Regression Analysis of the Ridgeley-Nevitt Trawlers
WEBB TRAWLER MODELS

Oktay Çemberci
oktay@cembercidenizcilikltd.com

16/3/2012

RIDGELEY-NEVITT TRAWLER SERIES RESISTANCE

Webb-C01

Length BP		1.22	m			
Beam Waterline		0.26	m	4.662	Allowable range	3.22 - 5.75
Draft-Midship		0.11	m	2.314	Allowable range	1.94 - 2.42
Displacement volume		0.0190	Δ/(0.01Λ)3	292.56	Allowable range	200 - 500
Block coefficient		0.528			Allowable range	0.400 - 0.598
Prismatic coefficient		0.652	0.652		Allowable range	0.554 - 0.700
Midship coefficient		0.810			Allowable range	0.729 - 0.810
Wetted surface area	0.418	0.397	m3-Mumford	5.564	Allowable range	5.198 - 6.255
Water density		1	t/m3	1.0250 at 19oC	→	
Water viscosity		1.13902	x 10-6 m2/s	1.07854 x 10-6 at 19oC		
Correlation allowance		0.0004				

Displacement   0.019 t

V/L	V	10-6Rn	103CF	103CR	103CT	RT	PE
	kn		ITTC'57			kN	kW
0.7	1.40	0.77	4.964	1.223	6.587	0.00	0.0
0.8	1.60	0.88	4.819	1.480	6.699	0.00	0.0
0.9	1.80	0.99	4.697	1.818	6.914	0.00	0.0
1.0	2.00	1.10	4.591	3.525	8.516	0.00	0.0
1.1	2.20	1.21	4.498	5.012	9.910	0.00	0.0
1.2	2.40	1.32	4.416	5.652	10.468	0.00	0.0
1.3	2.60	1.43	4.343	7.386	12.129	0.00	0.0
1.4	2.80	1.54	4.276	11.487	16.163	0.01	0.0
1.5	3.00	1.65	4.215	17.012	21.628	0.01	0.0

```
;**********************************************
;* NavCad model file          HydroComp, Inc. *
;**********************************************
;

[NavCad]
Version=3.00
Release=PreRelease
Date=08/31/1994
Time=15:07:53.78
Precision=6
Description=WEBB TRAWLER FORMS Cp=0.650 Cm=0.810 Model=W1 1956

[Units]
Length=Foot
Area=SqFoot
Weight=LongTon
Speed=Knot
Force=Pound
Power=Horsepower
Density=SlugPerCuFt
KinemVisc=SqFtPerSec

[Condition]
rho=1.9336
nu=9.2969e-06

[Resistance]

[Hull]
HullType=Displ
Loading=LoadDraft
ChineType=RoundBilge
SternShape=Normal
BowShape=Normal
FlapBehind=No
LengthPP=4
LengthWL=4.105
BeamWL=0.858
Draft=0.371
LCBHull=2.06
WettedSurf=4.268
MaxSecArea=0.257838
HullDispl=0.0192
HalfEntAng=21
MidshiCoef=0.81
WaterpCoef=0.79

[Speeds]
Speeds=1.344,1.612,1.881,2.015,2.15,2.284,2.419,2.687,2.822,2.956

[Results]
ResiCoef=0.0009661,0.00140867,0.00281716,0.00447041,0.00563332,0.00589989,0.00618492,0.00949108,0.012791,0.0161532
BareResist=0.1226,0.1853,0.3058,0.4273,0.547,0.6309,0.7244,1.168,1.594,2.091
ModCfType=ATTC
ModSource=ModelTest
ModLengthWL=4
FroudeLen=0.197385,0.236744,0.276251,0.29593,0.315757,0.335437,0.355263,0.394623,0.414449,0.434129
FroudeVol=0.425295,0.510101,0.595224,0.637627,0.680346,0.722749,0.765468,0.850274,0.892994,0.935397
HullReyNum=1.00161e+06,1.20133e+06,1.4018e+06,1.50167e+06,1.60227e+06,1.70214e+06,1.80275e+06,2.00247e+06,2.10308e+06,2.20294e+06
```
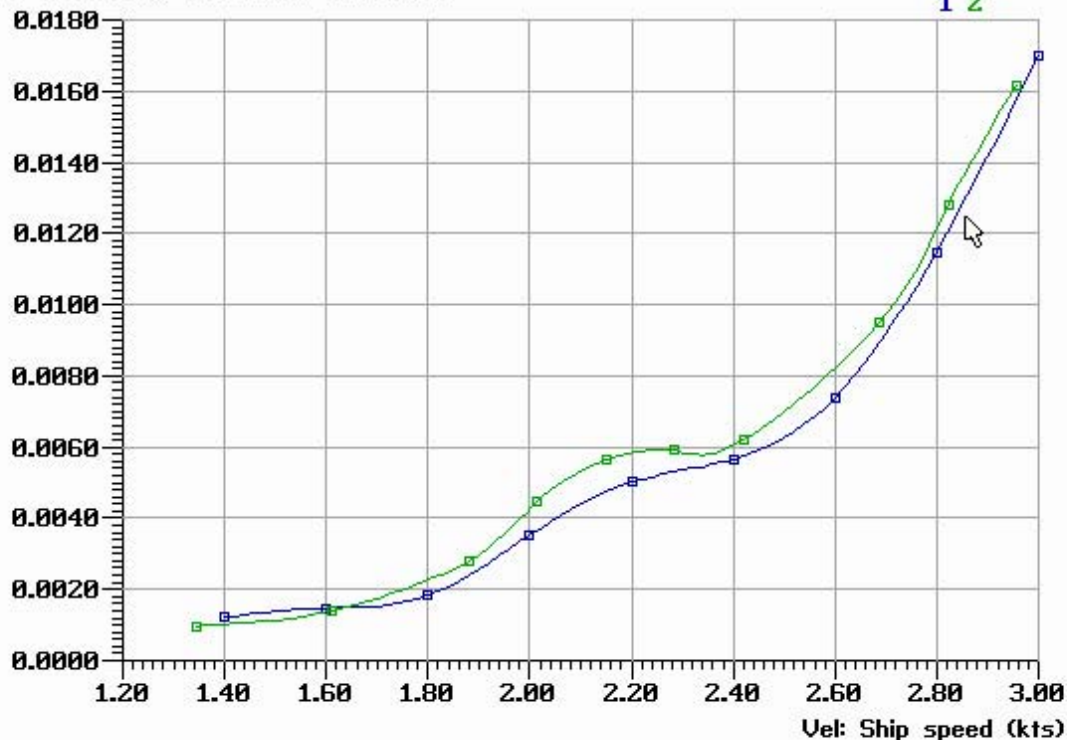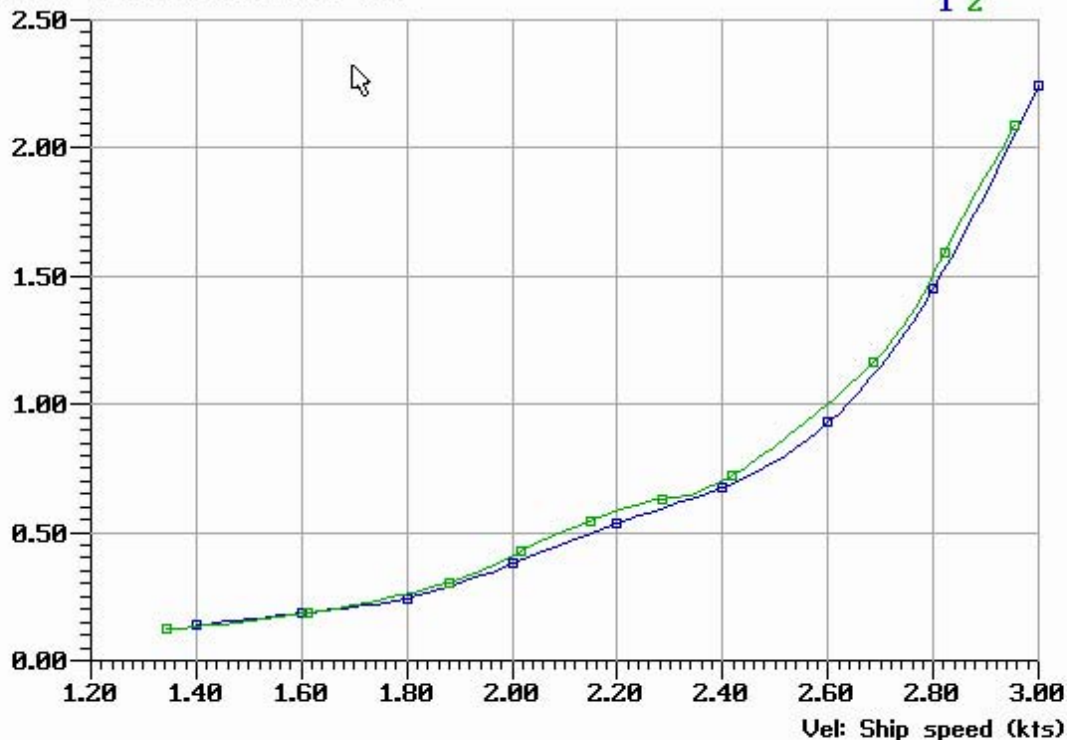
RIDGELEY-NEVITT TRAWLER SERIES RESISTANCE   # Webb-C02

15-Mar-2012 22:00:59

Length BP		30.48 m			
Beam Waterline		6.54 m	4.664	Allowable range	3.22 - 5.75
Draft-Midship		2.83 m	2.308	Allowable range	1.94 - 2.42
Displacement volume		297.4 Δ/(0.01Λ)3	300.26	Allowable range	200 - 500
Block coefficient		0.527		Allowable range	0.400 - 0.598
Prismatic coefficient		0.651	0.651	Allowable range	0.554 - 0.700
Midship coefficient		0.810		Allowable range	0.729 - 0.810
Wetted surface area	261.673	247.308 m3-Mumford	5.551	Allowable range	5.198 - 6.255
Water density		1.0259 t/m3	1.0250 at 19oC	→	
Water viscosity		1.18831 x 10-6 m2/s	1.07854 x 10-6 at 19oC		
Correlation allowance		0.0004			

Displacement   305.08 t

V/L	V	10-6Rn	103CF	103CR	103CT	RT	PE
	kn		ITTC'57			kN	kW
0.7	7.00	92.37	2.107	1.233	3.740	6.15	22.2
0.8	8.00	105.56	2.067	1.491	3.959	8.51	35.0
0.9	9.00	118.76	2.032	1.837	4.270	11.61	53.8
1.0	10.00	131.95	2.002	3.532	5.934	19.92	102.5
1.1	11.00	145.15	1.975	5.014	7.389	30.02	169.9
1.2	12.00	158.35	1.951	5.668	8.019	38.77	239.3
1.3	13.00	171.54	1.930	7.450	9.779	55.49	371.1
1.4	14.00	184.74	1.910	11.685	13.995	92.09	663.3
1.5	15.00	197.93	1.892	17.346	19.638	148.34	1144.7

```
;*********************************************
;* NavCad model file        HydroComp, Inc. *
;*********************************************
;
[NavCad]
Version=3.00
Release=PreRelease
Date=03/14/1995
Time=12:08:02.24
Precision=6
Description=WEBB-TRAWLER SERIES Model=W 2 L/B=4.67 B/T=2.31 Cp=0.652 1956

[Units]
Length=Foot
Area=SqFoot
Weight=LongTon
Speed=Knot
Force=Pound
Power=Horsepower
Density=KgPerCuM
KinemVisc=SqMPerSec

[Condition]
rho=1025.86
nu=1.1883e-06

[Resistance]

[Hull]
HullType=Displ
Loading=LoadDraft
ChineType=RoundBilge
SternShape=Normal
BowShape=Normal
FlapBehind=No
LengthPP=100
LengthWL=102.62
BeamWL=21.44
Draft=9.27
LCBHull=51.52
WettedSurf=2662
MaxSecArea=160.987
HullDispl=300
HalfEntAng=8
MidshiCoef=0.81
WaterpCoef=0.701

[Speeds]
Speeds=7,8,9,10,10.5,11,11.5,12,12.5,13

[Results]
ResiCoef=0.0013945,0.00145163,0.00241372,0.00519284,0.00579509,0.00598888,0.00624088,0.00673693,0.00822007,0.0103188
BareResist=1435.81,1884.12,2952.35,5720.32,6796.7,7624.91,8573.48,9862.04,12437.3,16116.1
ModCfType=ATTC
ModSource=ModelTest
ModLengthWL=4.1
FroudeLen=0.205614,0.234988,0.264361,0.293735,0.308421,0.323108,0.337795,0.352481,0.367168,0.381855
FroudeVol=0.445163,0.508757,0.572352,0.635947,0.667744,0.699541,0.731339,0.763136,0.794933,0.826731
HullReyNum=9.47886e+07,1.0833e+08,1.21871e+08,1.35412e+08,1.42183e+08,1.48953e+08,1.55724e+08,1.62495e+08,1.69265e+08,1.76036e+08
```
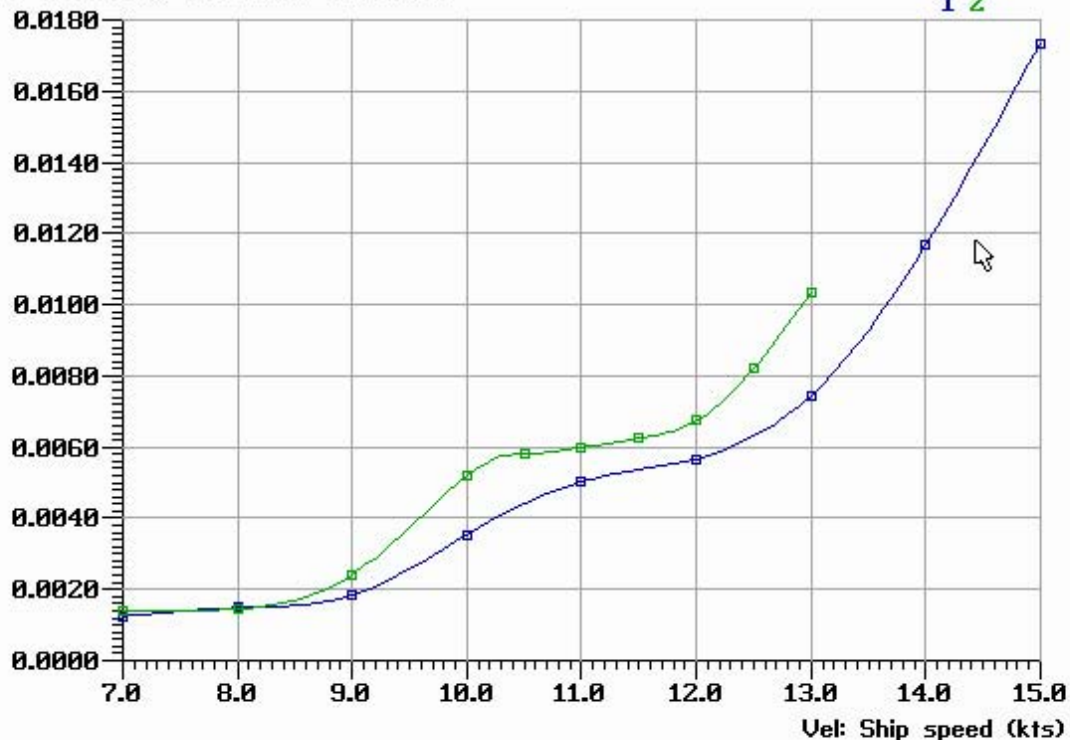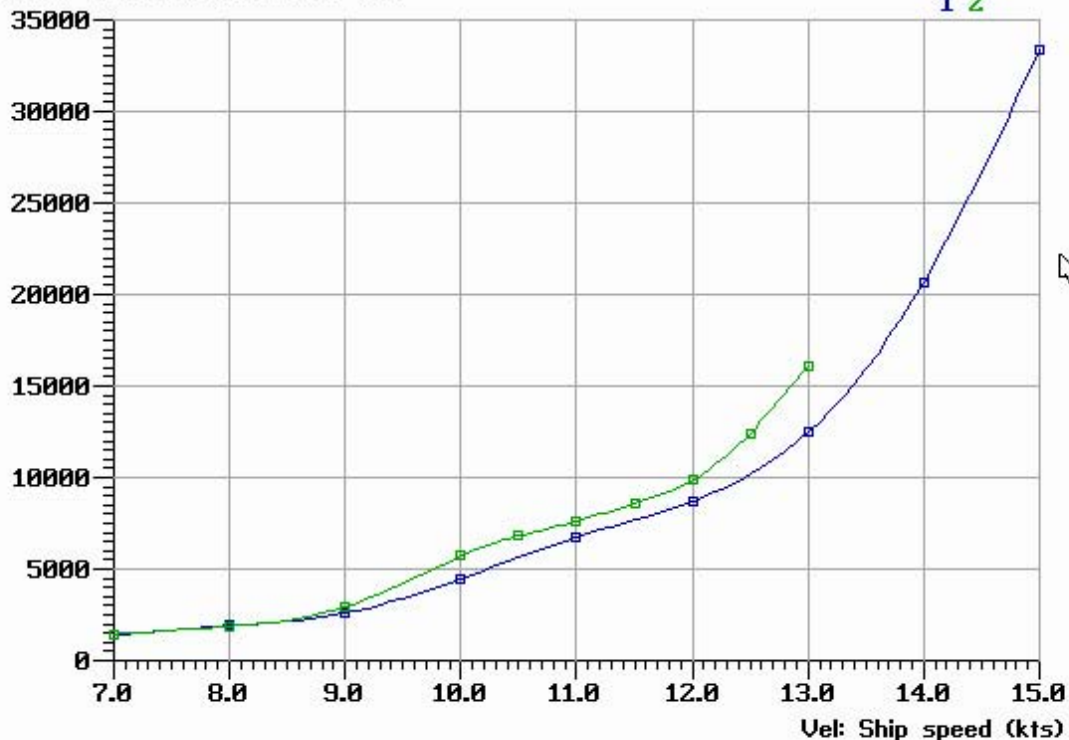
RIDGELEY-NEVITT TRAWLER SERIES RESISTANCE   Webb-C03

15-Mar-2012 22:00:28

Length BP	30.48	m			
Beam Waterline	6.54	m	4.664	Allowable range	3.22 - 5.75
Draft-Midship	2.83	m	2.308	Allowable range	1.94 - 2.42
Displacement volume	297.4	Δ/(0.01Λ)3	300.26	Allowable range	200 - 500
Block coefficient	0.527			Allowable range	0.400 - 0.598
Prismatic coefficient	0.652	0.652		Allowable range	0.554 - 0.700
Midship coefficient	0.809			Allowable range	0.729 - 0.810
Wetted surface area	261.673	253.350 m3-Mumford	5.687	Allowable range	5.198 - 6.255
Water density	1.0259	t/m3	1.0250 at 19oC	→	
Water viscosity	1.18831	x 10-6 m2/s	1.07854 x 10-6 at 19oC		
Correlation allowance	0.0004				

Displacement   305.08 t

V/L	V	10-6Rn	103CF	103CR	103CT	RT	PE
	kn		ITTC'57			kN	kW
0.7	7.00	92.37	2.107	1.232	3.739	6.30	22.7
0.8	8.00	105.56	2.067	1.493	3.960	8.72	35.9
0.9	9.00	118.76	2.032	1.843	4.276	11.91	55.1
1.0	10.00	131.95	2.002	3.556	5.958	20.49	105.4
1.1	11.00	145.15	1.975	5.068	7.443	30.98	175.3
1.2	12.00	158.35	1.951	5.723	8.074	39.99	246.9
1.3	13.00	171.54	1.930	7.487	9.817	57.06	381.6
1.4	14.00	184.74	1.910	11.695	14.005	94.41	680.0
1.5	15.00	197.93	1.892	17.337	19.629	151.90	1172.2

```
;*******************************************
;* NavCad model file       HydroComp, Inc. *
;*******************************************

[NavCad]
Version=3.00
Release=PreRelease
Date=03/14/1995
Time=12:13:24.65
Precision=6
Description=WEBB-TRAWLER SERIES Model=W 3 L/B=4.67 B/T=2.31 Cb= 0.527 Cp=0.652 1956

[Units]
Length=Foot
Area=SqFoot
Weight=LongTon
Speed=Knot
Force=Pound
Power=Horsepower
Density=KgPerCuM
KinemVisc=SqMPerSec

[Condition]
rho=1025.86
nu=1.1883e-06

[Resistance]

[Hull]
HullType=Displ
Loading=LoadDraft
ChineType=RoundBilge
SternShape=Normal
BowShape=Normal
FlapBehind=No
LengthPP=100
LengthWL=102.62
BeamWL=21.44
Draft=9.29
LCBHull=51.52
WettedSurf=2727
MaxSecArea=161.135
HullDispl=300
HalfEntAng=37
MidshiCoef=0.809
WaterpCoef=0.863

[Speeds]
Speeds=7,8,9,10,10.5,11,11.5,12,13,14

[Results]
ResiCoef=0.0016292,0.00223875,0.00278947,0.00473356,0.00585691,0.00672299,0.00728772,0.00770145,0.00886344,0.0119518
BareResist=1559.78,2319.6,3259.75,5504.89,7015.34,8497.85,9853.2,11176.7,14607.9,21592.6
ModCfType=ATTC
ModSource=ModelTest
ModLengthWL=4.1
FroudeLen=0.205614,0.234988,0.264361,0.293735,0.308421,0.323108,0.337795,0.352481,0.381855,0.411228
FroudeVol=0.445163,0.508757,0.572352,0.635947,0.667744,0.699541,0.731339,0.763136,0.82673,0.890325
HullReyNum=9.47889e+07,1.0833e+08,1.21871e+08,1.35413e+08,1.42183e+08,1.48954e+08,1.55725e+08,1.62495e+08,1.76037e+08,1.89578e+08
```
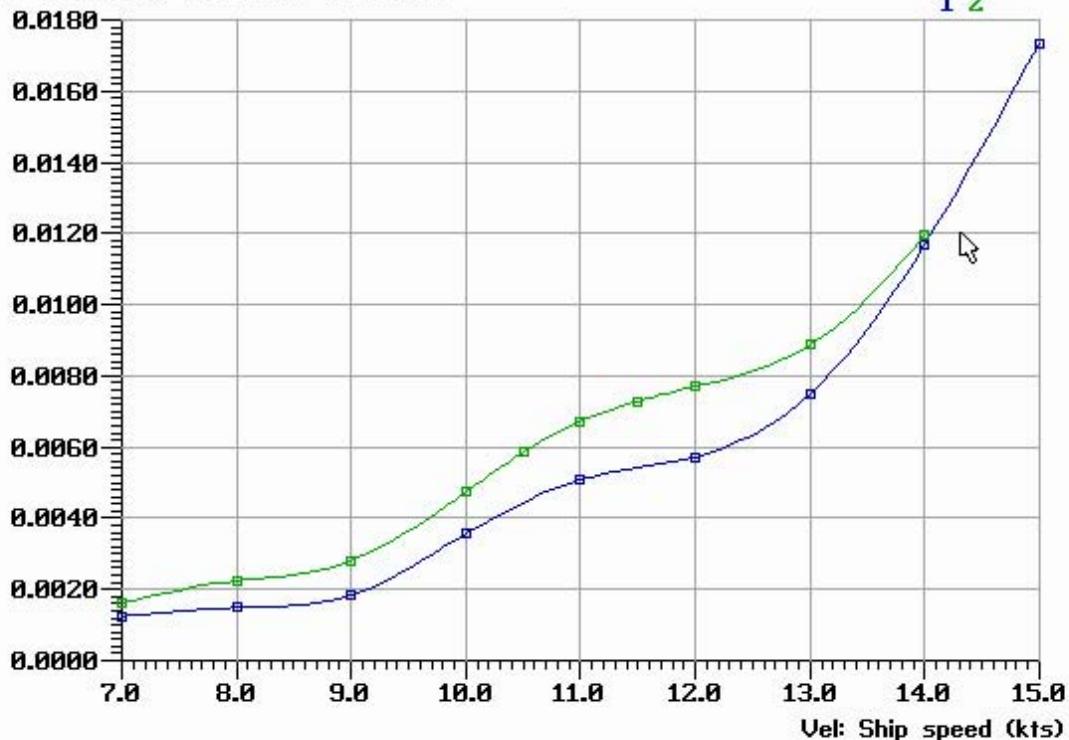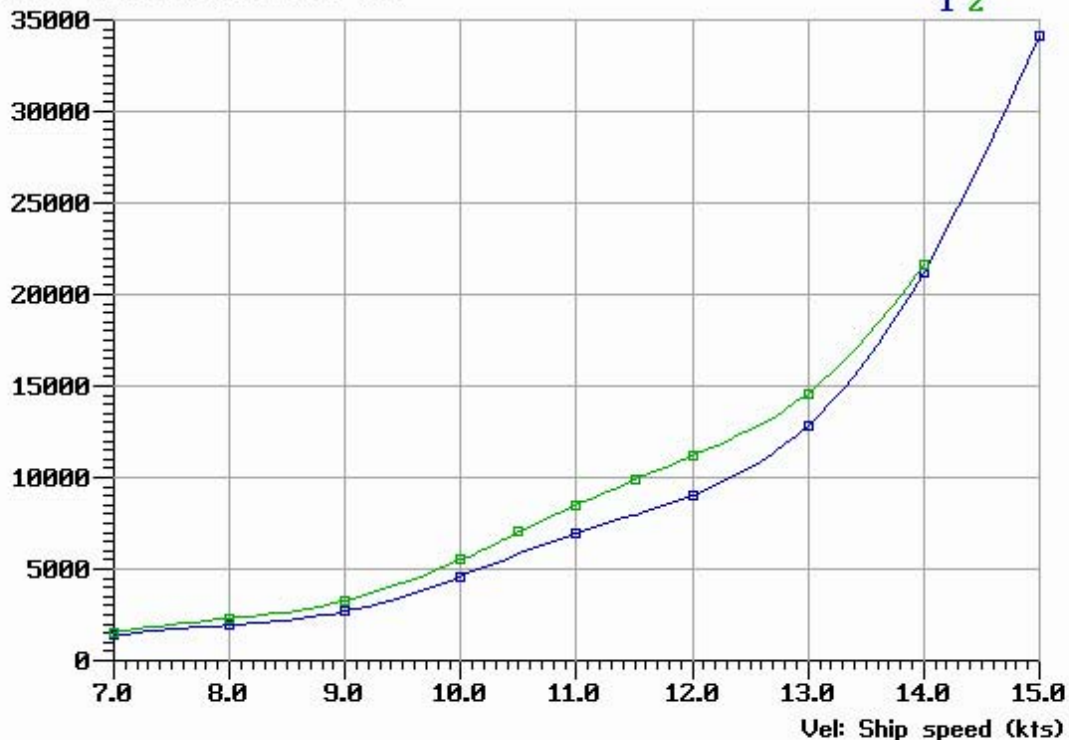
RIDGELEY-NEVITT TRAWLER SERIES RESISTANCE

Webb-C04

15-Mar-2012 22:00:03

Length BP	30.48 m			
Beam Waterline	6.10 m	4.997	Allowable range	3.22 - 5.75
Draft-Midship	2.66 m	2.293	Allowable range	1.94 - 2.42
Displacement volume	297.4 Δ/(0.01Λ)3	300.26	Allowable range	200 - 500
Block coefficient	0.601		Allowable range	0.400 - 0.598
Prismatic coefficient	0.653	0.653	Allowable range	0.554 - 0.700
Midship coefficient	0.921		Allowable range	0.729 - 0.810
Wetted surface area 257.788	244.800 m3-Mumford	5.495	Allowable range	5.198 - 6.255
Water density	1.0259 t/m3	1.0250 at 19oC	→	
Water viscosity	1.18831 x 10-6 m2/s	1.07854 x 10-6 at 19oC		
Correlation allowance	0.0004			

Displacement   305.08 t

V/L	V	10-6Rn	103CF	103CR	103CT	RT	PE
	kn		ITTC'57			kN	kW
0.7	7.00	92.37	2.107	1.231	3.738	6.09	21.9
0.8	8.00	105.56	2.067	1.494	3.961	8.43	34.7
0.9	9.00	118.76	2.032	1.849	4.282	11.53	53.4
1.0	10.00	131.95	2.002	3.580	5.983	19.88	102.3
1.1	11.00	145.15	1.975	5.122	7.498	30.15	170.6
1.2	12.00	158.35	1.951	5.778	8.130	38.90	240.2
1.3	13.00	171.54	1.930	7.526	9.855	55.35	370.2
1.4	14.00	184.74	1.910	11.706	14.016	91.29	657.5
1.5	15.00	197.93	1.892	17.329	19.620	146.71	1132.1

```
;*******************************************
;* NavCad model file       HydroComp, Inc. *
;*******************************************
;
[NavCad]
Version=3.00
Release=PreRelease
Date=03/14/1995
Time=12:18:46.35
Precision=6
Description=WEBB-TRAWLER SERIES Model=W 4 L/B=4.98 B/T=2.30 Cb= 0.598 Cp=0.650 1956

[Units]
Length=Foot
Area=SqFoot
Weight=LongTon
Speed=Knot
Force=Pound
Power=Horsepower
Density=KgPerCuM
KinemVisc=SqMPerSec

[Condition]
rho=1025.86
nu=1.1883e-06

[Resistance]

[Hull]
HullType=Displ
Loading=LoadDraft
ChineType=RoundBilge
SternShape=Normal
BowShape=Normal
FlapBehind=No
LengthPP=100
LengthWL=101.94
BeamWL=20.01
Draft=8.73
LCBHull=51.5
WettedSurf=2635
MaxSecArea=160.887
HullDispl=300
HalfEntAng=20
MidshiCoef=0.921
WaterpCoef=0.787

[Speeds]
Speeds=7,8,9,10,10.5,11,11.5,12,13,14

[Results]
ResiCoef=0.0015971,0.00196108,0.00260322,0.00453183,0.00550626,0.00625114,0.00627221,0.00681444,0.00873487,0.0131615
BareResist=1496.14,2109.49,3038.19,5169.83,6491.35,7786.24,8519.22,9847.27,13954.9,22638.1
ModCfType=ATTC
ModSource=ModelTest
ModLengthWL=4.08
FroudeLen=0.206299,0.23577,0.265241,0.294713,0.309448,0.324184,0.338919,0.353655,0.383126,0.412598
FroudeVol=0.445163,0.508757,0.572352,0.635947,0.667744,0.699541,0.731339,0.763136,0.82673,0.890325
HullReyNum=9.41608e+07,1.07612e+08,1.21064e+08,1.34515e+08,1.41241e+08,1.47967e+08,1.54693e+08,1.61418e+08,1.7487e+08,1.88322e+08
```
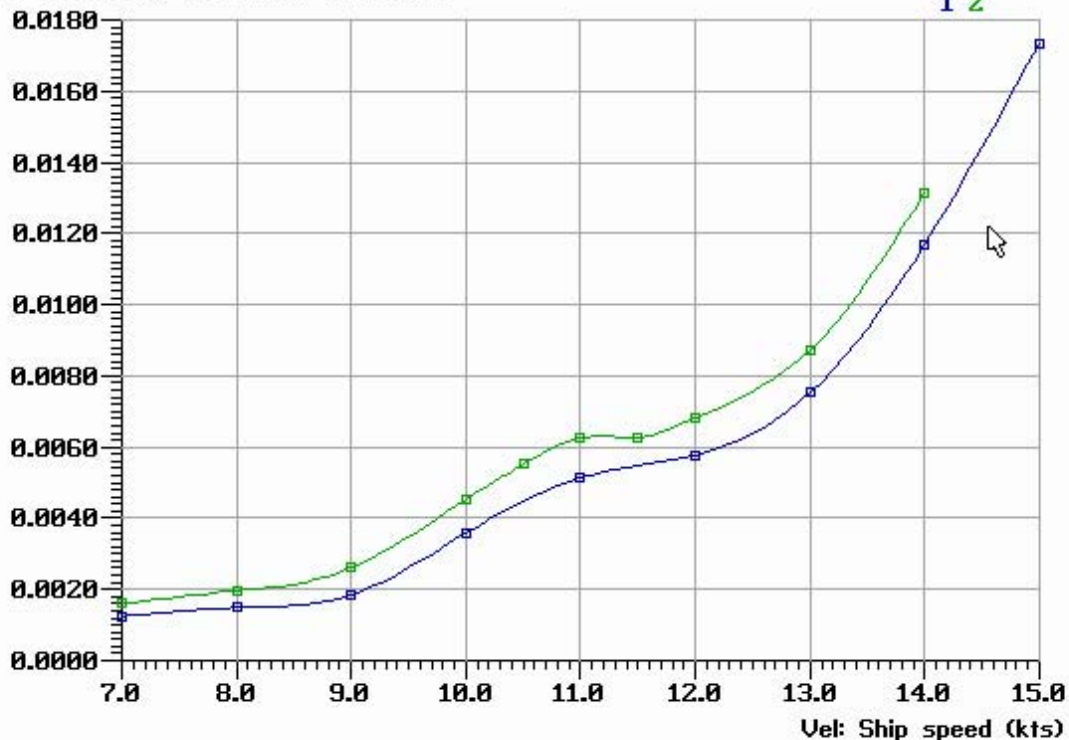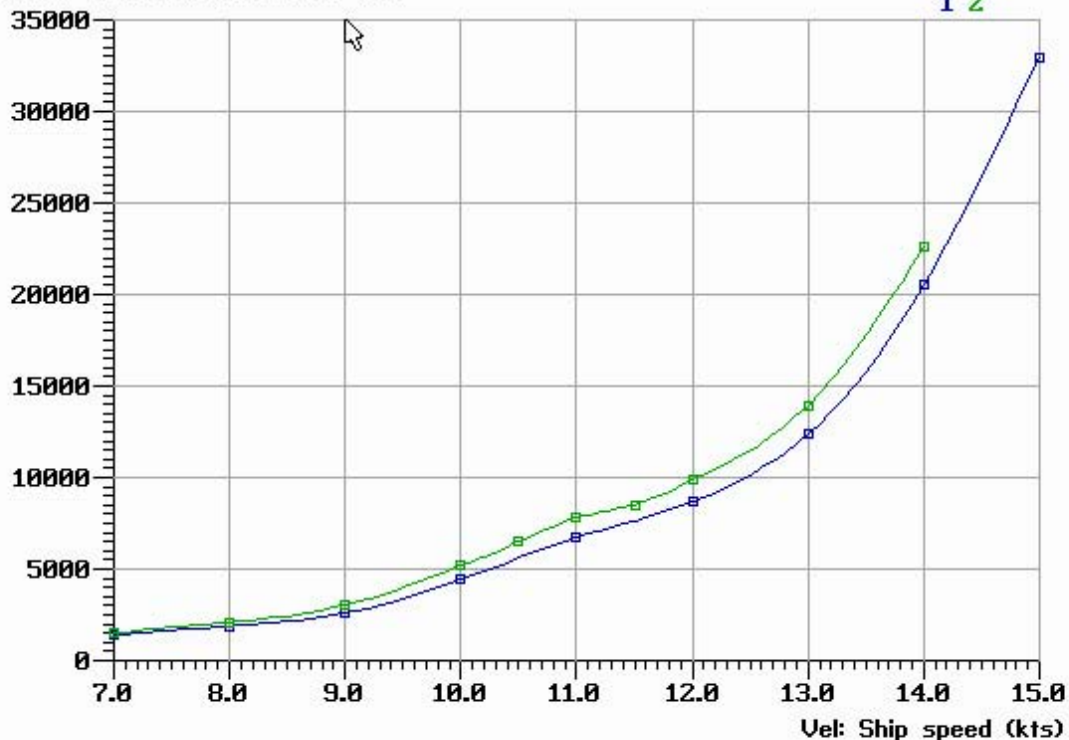
RIDGELEY-NEVITT TRAWLER SERIES RESISTANCE

Webb-C05

15-Mar-2012 21:59:39

Length BP		30.48	m		
Beam Waterline		7.02	m	4.342	Allowable range	3.22 - 5.75
Draft-Midship		3.05	m	2.302	Allowable range	1.94 - 2.42
Displacement volume		297.4	Δ/(0.01Λ)3	300.26	Allowable range	200 - 500
Block coefficient		0.456			Allowable range	0.400 - 0.598
Prismatic coefficient		0.651	0.651		Allowable range	0.554 - 0.700
Midship coefficient		0.700			Allowable range	0.729 - 0.810
Wetted surface area	267.424	259.290	m3-Mumford	5.820	Allowable range	5.198 - 6.255
Water density		1.0259	t/m3	1.0250 at 19oC	→
Water viscosity		1.18831	x 10-6 m2/s	1.07854 x 10-6 at 19oC
Correlation allowance		0.0004			

Displacement   305.08 t

V/L	V	$10^{-6}Rn$	10^3CF	10^3CR	10^3CT	RT	PE
	kn		ITTC'57			kN	kW
0.7	7.00	92.37	2.107	1.233	3.740	6.45	23.2
0.8	8.00	105.56	2.067	1.491	3.959	8.92	36.7
0.9	9.00	118.76	2.032	1.837	4.270	12.17	56.4
1.0	10.00	131.95	2.002	3.532	5.934	20.89	107.5
1.1	11.00	145.15	1.975	5.014	7.389	31.47	178.1
1.2	12.00	158.35	1.951	5.668	8.019	40.65	250.9
1.3	13.00	171.54	1.930	7.450	9.779	58.17	389.1
1.4	14.00	184.74	1.910	11.685	13.995	96.55	695.4
1.5	15.00	197.93	1.892	17.346	19.638	155.53	1200.2

```
;**********************************************
;* NavCad model file        HydroComp, Inc. *
;**********************************************
;

[NavCad]
Version=3.00
Release=PreRelease
Date=03/14/1995
Time=12:23:48.06
Precision=6
Description=WEBB-TRAWLER SERIES Model=W 5 L/B=4.34 B/T=2.30 Cb=0.455 Cp=0.650 1956

[Units]
Length=Foot
Area=SqFoot
Weight=LongTon
Speed=Knot
Force=Pound
Power=Horsepower
Density=KgPerCuM
KinemVisc=SqMPerSec

[Condition]
rho=1025.86
nu=1.1883e-06

[Resistance]

[Hull]
HullType=Displ
Loading=LoadDraft
ChineType=RoundBilge
SternShape=Normal
BowShape=Normal
FlapBehind=No
LengthPP=100
LengthWL=102.6
BeamWL=23.04
Draft=10.02
LCBHull=51.57
WettedSurf=2791
MaxSecArea=161.603
HullDispl=300
HalfEntAng=21
MidshiCoef=0.7
WaterpCoef=0.788

[Speeds]
Speeds=7,8,9,10,10.5,11,11.5,12,13,14

[Results]
ResiCoef=0.0013058,0.00163855,0.00221204,0.00467829,0.00552121,0.00562886,0.0059562,0.00599341,0.00801071,0.0113398
BareResist=1471.01,2070.11,2966.18,5590.4,6887.16,7649.74,8691.08,9492.78,13810.5,21150.3
ModCfType=ATTC
ModSource=ModelTest
ModLengthWL=4.1
FroudeLen=0.205634,0.235011,0.264387,0.293763,0.308451,0.323139,0.337828,0.352516,0.381892,0.411268
FroudeVol=0.445163,0.508757,0.572352,0.635947,0.667744,0.699541,0.731339,0.763136,0.82673,0.890325
HullReyNum=9.47704e+07,1.08309e+08,1.21848e+08,1.35386e+08,1.42156e+08,1.48925e+08,1.55694e+08,1.62464e+08,1.76002e+08,1.89541e+08
```
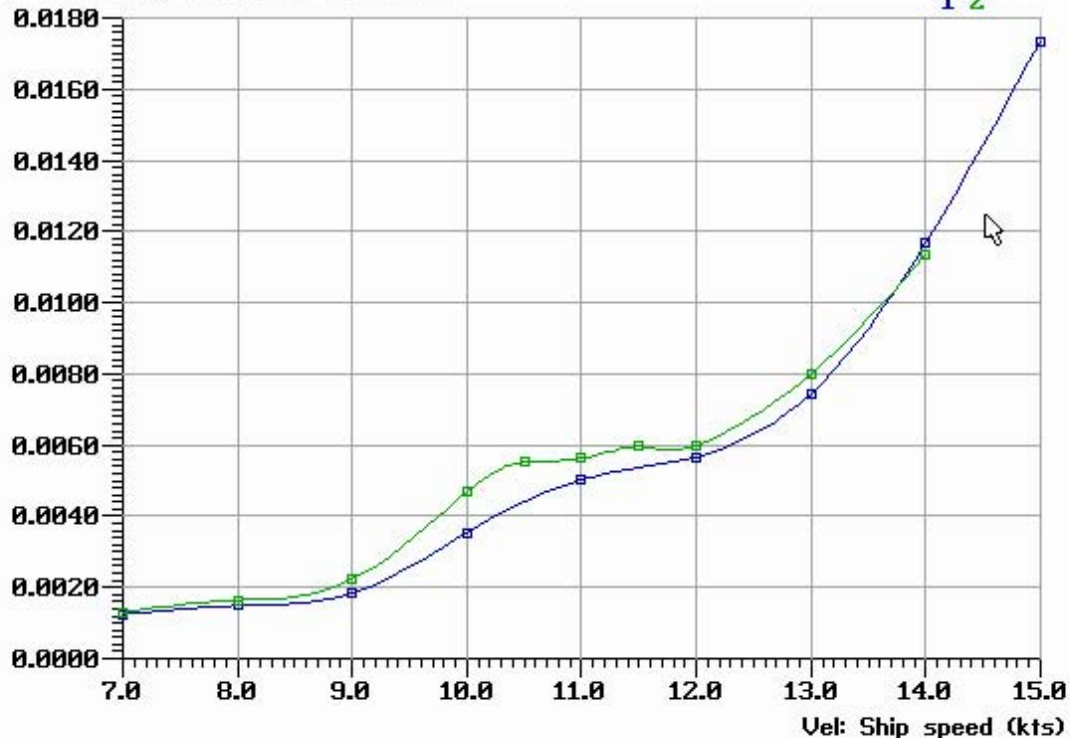
Graph results

Graph | Parameters

Rbare: Bare-hull resistance (lbs)
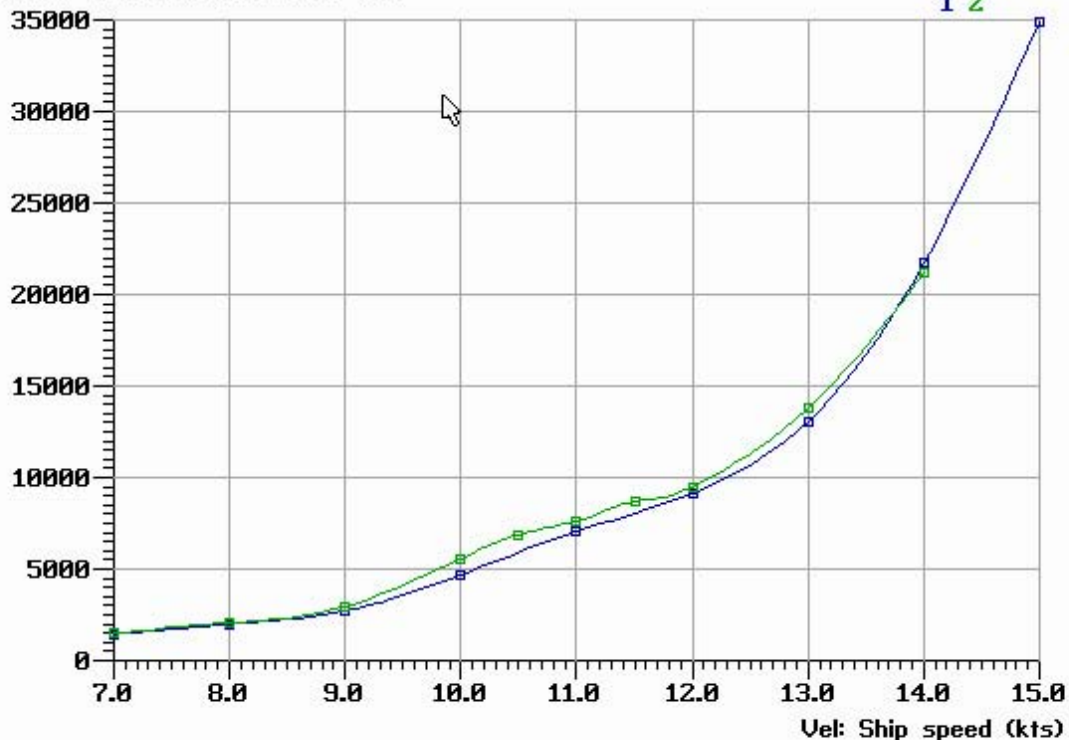
1 2

Vel: Ship speed (kts)

RIDGELEY-NEVITT TRAWLER SERIES RESISTANCE   Webb-C06

Length BP	30.48 m		
Beam Waterline	6.54 m	4.661	Allowable range	3.22 - 5.75
Draft-Midship	2.85 m	2.295	Allowable range	1.94 - 2.42
Displacement volume	297.4 Δ/(0.01Λ)3	300.26 Allowable range	200 - 500
Block coefficient	0.523	Allowable range	0.400 - 0.598
Prismatic coefficient	0.649	0.649	Allowable range	0.554 - 0.700
Midship coefficient	0.807	Allowable range	0.729 - 0.810
Wetted surface area	262.010	252.800 m3-Mumford	5.674 Allowable range	5.198 - 6.255
Water density	1.0259 t/m3	1.0250 at 19oC	→
Water viscosity	1.18831 x 10-6 m2/s	1.07854 x 10-6 at 19oC
Correlation allowance	0.0004	

Displacement   305.08 t

V/L	V	10-6Rn	103CF	103CR	103CT	RT	PE
	kn		ITTC'57			kN	kW
0.7	7.00	92.37	2.107	1.235	3.743	6.29	22.7
0.8	8.00	105.56	2.067	1.489	3.956	8.69	35.8
0.9	9.00	118.76	2.032	1.826	4.259	11.84	54.8
1.0	10.00	131.95	2.002	3.483	5.885	20.20	103.9
1.1	11.00	145.15	1.975	4.906	7.281	30.24	171.1
1.2	12.00	158.35	1.951	5.559	7.911	39.09	241.3
1.3	13.00	171.54	1.930	7.377	9.707	56.30	376.5
1.4	14.00	184.74	1.910	11.667	13.977	94.01	677.1
1.5	15.00	197.93	1.892	17.364	19.656	151.77	1171.2

```
;***********************************************
;* NavCad model file        HydroComp, Inc. *
;***********************************************
;
[NavCad]
Version=3.00
Release=PreRelease
Date=03/14/1995
Time=12:28:40.59
Precision=6
Description=WEBB-TRAWLER SERIES Model=W 6 L/B=4.67 B/T=2.30 Cb=0.524 Cp=0.649 1956

[Units]
Length=Foot
Area=SqFoot
Weight=LongTon
Speed=Knot
Force=Pound
Power=Horsepower
Density=KgPerCuM
KinemVisc=SqMPerSec

[Condition]
rho=1025.86
nu=1.1883e-06

[Resistance]

[Hull]
HullType=Displ
Loading=LoadDraft
ChineType=RoundBilge
SternShape=Normal
BowShape=Normal
FlapBehind=No
LengthPP=100
LengthWL=103.52
BeamWL=21.44
Draft=9.33
LCBHull=51.53
WettedSurf=2721
MaxSecArea=161.428
HullDispl=300
HalfEntAng=20
MidshiCoef=0.807
WaterpCoef=0.8

[Speeds]
Speeds=7,8,9,10,10.5,11,11.5,12,13,14

[Results]
ResiCoef=0.0014951,0.00189254,0.0022228,0.00393171,0.00510181,0.00570382,0.0061279,0.00645828,0.00802609,0.0119411
BareResist=1504.52,2142.33,2896.95,4872.35,6355.66,7525.61,8645.85,9768.49,13481.1,21525.6
ModCfType=ATTC
ModSource=ModelTest
ModLengthWL=4.14
FroudeLen=0.204718,0.233964,0.263209,0.292455,0.307078,0.3217,0.336323,0.350946,0.380191,0.409437
FroudeVol=0.445163,0.508757,0.572352,0.635947,0.667744,0.699541,0.731339,0.763136,0.82673,0.890325
HullReyNum=9.56202e+07,1.0928e+08,1.2294e+08,1.366e+08,1.4343e+08,1.5026e+08,1.5709e+08,1.6392e+08,1.7758e+08,1.9124e+08
```
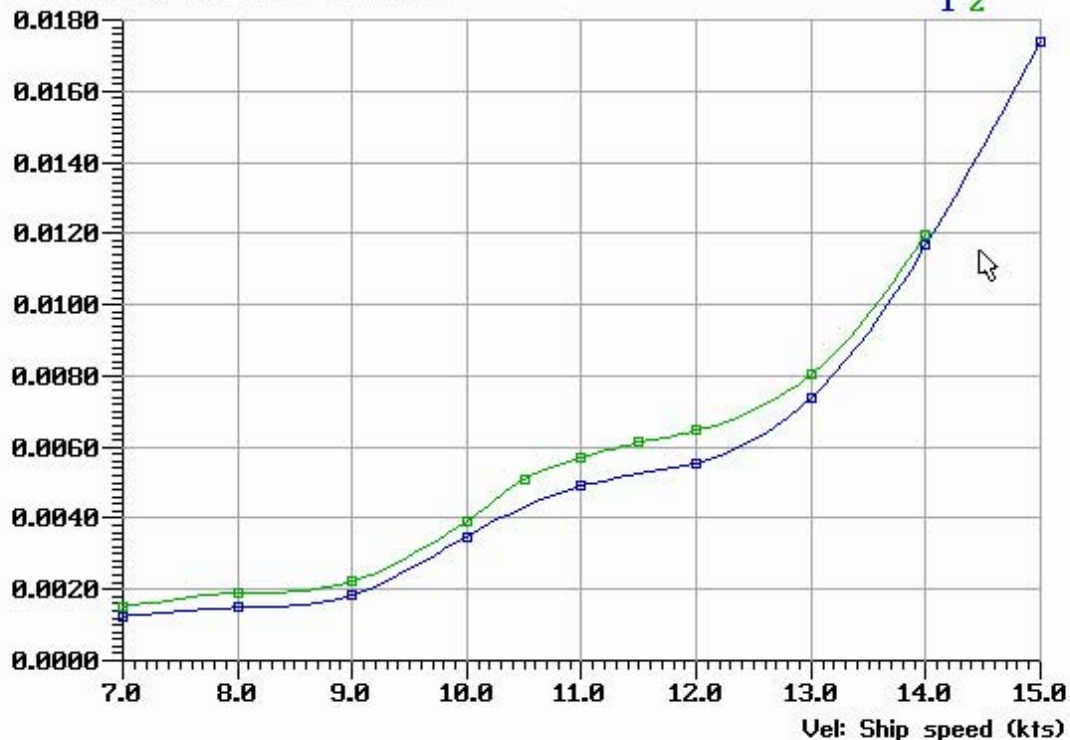
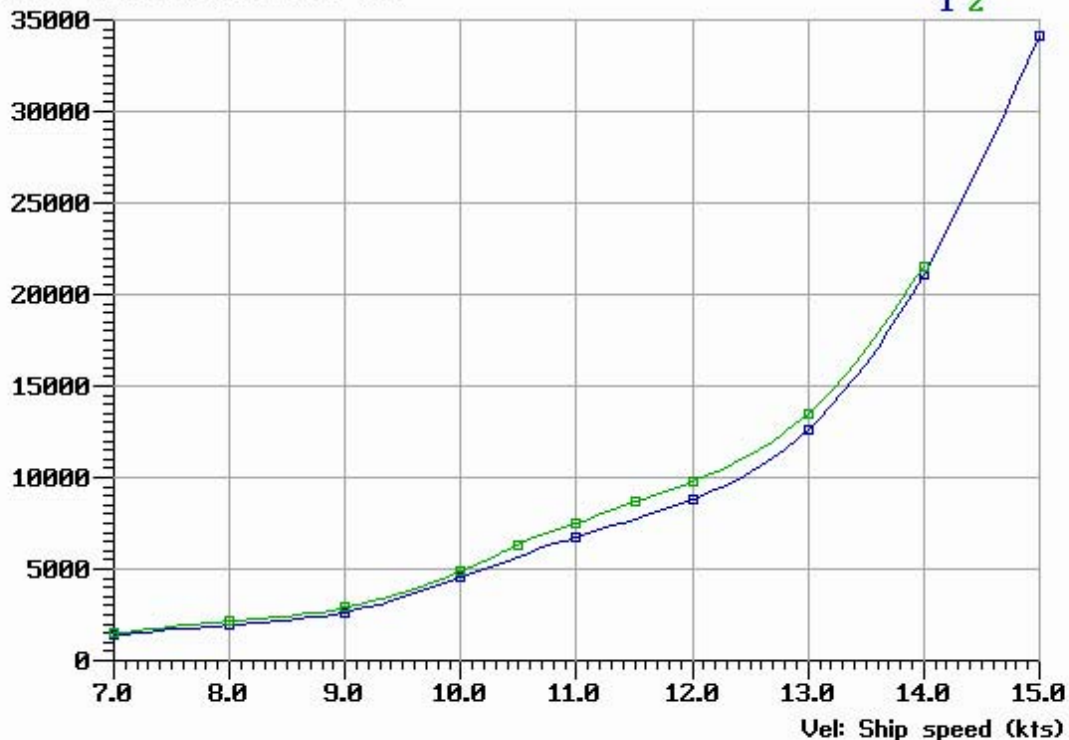**Graph results**

Graph Parameters

Rbare: Bare-hull resistance (lbs)

1 2

Vel: Ship speed (kts)

RIDGELEY-NEVITT TRAWLER SERIES RESISTANCE   # Webb-C07

15-Mar-2012 21:58:49

Length BP		30.48 m				
Beam Waterline		6.54 m	4.661	Allowable range	3.22 - 5.75	
Draft-Midship		2.85 m	2.295	Allowable range	1.94 - 2.42	
Displacement volume		297.4 Δ/(0.01Λ)3	300.26	Allowable range	200 - 500	
Block coefficient		0.523		Allowable range	0.400 - 0.598	
Prismatic coefficient		0.646	0.646	Allowable range	0.554 - 0.700	
Midship coefficient		0.810		Allowable range	0.729 - 0.810	
Wetted surface area	262.010	244.985 m3-Mumford	5.499	Allowable range	5.198 - 6.255	
Water density		1.0259 t/m3	1.0250 at 19oC	→		
Water viscosity		1.18831 x 10-6 m2/s	1.07854 x 10-6 at 19oC			
Correlation allowance		0.0004				

Displacement   305.08 t

V/L	V	10-6Rn	103CF	103CR	103CT	RT	PE
	kn		ITTC'57			kN	kW
0.7	7.00	92.37	2.107	1.239	3.746	6.11	22.0
0.8	8.00	105.56	2.067	1.486	3.953	8.41	34.6
0.9	9.00	118.76	2.032	1.811	4.243	11.43	52.9
1.0	10.00	131.95	2.002	3.408	5.810	19.32	99.4
1.1	11.00	145.15	1.975	4.744	7.120	28.65	162.1
1.2	12.00	158.35	1.951	5.400	7.752	37.12	229.2
1.3	13.00	171.54	1.930	7.275	9.604	53.98	361.0
1.4	14.00	184.74	1.910	11.644	13.954	90.96	655.1
1.5	15.00	197.93	1.892	17.391	19.683	147.29	1136.6

```
;************************************************
;* NavCad model file         HydroComp, Inc. *
;************************************************

[NavCad]
Version=3.00
Release=PreRelease
Date=03/14/1995
Time=12:33:29.66
Precision=6
Description=WEBB-TRAWLER SERIES Model=W 7 L/B=4.67 B/T=2.30 Cb=0.525 Cp=0.648 1956

[Units]
Length=Foot
Area=SqFoot
Weight=LongTon
Speed=Knot
Force=Pound
Power=Horsepower
Density=KgPerCuM
KinemVisc=SqMPerSec

[Condition]
rho=1025.86
nu=1.1883e-06

[Resistance]

[Hull]
HullType=Displ
Loading=LoadDraft
ChineType=RoundBilge
SternShape=Normal
BowShape=Normal
FlapBehind=No
LengthPP=100
LengthWL=101.92
BeamWL=21.44
Draft=9.33
LCBHull=51.55
WettedSurf=2637
MaxSecArea=162.029
HullDispl=300
HalfEntAng=22
MidshiCoef=0.81
WaterpCoef=0.773

[Speeds]
Speeds=7,8,9,10,10.5,11,11.5,12,13,14

[Results]
ResiCoef=0.0021291,0.00240129,0.0043464,0.00675833,0.00721981,0.00730101,0.00726263,0.00737914,0.00825994,0.00984778
BareResist=1692.18,2321.76,4096.17,6838.4,7908.74,8741.95,9505,10462.7,13365.5,17799.5
ModCfType=ATTC
ModSource=ModelTest
ModLengthWL=4.08
FroudeLen=0.206319,0.235793,0.265267,0.294742,0.309479,0.324216,0.338953,0.35369,0.383164,0.412638
FroudeVol=0.445163,0.508757,0.572352,0.635947,0.667744,0.699541,0.731339,0.763136,0.82673,0.890325
HullReyNum=9.41423e+07,1.07591e+08,1.2104e+08,1.34489e+08,1.41213e+08,1.47938e+08,1.54662e+08,1.61387e+08,1.74836e+08,1.88285e+08
```
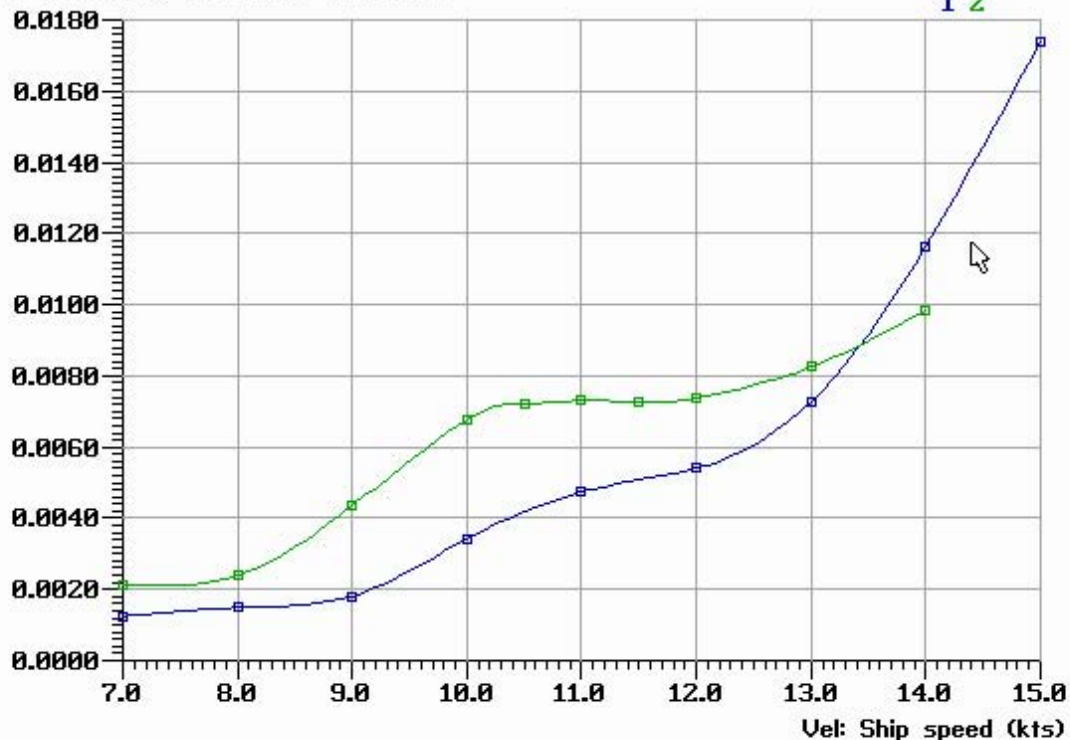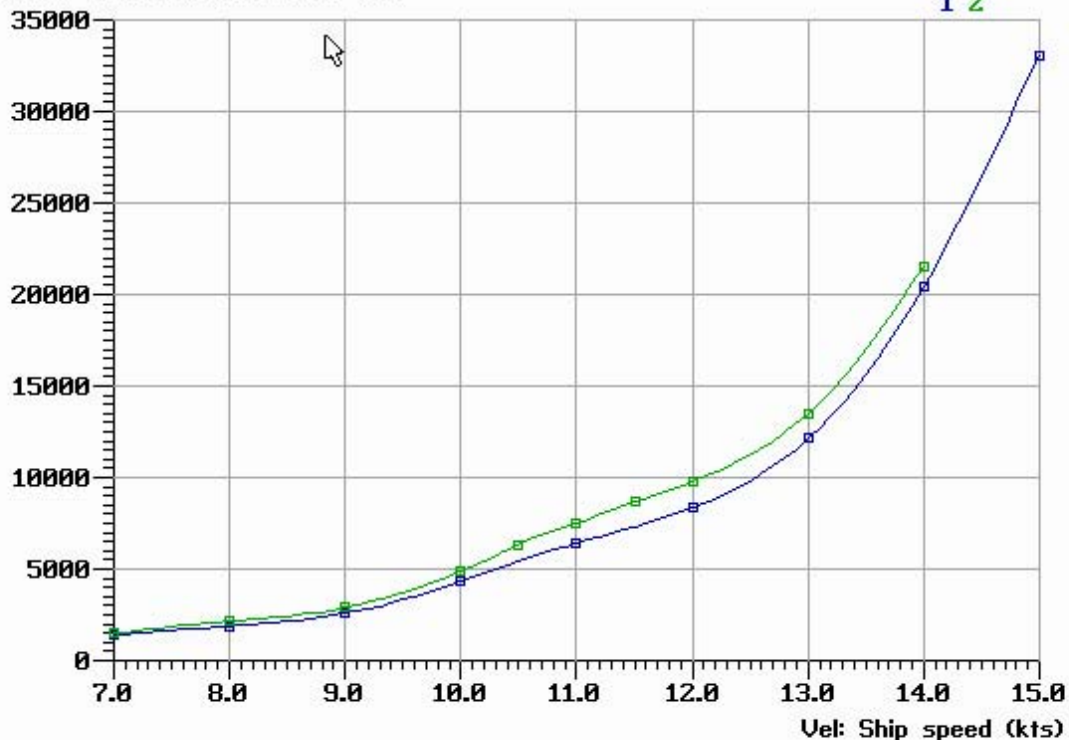
RIDGELEY-NEVITT TRAWLER SERIES RESISTANCE

15-Mar-2012 22:04:46

Length BP	1.22	m			
Beam Waterline	0.27	m	4.516	Allowable range	3.22 - 5.75
Draft-Midship	0.12	m	2.308	Allowable range	1.94 - 2.42
Displacement volume	0.0190	Δ/(0.01Λ)3	292.56	Allowable range	200 - 500
Block coefficient	0.494			Allowable range	0.400 - 0.598
Prismatic coefficient	0.650	0.650		Allowable range	0.554 - 0.700
Midship coefficient	0.760			Allowable range	0.729 - 0.810
Wetted surface area	0.422	0.404 m3-Mumford	5.669	Allowable range	5.198 - 6.255
Water density		1 t/m3	1.0250 at 19oC		→
Water viscosity		1.13902 x 10-6 m2/s	1.07854 x 10-6 at 19oC		
Correlation allowance	0.0004				

Displacement   0.019 t

V/L	V	10-6Rn	103CF	103CR	103CT	RT	PE
	kn		ITTC'57			kN	kW
0.7	1.40	0.77	4.964	1.226	6.590	0.00	0.0
0.8	1.60	0.88	4.819	1.477	6.696	0.00	0.0
0.9	1.80	0.99	4.697	1.806	6.903	0.00	0.0
1.0	2.00	1.10	4.591	3.477	8.467	0.00	0.0
1.1	2.20	1.21	4.498	4.904	9.802	0.00	0.0
1.2	2.40	1.32	4.416	5.544	10.360	0.00	0.0
1.3	2.60	1.43	4.343	7.312	12.054	0.00	0.0
1.4	2.80	1.54	4.276	11.467	16.143	0.01	0.0
1.5	3.00	1.65	4.215	17.029	21.645	0.01	0.0

```
;**********************************************
;* NavCad model file        HydroComp, Inc. *
;**********************************************
;

[NavCad]
Version=3.00
Release=PreRelease
Date=08/31/1994
Time=15:17:36.16
Precision=6
Description=WEBB TRAWLER FORMS Cp=0.650 Cm=0.760 Model=W8 1956

[Units]
Length=Foot
Area=SqFoot
Weight=LongTon
Speed=Knot
Force=Pound
Power=Horsepower
Density=SlugPerCuFt
KinemVisc=SqFtPerSec

[Condition]
rho=1.9336
nu=9.2969e-06

[Resistance]

[Hull]
HullType=Displ
Loading=LoadDraft
ChineType=RoundBilge
SternShape=Normal
BowShape=Normal
FlapBehind=No
LengthPP=4
LengthWL=4.105
BeamWL=0.883
Draft=0.385
LCBHull=2.06
WettedSurf=4.344
MaxSecArea=0.258366
HullDispl=0.0192
HalfEntAng=22
MidshiCoef=0.76
WaterpCoef=0.779

[Speeds]
Speeds=1.344,1.612,1.881,2.015,2.15,2.284,2.419,2.687,2.822,2.956

[Results]
ResiCoef=0.0009622,0.0012575,0.00204596,0.00336063,0.00443555,0.00493477,0.00540644,0.00855569,0.0116011,0.0153666
BareResist=0.1247,0.1839,0.2786,0.381,0.4905,0.5819,0.6828,1.108,1.50901,2.046
ModCfType=ATTC
ModSource=ModelTest
ModLengthWL=4
FroudeLen=0.197385,0.236744,0.276251,0.29593,0.315757,0.335437,0.355263,0.394623,0.414449,0.434129
FroudeVol=0.425295,0.510101,0.595224,0.637627,0.680346,0.722749,0.765468,0.850274,0.892994,0.935397
HullReyNum=1.00161e+06,1.20133e+06,1.4018e+06,1.50167e+06,1.60227e+06,1.70214e+06,1.80275e+06,2.00247e+06,2.10308e+06,2.20294e+06
```
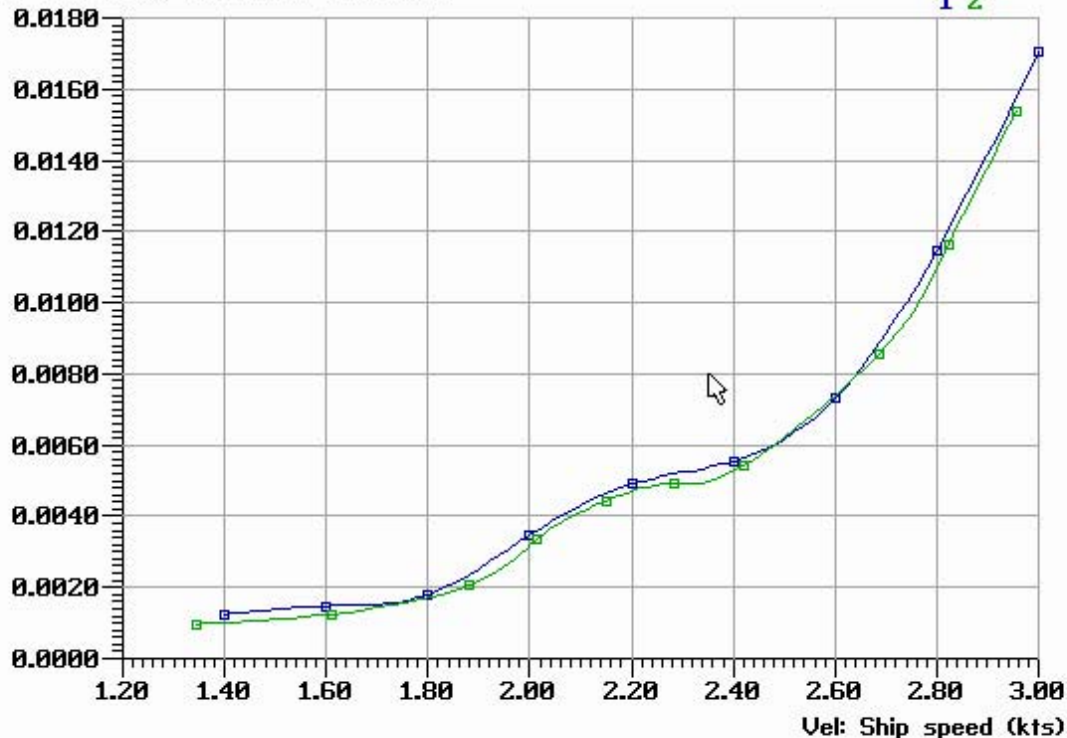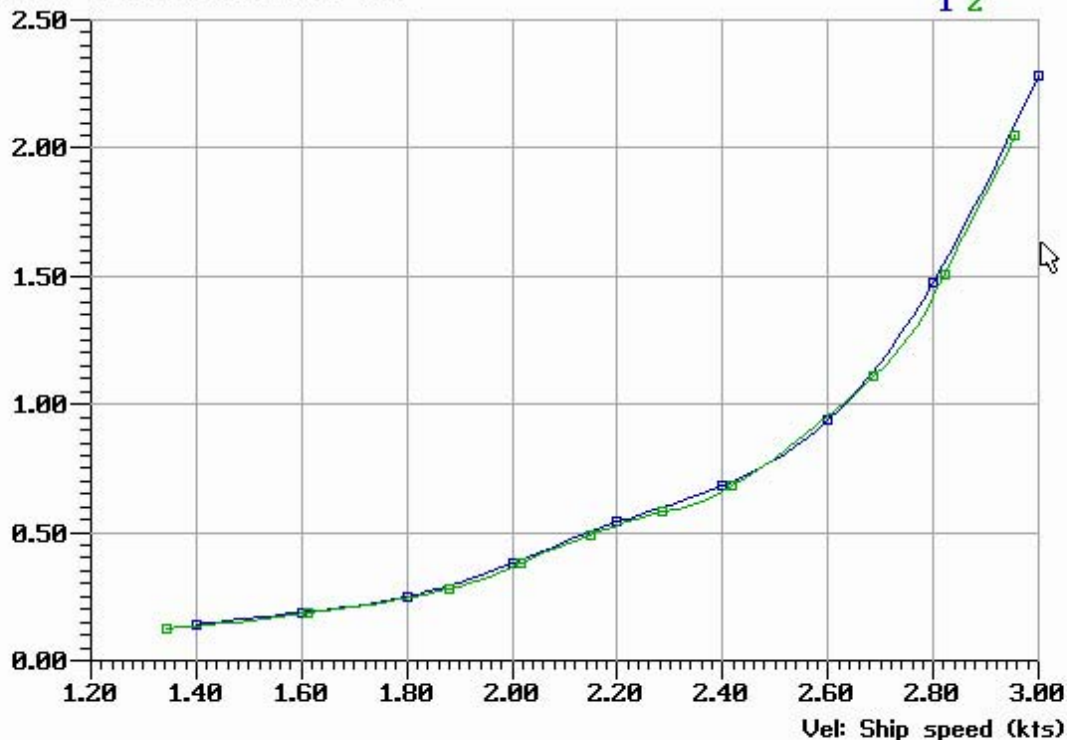
15-Mar-2012 21:58:15

Length BP	30.48	m			
Beam Waterline	6.73	m	4.529	Allowable range	3.22 - 5.75
Draft-Midship	2.94	m	2.286	Allowable range	1.94 - 2.42
Displacement volume	297.4	Δ/(0.01Λ)3	300.26	Allowable range	200 - 500
Block coefficient	0.492			Allowable range	0.400 - 0.598
Prismatic coefficient	0.650	0.650		Allowable range	0.554 - 0.700
Midship coefficient	0.758			Allowable range	0.729 - 0.810
Wetted surface area	264.348	251.953 m3-Mumford	5.655	Allowable range	5.198 - 6.255
Water density		1.0259 t/m3	1.0250 at 19oC	→	
Water viscosity		1.18831 x 10-6 m2/s	1.07854 x 10-6 at 19oC		
Correlation allowance		0.0004			

Displacement   305.08 t

V/L	V	10-6Rn	103CF	103CR	103CT	RT	PE
	kn		ITTC'57			kN	kW
0.7	7.00	92.37	2.107	1.234	3.742	6.27	22.6
0.8	8.00	105.56	2.067	1.490	3.957	8.66	35.7
0.9	9.00	118.76	2.032	1.832	4.264	11.81	54.7
1.0	10.00	131.95	2.002	3.507	5.910	20.21	104.0
1.1	11.00	145.15	1.975	4.960	7.335	30.36	171.8
1.2	12.00	158.35	1.951	5.613	7.965	39.23	242.2
1.3	13.00	171.54	1.930	7.413	9.742	56.32	376.6
1.4	14.00	184.74	1.910	11.676	13.986	93.76	675.3
1.5	15.00	197.93	1.892	17.355	19.647	151.20	1166.7

```
;**********************************************
;* NavCad model file        HydroComp, Inc. *
;**********************************************
;

[NavCad]
Version=3.00
Release=PreRelease
Date=03/14/1995
Time=12:38:06.32
Precision=6
Description=WEBB-TRAWLER SERIES Model=W 9 L/B=4.53 B/T=2.29 Cb=0.492 Cp=0.650 1956

[Units]
Length=Foot
Area=SqFoot
Weight=LongTon
Speed=Knot
Force=Pound
Power=Horsepower
Density=KgPerCuM
KinemVisc=SqMPerSec

[Condition]
rho=1025.86
nu=1.1883e-06

[Resistance]

[Hull]
HullType=Displ
Loading=LoadDraft
ChineType=RoundBilge
SternShape=Normal
BowShape=Normal
FlapBehind=No
LengthPP=100
LengthWL=105
BeamWL=22.08
Draft=9.66
LCBHull=51.5
WettedSurf=2712
MaxSecArea=161.676
HullDispl=300
HalfEntAng=19
MidshiCoef=0.758
WaterpCoef=0.776

[Speeds]
Speeds=7,8,9,10,10.5,11,11.5,12,13,14

[Results]
ResiCoef=0.00133,0.00164868,0.00206425,0.00369417,0.00478803,0.00537862,0.00574178,0.00609545,0.00768166,0.0115028
BareResist=1435.81,2013.24,2786.16,4670.61,6065.39,7194.62,8220.78,9330.31,12984.2,20788.4
ModCfType=ATTC
ModSource=ModelTest
ModLengthWL=4.2
FroudeLen=0.203271,0.232309,0.261348,0.290386,0.304906,0.319425,0.333944,0.348464,0.377502,0.406541
FroudeVol=0.445163,0.508757,0.572352,0.635947,0.667744,0.699541,0.731339,0.763136,0.82673,0.890325
HullReyNum=9.69873e+07,1.10843e+08,1.24698e+08,1.38553e+08,1.45481e+08,1.52409e+08,1.59336e+08,1.66264e+08,1.80119e+08,1.93975e+08
```
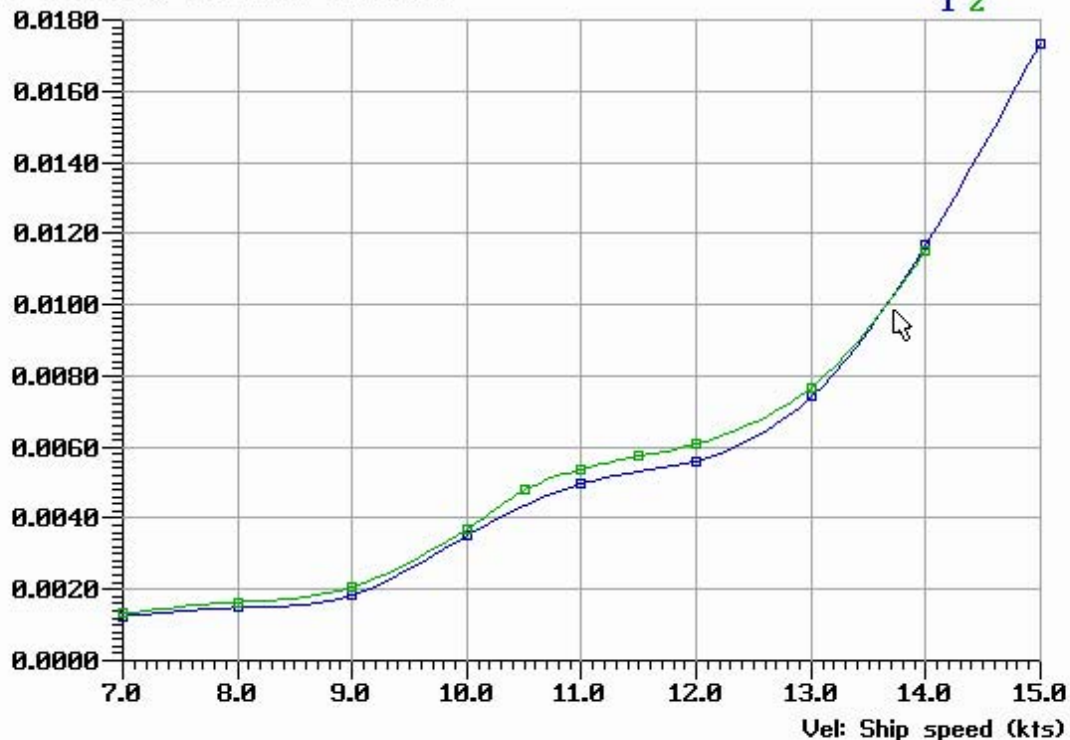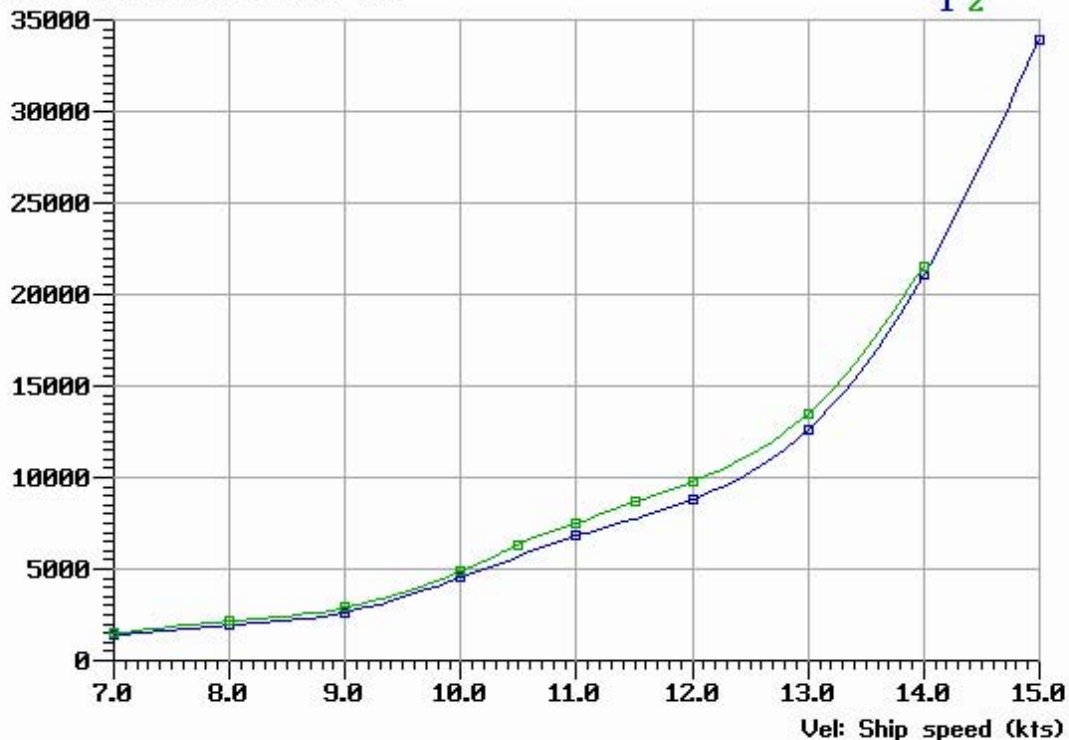
RIDGELEY-NEVITT TRAWLER SERIES RESISTANCE   # Webb-C10

Length BP		30.48	m			
Beam Waterline		5.50	m	5.542	Allowable range	3.22 - 5.75
Draft-Midship		2.34	m	2.350	Allowable range	1.94 - 2.42
Displacement volume		198.3	Δ/(0.01Λ)3	200.18	Allowable range	200 - 500
Block coefficient		0.505			Allowable range	0.400 - 0.598
Prismatic coefficient		0.665	0.665		Allowable range	0.554 - 0.700
Midship coefficient		0.760			Allowable range	0.729 - 0.810
Wetted surface area	214.618	205.966	m3-Mumford	6.058	Allowable range	5.198 - 6.255
Water density		1.0259	t/m3	1.0250 at 19oC		→
Water viscosity		1.18831	x 10-6 m2/s	1.07854 x 10-6 at 19oC		
Correlation allowance		0.0004				

Displacement   203.39 t

V/L	V	10-6Rn	103CF	103CR	103CT	RT	PE
	kn		ITTC'57			kN	kW
0.7	7.00	92.37	2.107	1.212	3.720	5.10	18.4
0.8	8.00	105.56	2.067	1.354	3.821	6.84	28.1
0.9	9.00	118.76	2.032	1.729	4.161	9.42	43.6
1.0	10.00	131.95	2.002	3.395	5.797	16.21	83.4
1.1	11.00	145.15	1.975	4.688	7.063	23.90	135.2
1.2	12.00	158.35	1.951	4.800	7.151	28.79	177.8
1.3	13.00	171.54	1.930	5.941	8.270	39.08	261.4
1.4	14.00	184.74	1.910	8.550	10.860	59.51	428.6
1.5	15.00	197.93	1.892	12.046	14.338	90.20	696.1

```
;**********************************************
;* NavCad model file        HydroComp, Inc. *
;**********************************************
;

[NavCad]
Version=3.00
Release=PreRelease
Date=02/01/1996
Time=15:27:50.17
Precision=6
Description=WEBB-TRAWLER Model=W 10 L/B=5.55 B/T=2.29 Cb=0.494 Cp=0.650 Lcb=-1.55A 1963

[Units]
Length=Foot
Area=SqFoot
Weight=LongTon
Speed=Knot
Force=Pound
Power=Horsepower
Density=KgPerCuM
KinemVisc=SqMPerSec

[Condition]
rho=1025.86
nu=1.1883e-06

[Resistance]

[Hull]
HullType=Displ
Loading=LoadDraft
ChineType=RoundBilge
SternShape=Normal
BowShape=Normal
FlapBehind=No
LengthPP=100
LengthWL=103.12
BeamWL=18.03
Draft=7.86
LCBHull=51.55
WettedSurf=2217
MaxSecArea=107.704
HullDispl=200
HalfEntAng=18.2
MidshiCoef=0.76
WaterpCoef=0.779

[Speeds]
Speeds=8.5,9.5,10.5,11.5,12.5,13,13.5,14,14.5,15

[Results]
ResiCoef=0.001369,0.00218935,0.00365495,0.0041293,0.00480175,0.00564533,0.00682689,0.00830199,0.00999497,0.0117199
BareResist=1729.77,2607.96,4181.95,5389.83,7006.12,8462.74,10468.3,13063.5,16238.5,19804.6
ModCfType=ITTC57
ModSource=ModelTest
ModLengthWL=4.125
FroudeLen=0.249068,0.27837,0.307673,0.336975,0.366277,0.380928,0.395579,0.41023,0.424881,0.439532
FroudeVol=0.578346,0.646387,0.714428,0.782469,0.850509,0.88453,0.91855,0.952571,0.986591,1.02061
HullReyNum=1.15662e+08,1.29269e+08,1.42876e+08,1.56483e+08,1.70091e+08,1.76894e+08,1.83698e+08,1.90501e+08,1.97305e+08,2.04109e+08
```
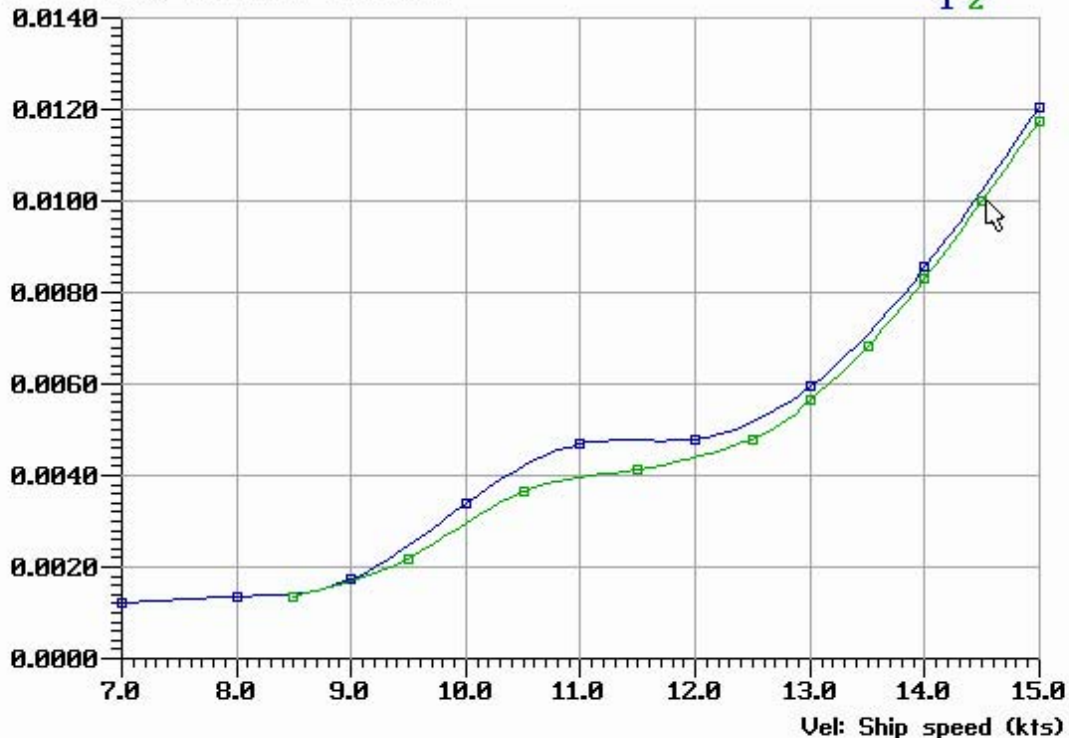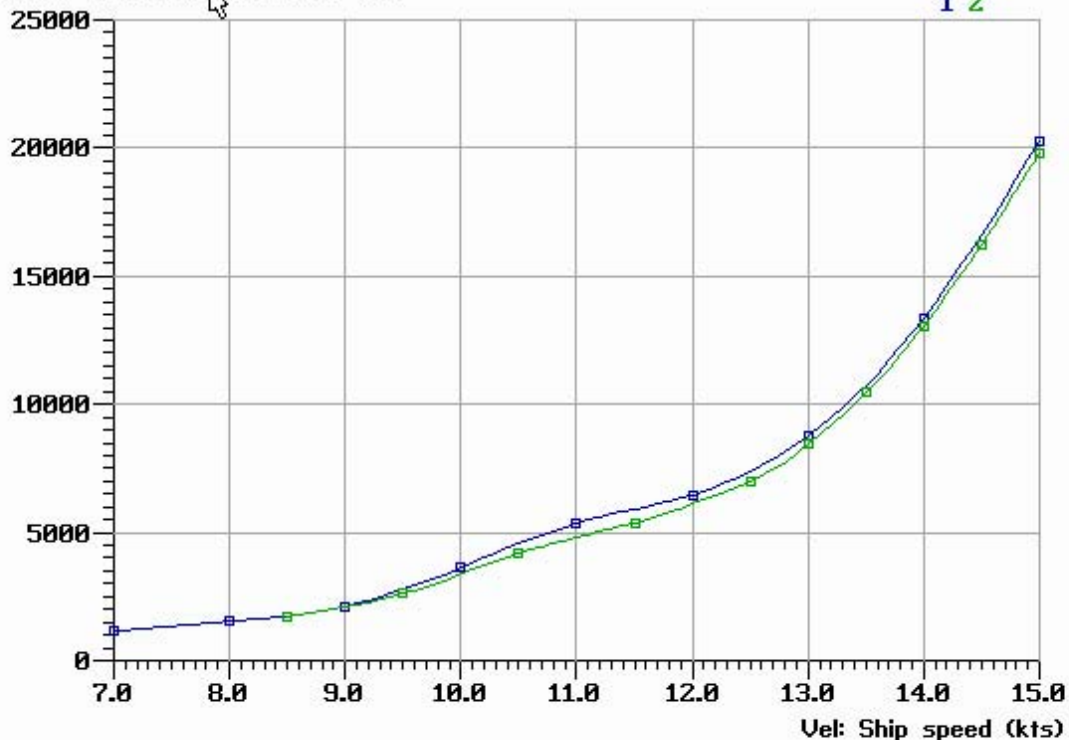
RIDGELEY-NEVITT TRAWLER SERIES RESISTANCE   Webb-C11

15-Mar-2012 21:57:02

Length BP		30.48 m			
Beam Waterline		7.77 m	3.923	Allowable range	3.22 - 5.75
Draft-Midship		3.40 m	2.285	Allowable range	1.94 - 2.42
Displacement volume		396.5 Δ/(0.01Λ)3	400.35	Allowable range	200 - 500
Block coefficient		0.492		Allowable range	0.400 - 0.598
Prismatic coefficient		0.648	0.648	Allowable range	0.554 - 0.700
Midship coefficient		0.760		Allowable range	0.729 - 0.810
Wetted surface area	305.253	291.250 m3-Mumford	5.396	Allowable range	5.198 - 6.255
Water density		1.0259 t/m3	1.0250 at 19oC		→
Water viscosity		1.18831 x 10-6 m2/s	1.07854 x 10-6 at 19oC		
Correlation allowance		0.0004			

Displacement   406.78 t

V/L	V	10-6Rn	103CF	103CR	103CT	RT	PE
	kn		ITTC'57			kN	kW
0.7	7.00	92.37	2.107	1.374	3.881	7.52	27.1
0.8	8.00	105.56	2.067	1.668	4.135	10.46	43.1
0.9	9.00	118.76	2.032	2.147	4.579	14.67	67.9
1.0	10.00	131.95	2.002	3.736	6.138	24.27	124.9
1.1	11.00	145.15	1.975	5.231	7.607	36.39	205.9
1.2	12.00	158.35	1.951	6.144	8.495	48.37	298.6
1.3	13.00	171.54	1.930	8.395	10.724	71.66	479.2
1.4	14.00	184.74	1.910	13.961	16.271	126.09	908.1
1.5	15.00	197.93	1.892	21.043	23.335	207.59	1601.9

```
;**********************************************
;* NavCad model file          HydroComp, Inc. *
;**********************************************

[NavCad]
Version=3.00
Release=PreRelease
Date=02/01/1996
Time=15:06:50.51
Precision=6
Description=WEBB-TRAWLER Model=W 11 L/B=3.92 B/T=2.29 Cb=0.494 Cp=0.650 Lcb=-1.55A 1963

[Units]
Length=Foot
Area=SqFoot
Weight=LongTon
Speed=Knot
Force=Pound
Power=Horsepower
Density=KgPerCuM
KinemVisc=SqMPerSec

[Condition]
rho=1025.86
nu=1.1883e-06

[Resistance]

[Hull]
HullType=Displ
Loading=LoadDraft
ChineType=RoundBilge
SternShape=Normal
BowShape=Normal
FlapBehind=No
LengthPP=100
LengthWL=103.12
BeamWL=25.5
Draft=11.12
LCBHull=51.55
WettedSurf=3135
MaxSecArea=215.506
HullDispl=400
HalfEntAng=25
MidshiCoef=0.76
WaterpCoef=0.779

[Speeds]
Speeds=9,10,10.5,11,11.5,12,12.5,13,13.5,14

[Results]
ResiCoef=0.0021767,0.0037259,0.00466694,0.00539127,0.00579695,0.00622203,0.00701953,0.00831592,0.0108577,0.0137953
BareResist=3312.25,5439.03,6905.26,8343.65,9581.88,10962.4,12987.2,15978.5,21332.4,28042.6
ModCfType=ITTC57
ModSource=ModelTest
ModLengthWL=4.125
FroudeLen=0.263719,0.293022,0.307673,0.322324,0.336975,0.351626,0.366277,0.380928,0.395579,0.41023
FroudeVol=0.545557,0.606174,0.636483,0.666792,0.6971,0.727409,0.757718,0.788027,0.818335,0.848644
HullReyNum=1.22465e+08,1.36072e+08,1.42876e+08,1.4968e+08,1.56483e+08,1.63287e+08,1.70091e+08,1.76894e+08,1.83698e+08,1.90501e+08
```
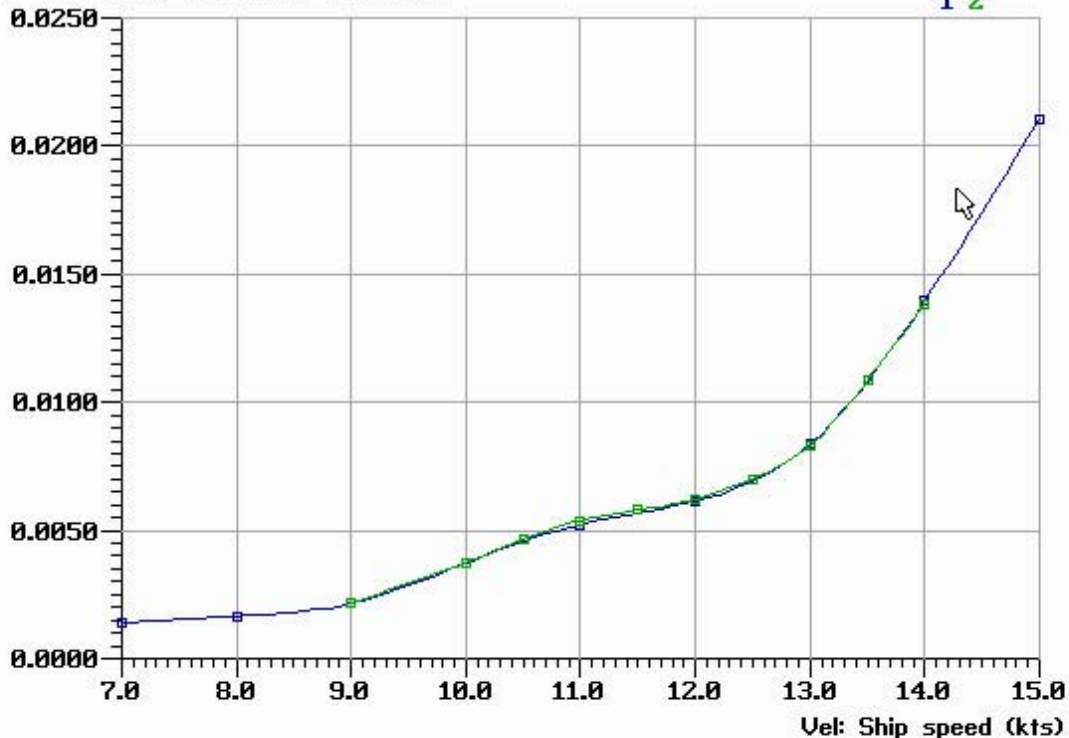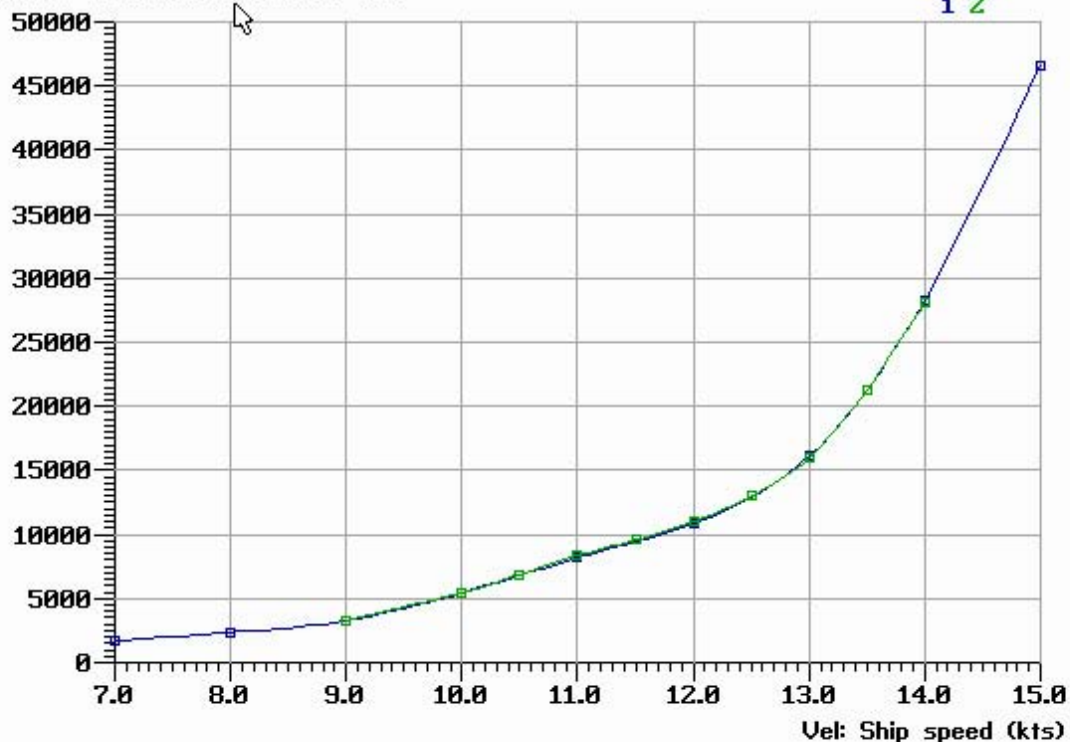
RIDGELEY-NEVITT TRAWLER SERIES RESISTANCE　　　　　　Webb-C12

15-Mar-2012 21:56:30

Length BP	30.48 m				
Beam Waterline	8.70 m	3.503	Allowable range	3.22 - 5.75	
Draft-Midship	3.80 m	2.289	Allowable range	1.94 - 2.42	
Displacement volume	495.6	$\Delta/(0.01\Lambda)3$	500.43 Allowable range	200 - 500	
Block coefficient	0.492		Allowable range	0.400 - 0.598	
Prismatic coefficient	0.631	0.631	Allowable range	0.554 - 0.700	
Midship coefficient	0.779		Allowable range	0.729 - 0.810	
Wetted surface area	341.291	325.625 m3-Mumford	5.199 Allowable range	5.198 - 6.255	
Water density	1.0259 t/m3	1.0250 at 19oC	$\rightarrow$		
Water viscosity	1.18831 x 10-6 m2/s	1.07854 x 10-6 at 19oC			
Correlation allowance	0.0004				

Displacement　　　　508.47 t

exceeds

V/L	V	10-6Rn	103CF	103CR	103CT	RT	PE
	kn		ITTC'57			kN	kW
0.7	7.00	92.37	2.107	1.628	4.136	8.96	32.3
0.8	8.00	105.56	2.067	1.805	4.272	12.09	49.7
0.9	9.00	118.76	2.032	2.258	4.691	16.80	77.8
1.0	10.00	131.95	2.002	3.334	5.736	25.36	130.4
1.1	11.00	145.15	1.975	4.286	6.661	35.63	201.6
1.2	12.00	158.35	1.951	5.697	8.049	51.23	316.3
1.3	13.00	171.54	1.930	9.116	11.446	85.51	571.8
1.4	14.00	184.74	1.910	15.896	18.205	157.73	1136.0
1.5	15.00	197.93	1.892	23.864	26.156	260.15	2007.5

```
;*********************************************
;* NavCad model file          HydroComp, Inc. *
;*********************************************
;

[NavCad]
Version=3.00
Release=PreRelease
Date=02/01/1996
Time=15:47:20.41
Precision=6
Description=WEBB-TRAWLER Model=W 12 L/B=3.508 B/T=2.29 Cb=0.494 Cp=0.650 Lcb=-1.55A 1963

[Units]
Length=Foot
Area=SqFoot
Weight=LongTon
Speed=Knot
Force=Pound
Power=Horsepower
Density=KgPerCuM
KinemVisc=SqMPerSec

[Condition]
rho=1025.86
nu=1.1883e-06

[Resistance]

[Hull]
HullType=Displ
Loading=LoadDraft
ChineType=RoundBilge
SternShape=Normal
BowShape=Normal
FlapBehind=No
LengthPP=100
LengthWL=103.12
BeamWL=28.51
Draft=12.43
LCBHull=51.55
WettedSurf=3505
MaxSecArea=269.328
HullDispl=500
HalfEntAng=27.5
MidshiCoef=0.76
WaterpCoef=0.779

[Speeds]
Speeds=7,8,9,10,11,12,12.5,13,13.5,14

[Results]
ResiCoef=0.0015604,0.00182041,0.00230909,0.00373576,0.00504608,0.00645707,0.00771317,0.00944354,0.0120742,0.0153399
BareResist=1976.15,2720.98,3809.37,6090.76,8913.33,12592.6,15597,19758,26053.1,34360.7
ModCfType=ITTC57
ModSource=ModelTest
ModLengthWL=4.125
FroudeLen=0.205115,0.234417,0.263719,0.293022,0.322324,0.351626,0.366277,0.380928,0.395579,0.41023
FroudeVol=0.408831,0.467235,0.52564,0.584044,0.642449,0.700853,0.730055,0.759258,0.78846,0.817662
HullReyNum=9.52507e+07,1.08858e+08,1.22465e+08,1.36072e+08,1.4968e+08,1.63287e+08,1.70091e+08,1.76894e+08,1.83698e+08,1.90501e+08
```
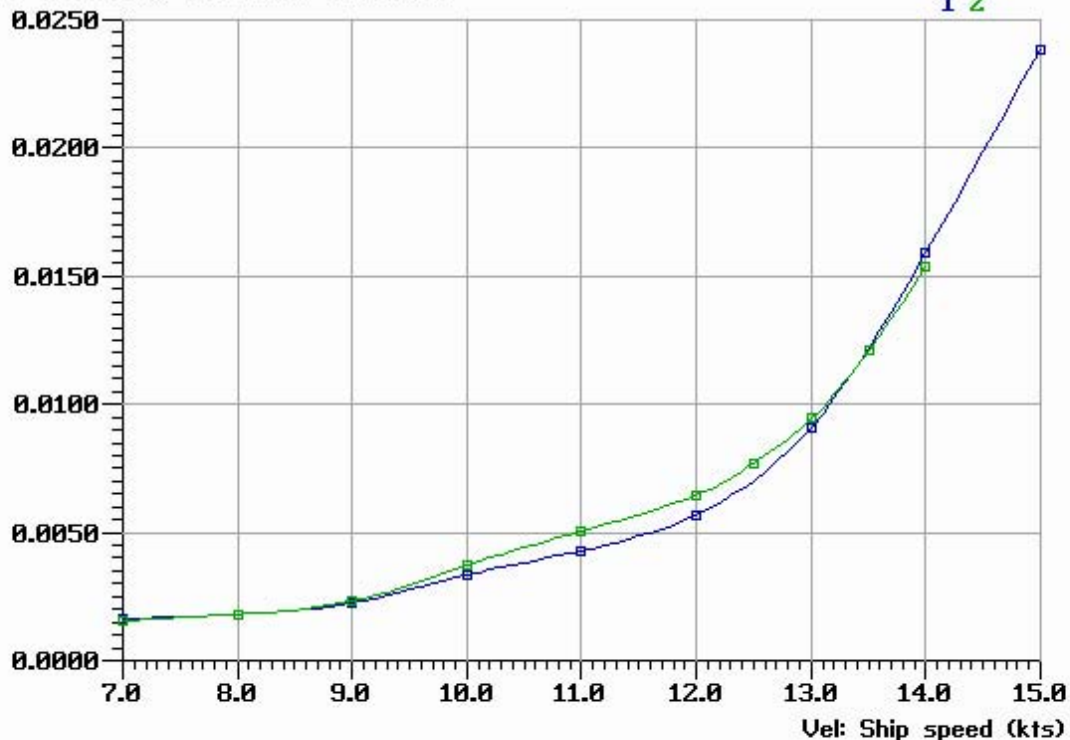
RIDGELEY-NEVITT TRAWLER SERIES RESISTANCE   Webb-C13

Length BP		30.48	m			
Beam Waterline		7.33	m	4.160	Allowable range	3.22 - 5.75
Draft-Midship		3.19	m	2.297	Allowable range	1.94 - 2.42
Displacement volume		297.4	Δ/(0.01Λ)3	300.26	Allowable range	200 - 500
Block coefficient		0.417			Allowable range	0.400 - 0.598
Prismatic coefficient		0.549	0.549		Allowable range	0.554 - 0.700
Midship coefficient		0.760			Allowable range	0.729 - 0.810
Wetted surface area	271.604	259.385	m3-Mumford	5.822	Allowable range	5.198 - 6.255
Water density		1.0259	t/m3	1.0250 at 19oC	→	
Water viscosity		1.18831	x 10-6 m2/s	1.07854 x 10-6 at 19oC		
Correlation allowance		0.0004				

Displacement   305.08 t

V/L	V	$10^{-6}R_n$	$10^3 C_F$	$10^3 C_R$	$10^3 C_T$	RT	PE
	kn		ITTC'57			kN	kW
0.7	7.00	92.37	2.107	0.920	3.428	5.91	21.3
0.8	8.00	105.56	2.067	0.940	3.407	7.68	31.6
0.9	9.00	118.76	2.032	1.119	3.551	10.13	46.9
1.0	10.00	131.95	2.002	1.376	3.778	13.30	68.4
1.1	11.00	145.15	1.975	1.935	4.310	18.36	103.9
1.2	12.00	158.35	1.951	4.495	6.846	34.72	214.3
1.3	13.00	171.54	1.930	9.494	11.824	70.36	470.6
1.4	14.00	184.74	1.910	15.938	18.248	125.94	907.1
1.5	15.00	197.93	1.892	22.001	24.293	192.47	1485.2

```
;*******************************************
;* NavCad model file        HydroComp, Inc. *
;*******************************************

[NavCad]
Version=3.00
Release=PreRelease
Date=03/14/1995
Time=14:17:05.69
Precision=6
Description=WEBB-TRAWLER SERIES Model=W 13 L/B=4.16 B/T=2.30 Cb=0.418 Cp=0.550 1963

[Units]
Length=Foot
Area=SqFoot
Weight=LongTon
Speed=Knot
Force=Pound
Power=Horsepower
Density=KgPerCuM
KinemVisc=SqMPerSec

[Condition]
rho=1025.86
nu=1.1883e-06

[Resistance]

[Hull]
HullType=Displ
Loading=LoadDraft
ChineType=RoundBilge
SternShape=Normal
BowShape=Normal
FlapBehind=No
LengthPP=100
LengthWL=102.94
BeamWL=24.04
Draft=10.46
LCBHull=52.5
WettedSurf=2792
MaxSecArea=191.108
HullDispl=300
HalfEntAng=5.5
MidshiCoef=0.76
WaterpCoef=0.687

[Speeds]
Speeds=8,9,9.5,10,10.5,11,11.5,12,13

[Results]
ResiCoef=0.0008248,0.00103153,0.00121982,0.00140717,0.00172325,0.00225452,0.00326025,0.00435173,0.00851998
BareResist=1663.1,2215.64,2592.08,3008.88,3581.18,4426.83,5878.45,7631.65,14503.9
ModCfType=ITTC57
ModSource=ModelTest
ModLengthWL=4.12
FroudeLen=0.234622,0.26395,0.278614,0.293278,0.307942,0.322605,0.337269,0.351933,0.381261
FroudeVol=0.508757,0.572352,0.604149,0.635947,0.667744,0.699541,0.731339,0.763136,0.82673
HullReyNum=1.08668e+08,1.22251e+08,1.29043e+08,1.35835e+08,1.42627e+08,1.49418e+08,1.5621e+08,1.63002e+08,1.76585e+08
```
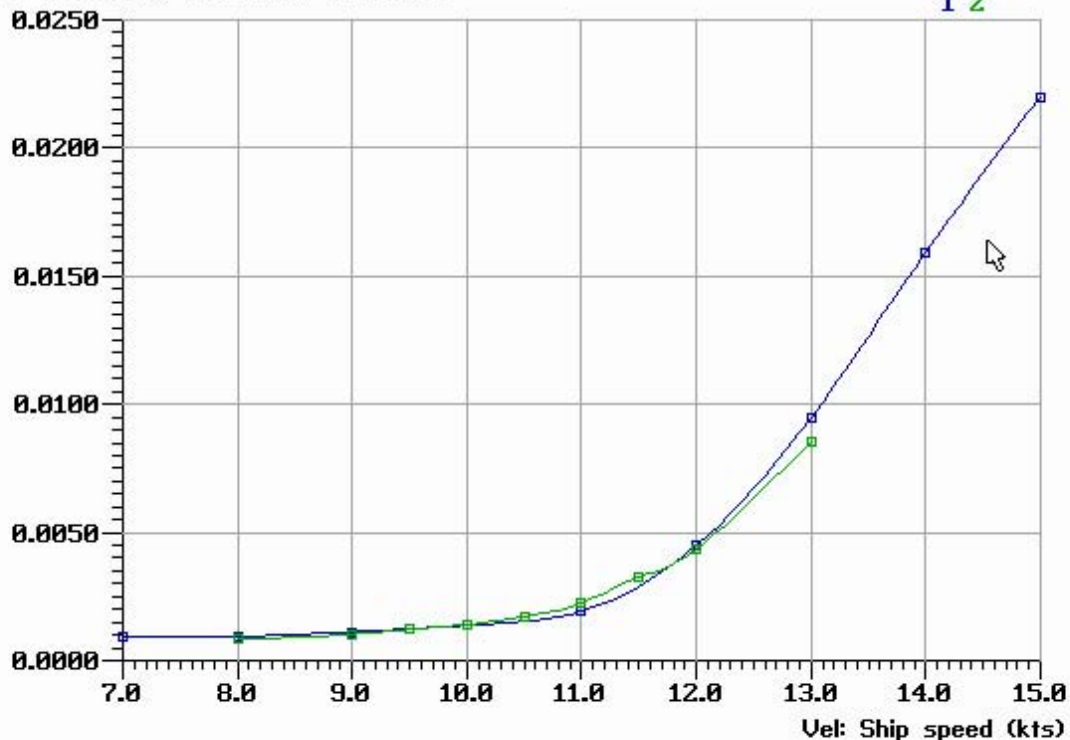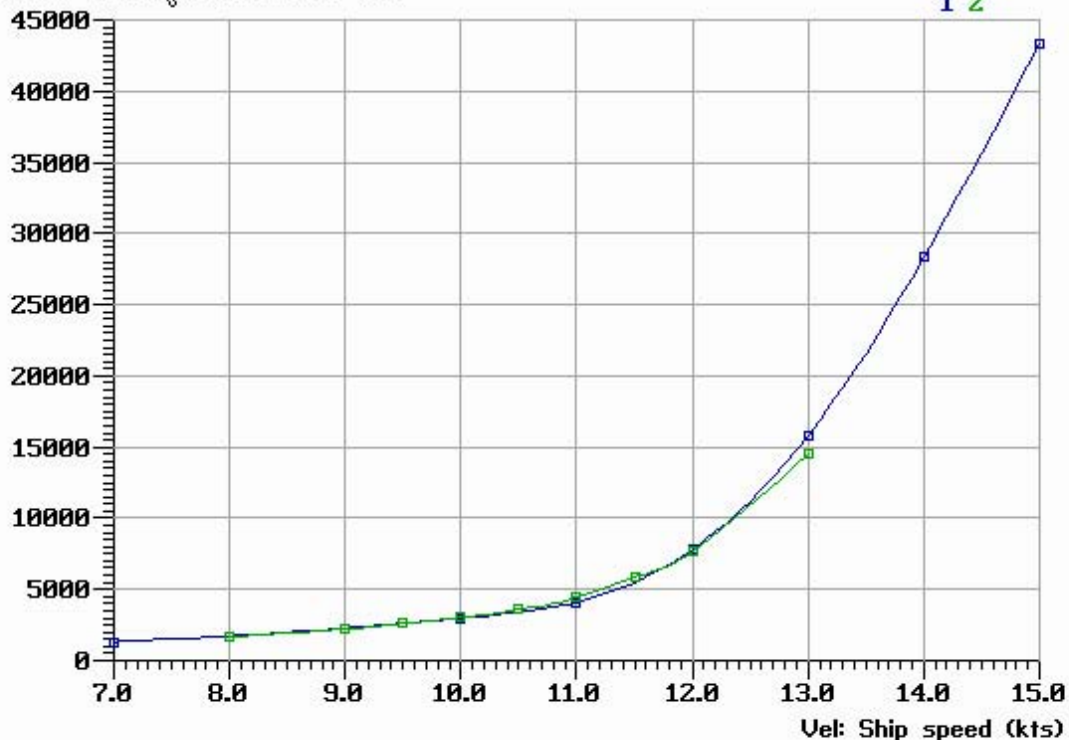
RIDGELEY-NEVITT TRAWLER SERIES RESISTANCE   # Webb-C14

15-Mar-2012 21:55:28

Length BP		30.48 m			
Beam Waterline		7.33 m	4.160	Allowable range	3.22 - 5.75
Draft-Midship		3.18 m	2.307	Allowable range	1.94 - 2.42
Displacement volume		297.4 Δ/(0.01Λ)3	300.26	Allowable range	200 - 500
Block coefficient		0.419		Allowable range	0.400 - 0.598
Prismatic coefficient		0.552	0.552	Allowable range	0.554 - 0.700
Midship coefficient		0.759		Allowable range	0.729 - 0.810
Wetted surface area	271.256	260.780 m3-Mumford	5.853	Allowable range	5.198 - 6.255
Water density		1.0259 t/m3	1.0250 at 19oC	$\rightarrow$	
Water viscosity		1.18831 x 10-6 m2/s	1.07854 x 10-6 at 19oC		
Correlation allowance		0.0004			

Displacement   305.08 t

V/L	V	10-6Rn	103CF	103CR	103CT	RT	PE
	kn		ITTC'57			kN	kW
0.7	7.00	92.37	2.107	0.950	3.458	6.00	21.6
0.8	8.00	105.56	2.067	0.983	3.450	7.82	32.2
0.9	9.00	118.76	2.032	1.145	3.578	10.26	47.5
1.0	10.00	131.95	2.002	1.406	3.808	13.48	69.4
1.1	11.00	145.15	1.975	1.940	4.315	18.48	104.6
1.2	12.00	158.35	1.951	4.318	6.670	34.00	209.9
1.3	13.00	171.54	1.930	9.146	11.475	68.66	459.2
1.4	14.00	184.74	1.910	15.489	17.799	123.50	889.5
1.5	15.00	197.93	1.892	21.644	23.935	190.65	1471.2

```
;*********************************************
;* NavCad model file        HydroComp, Inc. *
;*********************************************

[NavCad]
Version=3.00
Release=PreRelease
Date=03/14/1995
Time=14:21:57.67
Precision=6
Description=WEBB-TRAWLER SERIES Model=W 14 L/B=4.16 B/T=2.31 Cb=0.419 Cp=0.552 1963

[Units]
Length=Foot
Area=SqFoot
Weight=LongTon
Speed=Knot
Force=Pound
Power=Horsepower
Density=KgPerCuM
KinemVisc=SqMPerSec

[Condition]
rho=1025.86
nu=1.1883e-06

[Resistance]

[Hull]
HullType=Displ
Loading=LoadDraft
ChineType=RoundBilge
SternShape=Normal
BowShape=Normal
FlapBehind=No
LengthPP=100
LengthWL=103.12
BeamWL=24.04
Draft=10.42
LCBHull=52.49
WettedSurf=2807
MaxSecArea=190.127
HullDispl=300
HalfEntAng=8.5
MidshiCoef=0.759
WaterpCoef=0.684

[Speeds]
Speeds=8,9,9.5,10,10.5,11,11.5,12,13

[Results]
ResiCoef=0.0008502,0.00118544,0.00137281,0.00151625,0.00174478,0.00210141,0.00292998,0.00427347,0.00846251
BareResist=1684.97,2326.43,2715.53,3111.47,3618.88,4302.71,5561.93,7582.42,14503.9
ModCfType=ITTC57
ModSource=ModelTest
ModLengthWL=4.12
FroudeLen=0.234417,0.263719,0.27837,0.293022,0.307673,0.322324,0.336975,0.351626,0.380928
FroudeVol=0.508757,0.572352,0.604149,0.635947,0.667744,0.699541,0.731339,0.763136,0.82673
HullReyNum=1.08858e+08,1.22465e+08,1.29269e+08,1.36072e+08,1.42876e+08,1.4968e+08,1.56483e+08,1.63287e+08,1.76894e+08
```
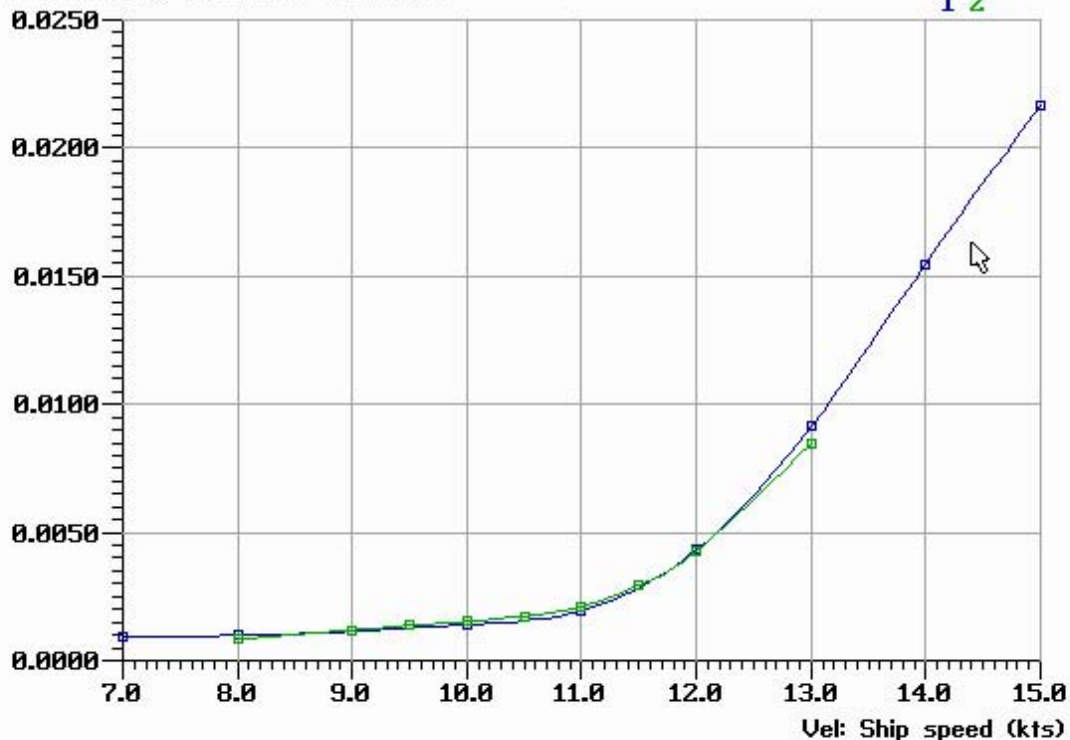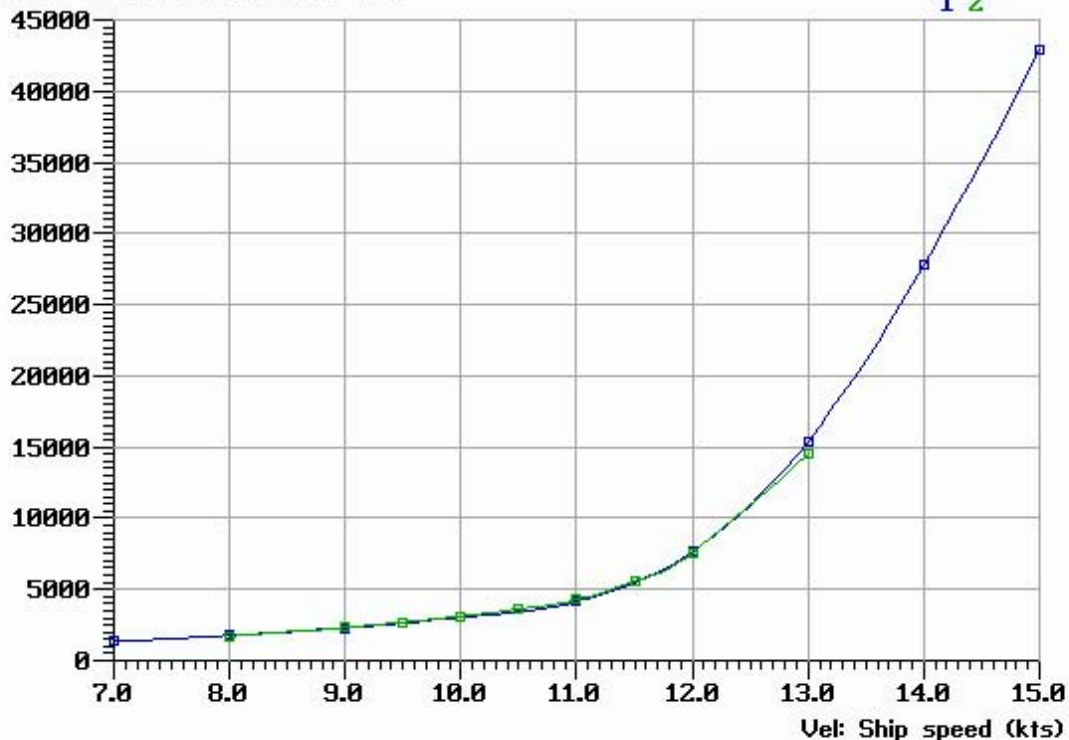
RIDGELEY-NEVITT TRAWLER SERIES RESISTANCE

Webb-C15

15-Mar-2012 21:54:59

Length BP		30.48	m			
Beam Waterline		7.47	m	4.078	Allowable range	3.22 - 5.75
Draft-Midship		3.25	m	2.302	Allowable range	1.94 - 2.42
Displacement volume		297.4	Δ/(0.01Λ)3	300.26	Allowable range	200 - 500
Block coefficient		0.402			Allowable range	0.400 - 0.598
Prismatic coefficient		0.552	0.552		Allowable range	0.554 - 0.700
Midship coefficient		0.729			Allowable range	0.729 - 0.810
Wetted surface area	273.437	260.410	m3-Mumford	5.845	Allowable range	5.198 - 6.255
Water density		1.0259	t/m3	1.0250 at 19oC		→
Water viscosity		1.18831	x 10-6 m2/s	1.07854 x 10-6 at 19oC		
Correlation allowance		0.0004				

Displacement   305.08 t

V/L	V	10-6Rn	103CF	103CR	103CT	RT	PE
	kn		ITTC'57			kN	kW
0.7	7.00	92.37	2.107	0.950	3.458	5.99	21.6
0.8	8.00	105.56	2.067	0.983	3.450	7.81	32.1
0.9	9.00	118.76	2.032	1.145	3.578	10.24	47.4
1.0	10.00	131.95	2.002	1.406	3.808	13.46	69.3
1.1	11.00	145.15	1.975	1.940	4.315	18.46	104.5
1.2	12.00	158.35	1.951	4.318	6.670	33.95	209.6
1.3	13.00	171.54	1.930	9.146	11.475	68.56	458.5
1.4	14.00	184.74	1.910	15.489	17.799	123.33	888.2
1.5	15.00	197.93	1.892	21.644	23.935	190.38	1469.1

```
;*********************************************
;* NavCad model file        HydroComp, Inc. *
;*********************************************
;

[NavCad]
Version=3.00
Release=PreRelease
Date=03/14/1995
Time=14:27:13.33
Precision=6
Description=WEBB-TRAWLER SERIES Model=W 15 L/B=4.08 B/T=2.30 Cb=0.402 Cp=0.552 1963

[Units]
Length=Foot
Area=SqFoot
Weight=LongTon
Speed=Knot
Force=Pound
Power=Horsepower
Density=KgPerCuM
KinemVisc=SqMPerSec

[Condition]
rho=1025.86
nu=1.1883e-06

[Resistance]

[Hull]
HullType=Displ
Loading=LoadDraft
ChineType=RoundBilge
SternShape=Normal
BowShape=Normal
FlapBehind=No
LengthPP=100
LengthWL=103.12
BeamWL=24.52
Draft=10.65
LCBHull=53.46
WettedSurf=2803
MaxSecArea=190.37
HullDispl=300
HalfEntAng=7
MidshiCoef=0.729
WaterpCoef=0.671

[Speeds]
Speeds=7,8,9,9.5,10,10.5,11,11.5,12,13

[Results]
ResiCoef=0.000901,0.000984053,0.00127665,0.00142125,0.00156485,0.00179367,0.00223687,0.00315263,0.00432593,0.00903722
BareResist=1323.57,1750.63,2381.83,2746.4,3145.65,3656.56,4426.83,5788.01,7631.65,15255.1
ModCfType=ITTC57
ModSource=ModelTest
ModLengthWL=4.12
FroudeLen=0.205115,0.234417,0.263719,0.27837,0.293022,0.307673,0.322324,0.336975,0.351626,0.380928
FroudeVol=0.445163,0.508757,0.572352,0.604149,0.635947,0.667744,0.699541,0.731339,0.763136,0.82673
HullReyNum=9.52507e+07,1.08858e+08,1.22465e+08,1.29269e+08,1.36072e+08,1.42876e+08,1.4968e+08,1.56483e+08,1.63287e+08,1.76894e+08
```
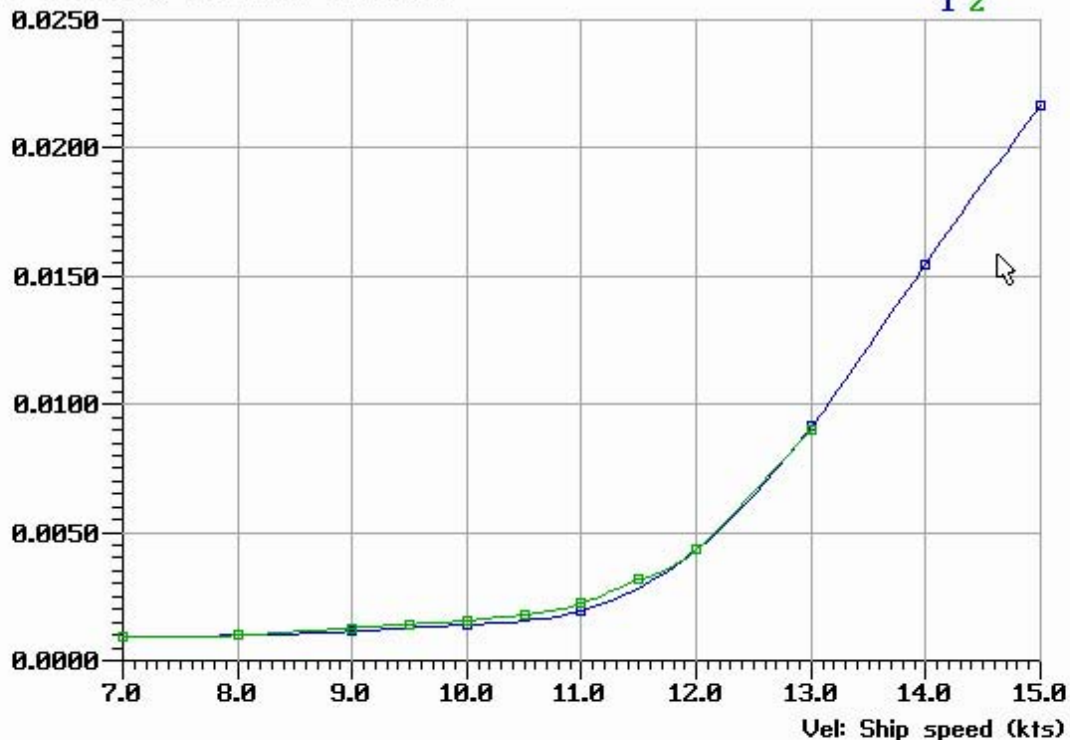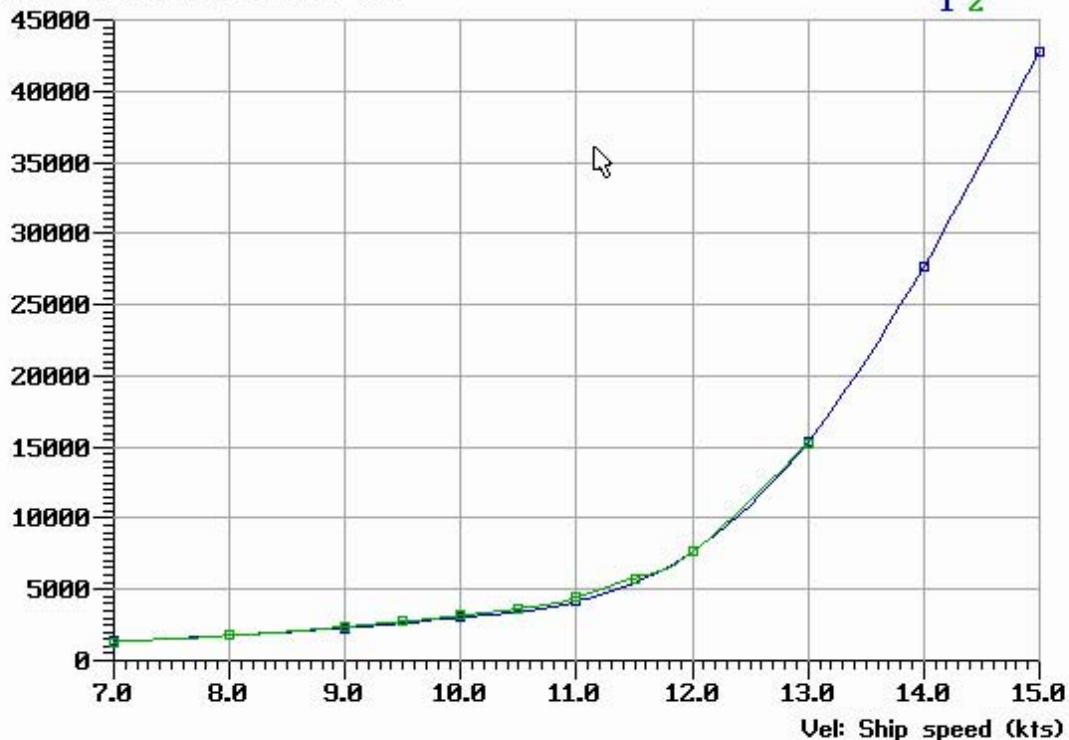
RIDGELEY-NEVITT TRAWLER SERIES RESISTANCE   Webb-C16

15-Mar-2012 21:54:19

Length BP		30.48	m		
Beam Waterline		7.33	m	4.160	Allowable range	3.22 - 5.75
Draft-Midship		3.17	m	2.311	Allowable range	1.94 - 2.42
Displacement volume		297.4	Δ/(0.01Λ)3	300.26 Allowable range	200 - 500
Block coefficient		0.420		Allowable range	0.400 - 0.598
Prismatic coefficient		0.554	0.554	Allowable range	0.554 - 0.700
Midship coefficient		0.758		Allowable range	0.729 - 0.810
Wetted surface area	271.109	260.500	m3-Mumford	5.847 Allowable range	5.198 - 6.255
Water density		1.0259	t/m3	1.0250 at 19oC	→
Water viscosity		1.18831	x 10-6 m2/s	1.07854 x 10-6 at 19oC	
Correlation allowance		0.0004			

Displacement   305.08 t

V/L	V	$10^{-6}Rn$	103CF	103CR	103CT	RT	PE
	kn		ITTC'57			kN	kW
0.7	7.00	92.37	2.107	0.969	3.477	6.02	21.7
0.8	8.00	105.56	2.067	1.010	3.478	7.87	32.4
0.9	9.00	118.76	2.032	1.163	3.595	10.30	47.7
1.0	10.00	131.95	2.002	1.427	3.829	13.54	69.7
1.1	11.00	145.15	1.975	1.944	4.319	18.48	104.6
1.2	12.00	158.35	1.951	4.210	6.562	33.42	206.3
1.3	13.00	171.54	1.930	8.932	11.262	67.31	450.1
1.4	14.00	184.74	1.910	15.213	17.523	121.46	874.8
1.5	15.00	197.93	1.892	21.417	23.708	188.64	1455.7

```
;**********************************************
;* NavCad model file        HydroComp, Inc. *
;**********************************************
;
[NavCad]
Version=3.00
Release=PreRelease
Date=02/01/1996
Time=14:57:35.05
Precision=6
Description=WEBB-TRAWLER SERIES Model=W 16 L/B=4.16 B/T=2.31 Cb=0.420 Cp=0.554 1963

[Units]
Length=Foot
Area=SqFoot
Weight=LongTon
Speed=Knot
Force=Pound
Power=Horsepower
Density=KgPerCuM
KinemVisc=SqMPerSec

[Condition]
rho=1025.86
nu=1.1883e-06

[Resistance]

[Hull]
HullType=Displ
Loading=LoadDraft
ChineType=RoundBilge
SternShape=Normal
BowShape=Normal
FlapBehind=No
LengthPP=100
LengthWL=103.12
BeamWL=24.04
Draft=10.4
LCBHull=53.64
WettedSurf=2804
MaxSecArea=189.512
HullDispl=300
HalfEntAng=8.5
MidshiCoef=0.758
WaterpCoef=0.687

[Speeds]
Speeds=7,8,9,10,11,12,12.5,13,13.5,14

[Results]
ResiCoef=0.0010131,0.00109507,0.00119757,0.00149408,0.00192809,0.00411493,0.00611098,0.00885908,0.0120664,0.0149047
BareResist=1367.71,1807.74,2331.75,3090.51,4131.39,7392.82,10487.4,15021.2,20831.3,26810.4
ModCfType=ITTC57
ModSource=ModelTest
ModLengthWL=4.125
FroudeLen=0.205115,0.234417,0.263719,0.293022,0.322324,0.351626,0.366277,0.380928,0.395579,0.41023
FroudeVol=0.445163,0.508757,0.572352,0.635947,0.699541,0.763136,0.794933,0.82673,0.858528,0.890325
HullReyNum=9.52507e+07,1.08858e+08,1.22465e+08,1.36072e+08,1.4968e+08,1.63287e+08,1.70091e+08,1.76894e+08,1.83698e+08,1.90501e+08
```
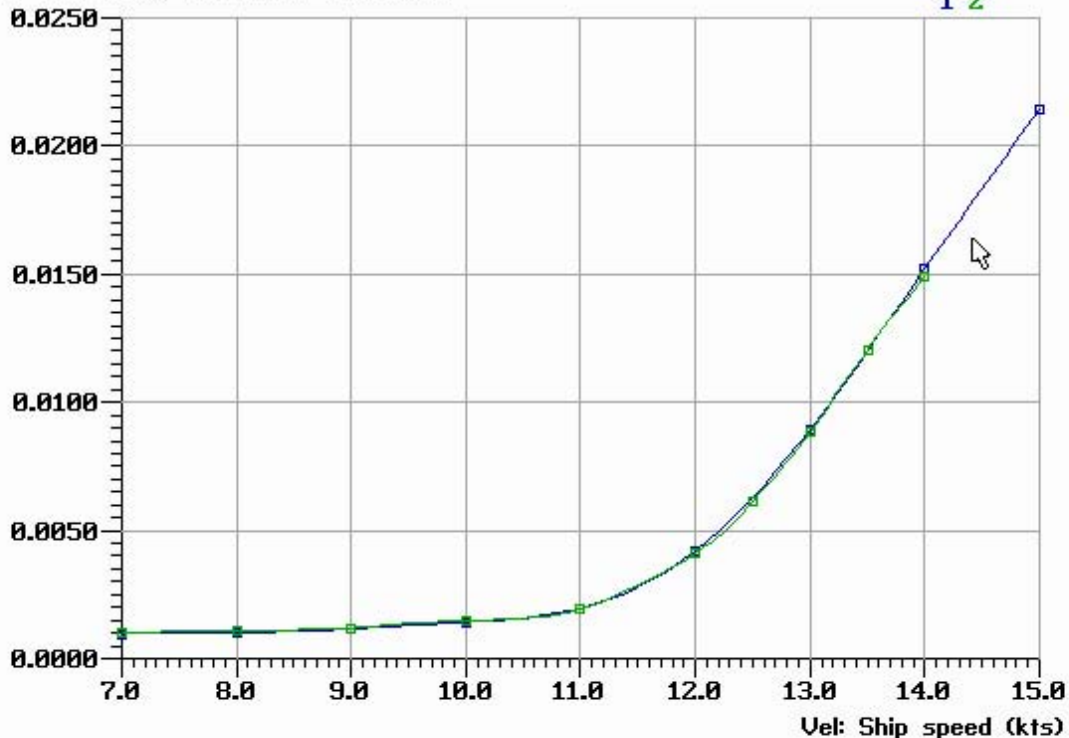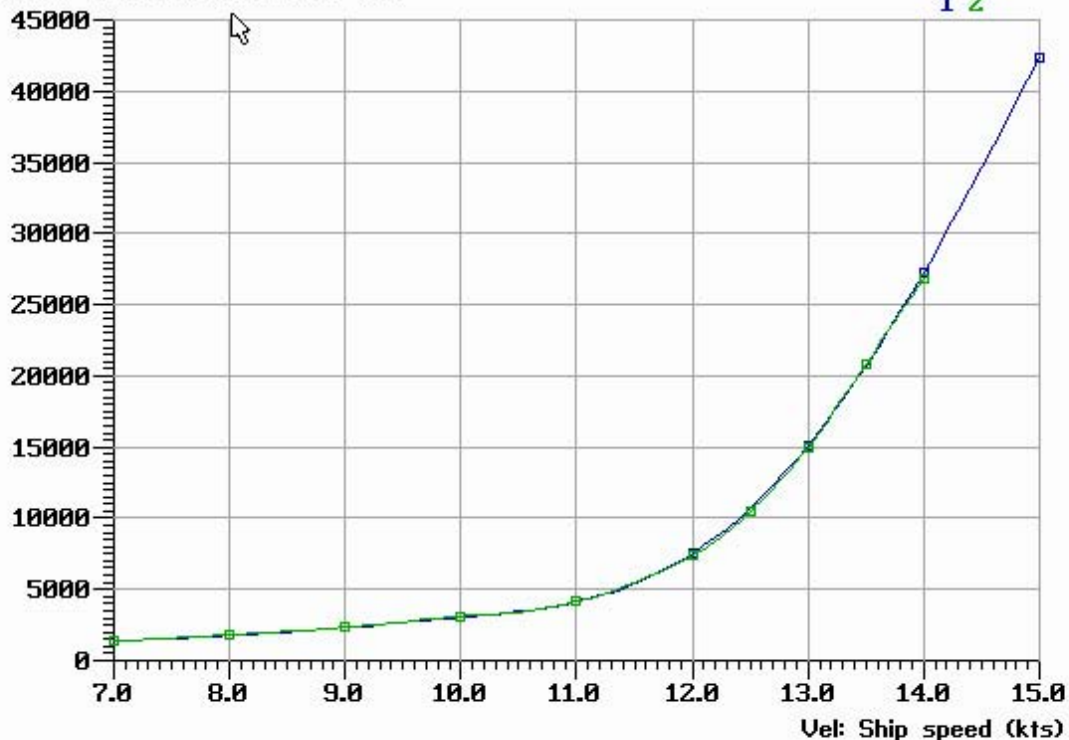
RIDGELEY-NEVITT TRAWLER SERIES RESISTANCE   # Webb-C17

15-Mar-2012 21:53:52

Length BP	30.48 m				
Beam Waterline	6.50 m	4.693	Allowable range	3.22 - 5.75	
Draft-Midship	2.82 m	2.306	Allowable range	1.94 - 2.42	
Displacement volume	297.4 $\Delta/(0.01\Lambda)3$	300.26	Allowable range	200 - 500	
Block coefficient	0.533		Allowable range	0.400 - 0.598	
Prismatic coefficient	0.698	0.698	Allowable range	0.554 - 0.700	
Midship coefficient	0.764		Allowable range	0.729 - 0.810	
Wetted surface area	261.282 253.160 m3-Mumford	5.682	Allowable range	5.198 - 6.255	
Water density	1.0259 t/m3	1.0250 at 19oC	$\rightarrow$		
Water viscosity	1.18831 x 10-6 m2/s	1.07854 x 10-6 at 19oC			
Correlation allowance	0.0004				

Displacement   305.08 t

V/L	V	10-6Rn	103CF	103CR	103CT	RT	PE
	kn		ITTC'57			kN	kW
0.7	7.00	92.37	2.107	1.346	3.854	6.49	23.4
0.8	8.00	105.56	2.067	1.890	4.357	9.58	39.4
0.9	9.00	118.76	2.032	2.537	4.970	13.83	64.1
1.0	10.00	131.95	2.002	4.520	6.922	23.79	122.4
1.1	11.00	145.15	1.975	7.542	9.917	41.24	233.4
1.2	12.00	158.35	1.951	9.031	11.382	56.33	347.7
1.3	13.00	171.54	1.930	9.941	12.271	71.27	476.6
1.4	14.00	184.74	1.910	12.644	14.954	100.73	725.5
1.5	15.00	197.93	1.892	16.836	19.128	147.91	1141.4

```
;*********************************************
;* NavCad model file       HydroComp, Inc. *
;*********************************************
;

[NavCad]
Version=3.00
Release=PreRelease
Date=03/14/1995
Time=14:39:54.21
Precision=6
Description=WEBB-TRAWLER SERIES Model=W 17 L/B=4.69 B/T=2.31 Cb=0.533 Cp=0.698 1963

[Units]
Length=Foot
Area=SqFoot
Weight=LongTon
Speed=Knot
Force=Pound
Power=Horsepower
Density=KgPerCuM
KinemVisc=SqMPerSec

[Condition]
rho=1025.86
nu=1.1883e-06

[Resistance]

[Hull]
HullType=Displ
Loading=LoadDraft
ChineType=RoundBilge
SternShape=Normal
BowShape=Normal
FlapBehind=No
LengthPP=100
LengthWL=103.12
BeamWL=21.31
Draft=9.24
LCBHull=50.52
WettedSurf=2725
MaxSecArea=150.435
HullDispl=300
HalfEntAng=32.4
MidshiCoef=0.764
WaterpCoef=0.826

[Speeds]
Speeds=7,8,9,10,10.5,11,11.5,12,13

[Results]
ResiCoef=0.0013745,0.00201636,0.00263503,0.0046876,0.00647159,0.0077237,0.00890431,0.00950454,0.0104776
BareResist=1465.98,2212.35,3165.61,5470.71,7539.33,9432.88,11503.7,13180.6,16711.2
ModCfType=ITTC57
ModSource=ModelTest
ModLengthWL=4.12
FroudeLen=0.205115,0.234417,0.263719,0.293022,0.307673,0.322324,0.336975,0.351626,0.380928
FroudeVol=0.445163,0.508757,0.572352,0.635947,0.667744,0.699541,0.731339,0.763136,0.82673
HullReyNum=9.52507e+07,1.08858e+08,1.22465e+08,1.36072e+08,1.42876e+08,1.4968e+08,1.56483e+08,1.63287e+08,1.76894e+08
```
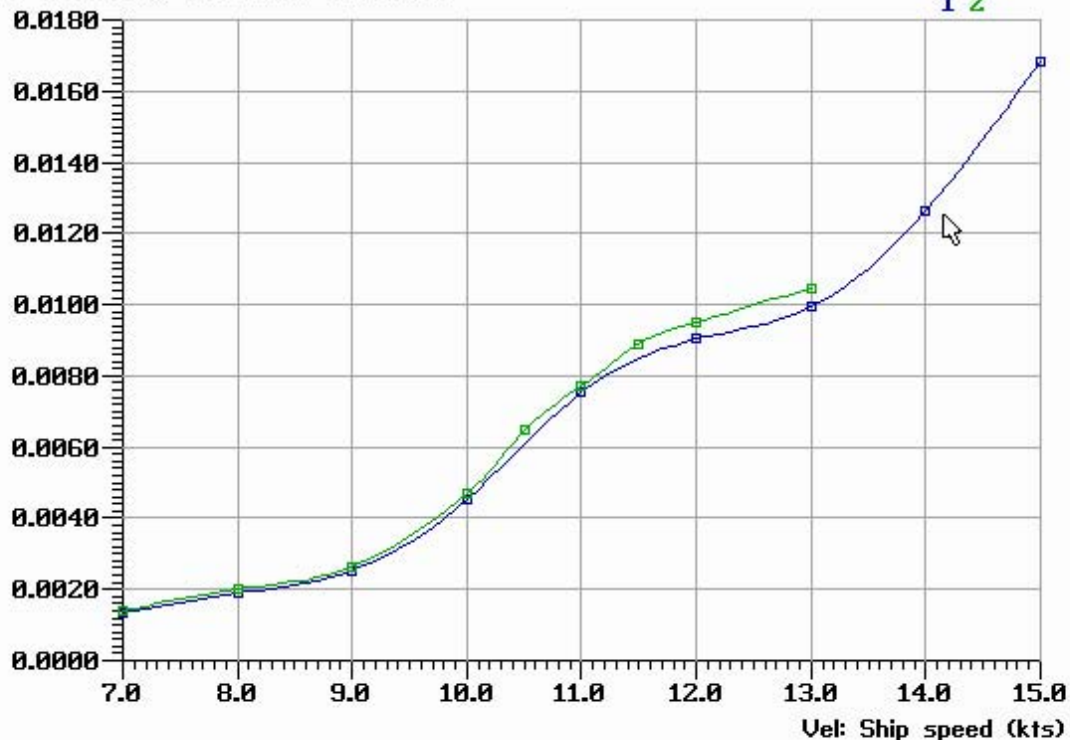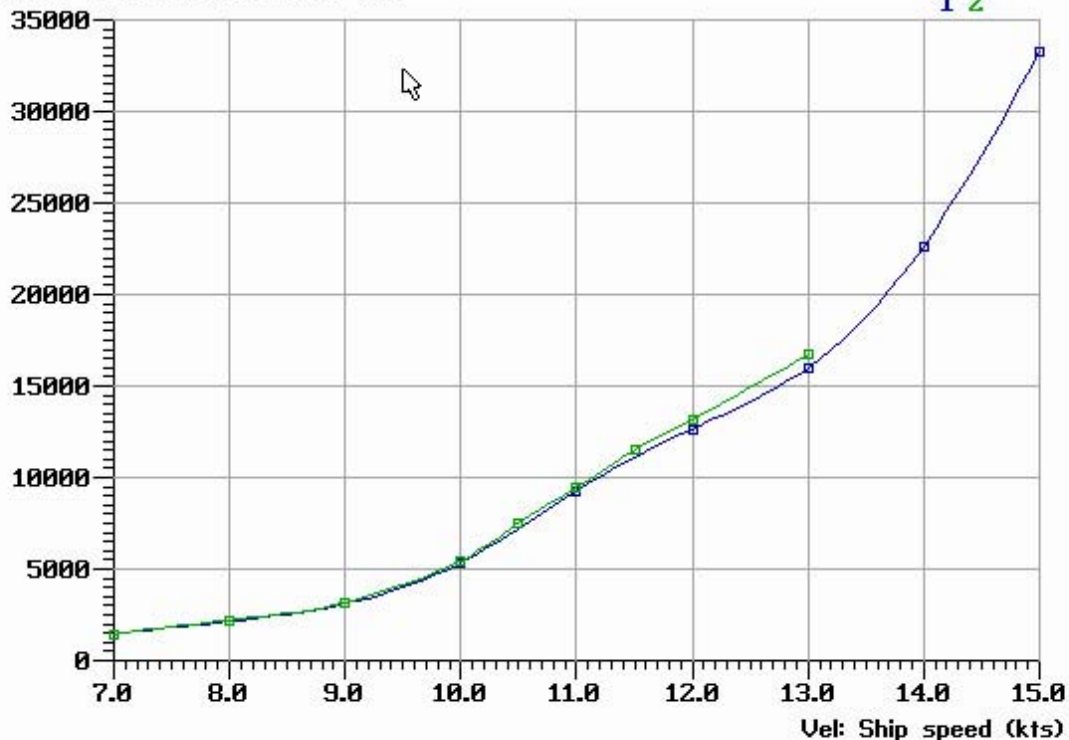
RIDGELEY-NEVITT TRAWLER SERIES RESISTANCE   Webb-C18

15-Mar-2012 21:53:26

Length BP	30.48	m			
Beam Waterline	7.02	m	4.342	Allowable range	3.22 - 5.75
Draft-Midship	3.05	m	2.303	Allowable range	1.94 - 2.42
Displacement volume	297.4	Δ/(0.01Λ)3	300.26 Allowable range		200 - 500
Block coefficient	0.456			Allowable range	0.400 - 0.598
Prismatic coefficient	0.597	0.597		Allowable range	0.554 - 0.700
Midship coefficient	0.764			Allowable range	0.729 - 0.810
Wetted surface area	267.381	254.830 m3-Mumford	5.720 Allowable range		5.198 - 6.255
Water density	1.0259	t/m3	1.0250 at 19oC	→	
Water viscosity	1.18831	x 10-6 m2/s	1.07854 x 10-6 at 19oC		
Correlation allowance	0.0004				

Displacement   305.08 t

V/L	V	10-6Rn	103CF	103CR	103CT	RT	PE
	kn		ITTC'57			kN	kW
0.7	7.00	92.37	2.107	1.226	3.733	6.33	22.8
0.8	8.00	105.56	2.067	1.390	3.857	8.54	35.1
0.9	9.00	118.76	2.032	1.533	3.965	11.11	51.4
1.0	10.00	131.95	2.002	2.157	4.559	15.77	81.1
1.1	11.00	145.15	1.975	2.545	4.920	20.60	116.6
1.2	12.00	158.35	1.951	3.580	5.931	29.55	182.4
1.3	13.00	171.54	1.930	6.772	9.102	53.21	355.9
1.4	14.00	184.74	1.910	12.157	14.467	98.09	706.5
1.5	15.00	197.93	1.892	18.368	20.660	160.81	1240.9

```
;************************************************
;* NavCad model file        HydroComp, Inc. *
;************************************************
;
[NavCad]
Version=3.00
Release=PreRelease
Date=02/01/1996
Time=14:52:47.35
Precision=6
Description=WEBB-TRAWLER SERIES Model=W 18 L/B=4.34 B/T=2.30 Cb=0.456 Cp=0.597 1963

[Units]
Length=Foot
Area=SqFoot
Weight=LongTon
Speed=Knot
Force=Pound
Power=Horsepower
Density=KgPerCuM
KinemVisc=SqMPerSec

[Condition]
rho=1025.86
nu=1.1883e-06

[Resistance]

[Hull]
HullType=Displ
Loading=LoadDraft
ChineType=RoundBilge
SternShape=Normal
BowShape=Normal
FlapBehind=No
LengthPP=100
LengthWL=103.12
BeamWL=23.02
Draft=10
LCBHull=52.65
WettedSurf=2743
MaxSecArea=175.873
HullDispl=300
HalfEntAng=16.1
MidshiCoef=0.764
WaterpCoef=0.731

[Speeds]
Speeds=7,8,9,10,11,12,13,13.5,14,14.5

[Results]
ResiCoef=0.001228,0.00139014,0.00157181,0.00217596,0.00263529,0.00354805,0.00661114,0.00933136,0.0118615,0.0152139
BareResist=1419.85,1915.28,2516.77,3553.57,4706.99,6597.16,11740,16501.6,21588.6,28624.5
ModCfType=ITTC57
ModSource=ModelTest
ModLengthWL=4.125
FroudeLen=0.205115,0.234417,0.263719,0.293022,0.322324,0.351626,0.380928,0.395579,0.41023,0.424881
FroudeVol=0.445163,0.508757,0.572352,0.635947,0.699541,0.763136,0.82673,0.858528,0.890325,0.922122
HullReyNum=9.52507e+07,1.08858e+08,1.22465e+08,1.36072e+08,1.4968e+08,1.63287e+08,1.76894e+08,1.83698e+08,1.90501e+08,1.97305e+08
```
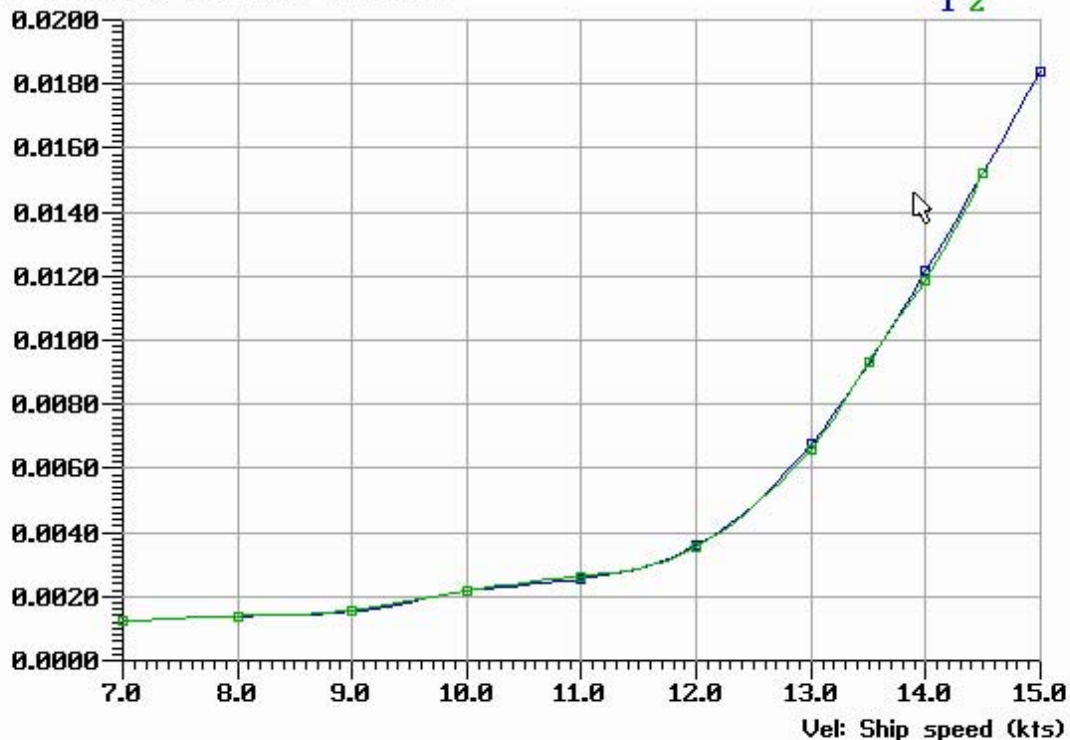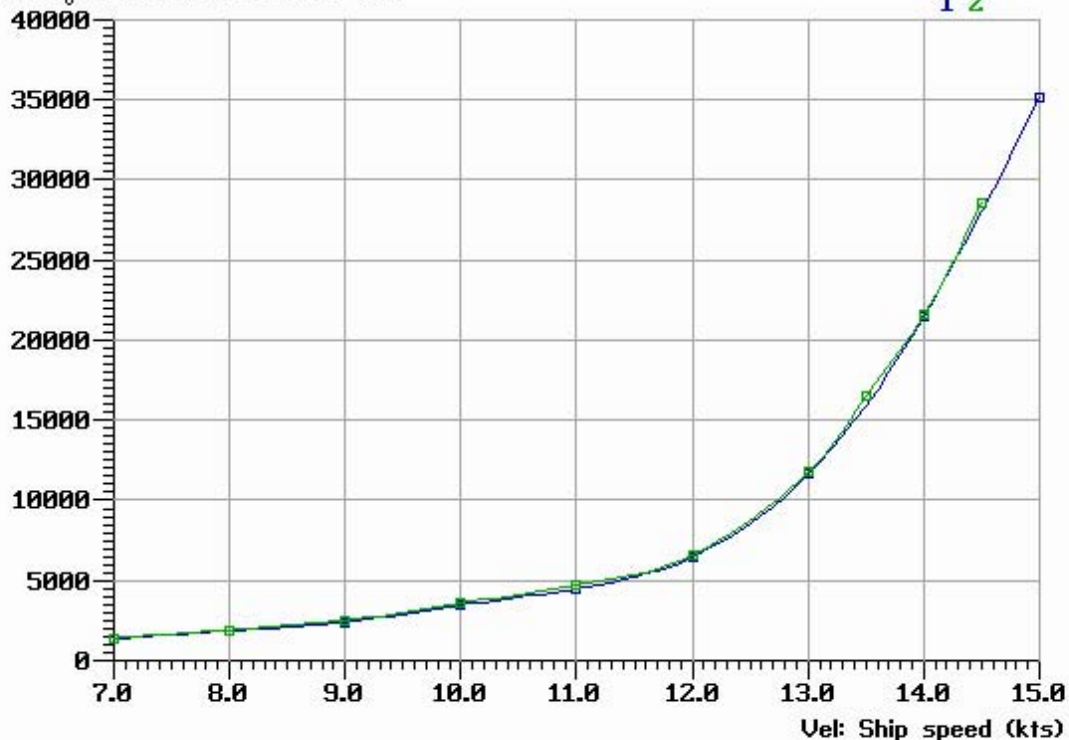
RIDGELEY-NEVITT TRAWLER SERIES RESISTANCE   # Webb-C19

15-Mar-2012 21:52:56

Length BP		30.48	m		
Beam Waterline		5.98	m	5.097	Allowable range	3.22 - 5.75
Draft-Midship		2.59	m	2.309	Allowable range	1.94 - 2.42
Displacement volume		297.4	Δ/(0.01Λ)3	300.26	Allowable range	200 - 500
Block coefficient		0.630			Allowable range	0.400 - 0.598
Prismatic coefficient		0.831	0.831		Allowable range	0.554 - 0.700
Midship coefficient		0.758			Allowable range	0.729 - 0.810
Wetted surface area	256.605	212.660	m3-Mumford	4.773	Allowable range	5.198 - 6.255
Water density		1.0259	t/m3	1.0250 at 19oC	→
Water viscosity		1.18831	x 10-6 m2/s	1.07854 x 10-6 at 19oC
Correlation allowance		0.0004		

Displacement   305.08 t

V/L	V	10-6Rn	103CF	103CR	103CT	RT	PE
	kn		ITTC'57			kN	kW
0.7	7.00	92.37	2.107	15.662	18.169	25.70	92.6
0.8	8.00	105.56	2.067	29.524	31.992	59.11	243.3
0.9	9.00	118.76	2.032	39.344	41.776	97.69	452.3
1.0	10.00	131.95	2.002	26.145	28.548	82.42	424.0
1.1	11.00	145.15	1.975	56.714	59.089	206.41	1168.1
1.2	12.00	158.35	1.951	82.274	84.626	351.80	2171.8
1.3	13.00	171.54	1.930	(44.297)	(41.967)	-204.75	-1369.3
1.4	14.00	184.74	1.910	(51.393)	(49.083)	-277.73	-2000.3
1.5	15.00	197.93	1.892	19.696	21.988	142.82	1102.1

```
;*****************************************
;* NavCad model file        HydroComp, Inc. *
;*****************************************

[NavCad]
Version=3.00
Release=PreRelease
Date=02/01/1996
Time=15:37:43.69
Precision=6
Description=WEBB-TRAWLER Model=W 19 L/B=5.094 B/T=2.31 Cb=0.420 Cp=0.554 Lcb=-3.64A 1963

[Units]
Length=Foot
Area=SqFoot
Weight=LongTon
Speed=Knot
Force=Pound
Power=Horsepower
Density=KgPerCuM
KinemVisc=SqMPerSec

[Condition]
rho=1025.86
nu=1.1883e-06

[Resistance]

[Hull]
HullType=Displ
Loading=LoadDraft
ChineType=RoundBilge
SternShape=Normal
BowShape=Normal
FlapBehind=No
LengthPP=100
LengthWL=103.12
BeamWL=19.63
Draft=8.49
LCBHull=53.64
WettedSurf=2289
MaxSecArea=126.327
HullDispl=200
HalfEntAng=7
MidshiCoef=0.758
WaterpCoef=0.687

[Speeds]
Speeds=7,8,9,10,11,12,13,13.5,14,14.5

[Results]
ResiCoef=0.0007519,0.00073133,0.000948098,0.00115057,0.00144159,0.00302586,0.00612381,0.00802193,0.010175,0.0124587
BareResist=1033.46,1324.65,1772.35,2299.96,2990.56,5017.25,9262.37,12221.7,15870.1,20127.5
ModCfType=ITTC57
ModSource=ModelTest
ModLengthWL=4.125
FroudeLen=0.205115,0.234417,0.263719,0.293022,0.322324,0.351626,0.380928,0.395579,0.41023,0.424881
FroudeVol=0.476285,0.544326,0.612367,0.680408,0.748448,0.816489,0.88453,0.91855,0.952571,0.986591
HullReyNum=9.52507e+07,1.08858e+08,1.22465e+08,1.36072e+08,1.4968e+08,1.63287e+08,1.76894e+08,1.83698e+08,1.90501e+08,1.97305e+08
```
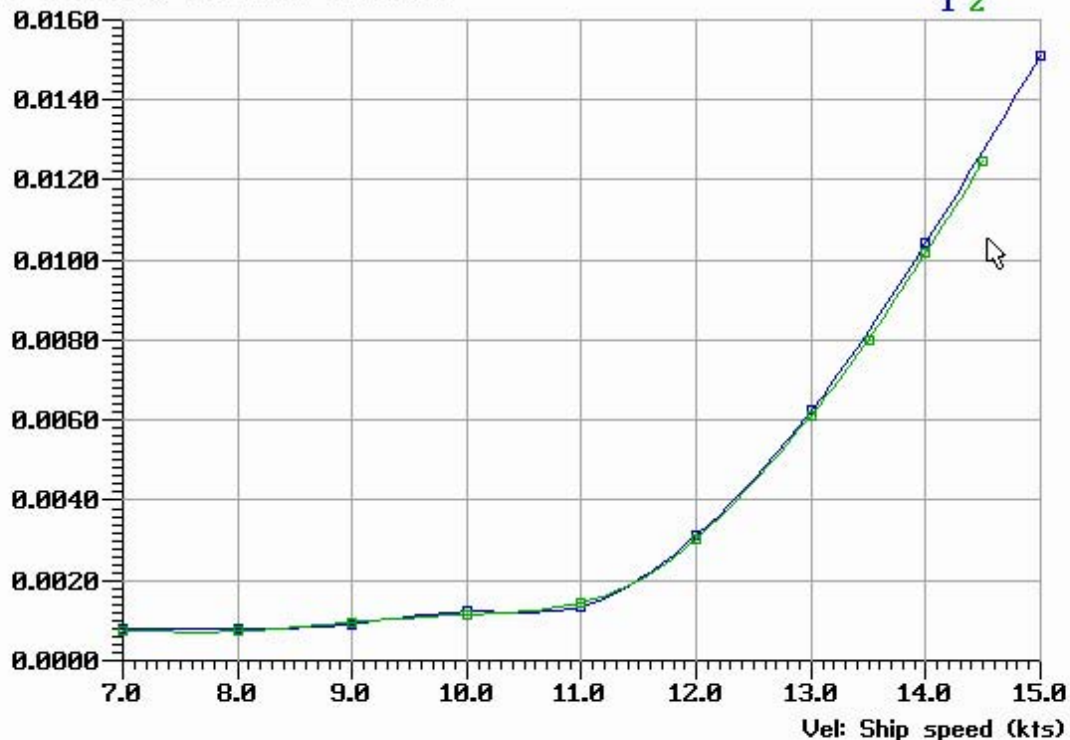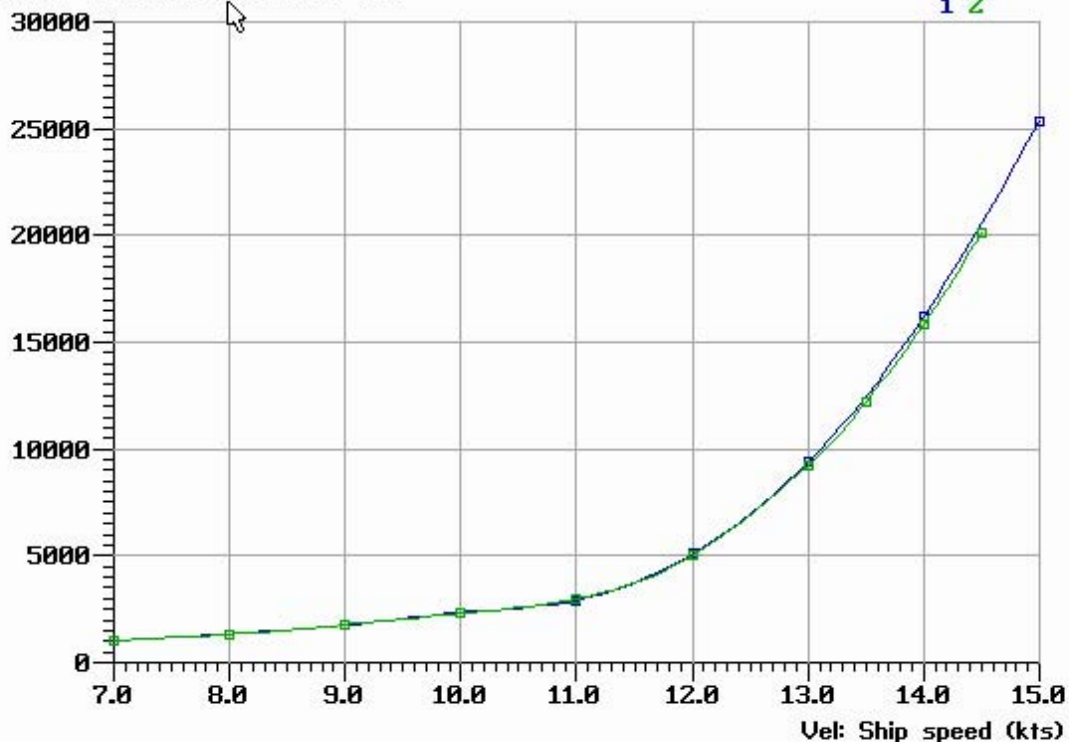
RIDGELEY-NEVITT TRAWLER SERIES RESISTANCE   Webb-C20

15-Mar-2012 21:51:27

Length BP		30.48	m		
Beam Waterline		6.50	m	4.689	Allowable range	3.22 - 5.75
Draft-Midship		2.82	m	2.305	Allowable range	1.94 - 2.42
Displacement volume		297.4	Δ/(0.01Λ)3	300.26	Allowable range	200 - 500
Block coefficient		0.532			Allowable range	0.400 - 0.598
Prismatic coefficient		0.699	0.699		Allowable range	0.554 - 0.700
Midship coefficient		0.761			Allowable range	0.729 - 0.810
Wetted surface area	261.366	253.997	m3-Mumford	5.701	Allowable range	5.198 - 6.255
Water density		1.0259	t/m3	1.0250 at 19oC	→
Water viscosity		1.18831	x 10-6 m2/s 1.07854 x 10-6 at 19oC
Correlation allowance		0.0004			

Displacement   305.08 t

V/L	V	10-6Rn	103CF	103CR	103CT	RT	PE
	kn		ITTC'57			kN	kW
0.7	7.00	92.37	2.107	1.356	3.863	6.53	23.5
0.8	8.00	105.56	2.067	1.912	4.379	9.66	39.8
0.9	9.00	118.76	2.032	2.570	5.002	13.97	64.7
1.0	10.00	131.95	2.002	4.539	6.941	23.93	123.1
1.1	11.00	145.15	1.975	7.598	9.973	41.61	235.5
1.2	12.00	158.35	1.951	9.130	11.482	57.01	351.9
1.3	13.00	171.54	1.930	10.001	12.330	71.85	480.5
1.4	14.00	184.74	1.910	12.666	14.976	101.21	728.9
1.5	15.00	197.93	1.892	16.821	19.113	148.28	1144.2

```
;*********************************************
;* NavCad model file          HydroComp, Inc. *
;*********************************************

[NavCad]
Version=3.00
Release=PreRelease
Date=02/01/1996
Time=15:42:32.77
Precision=6
Description=WEBB-TRAWLER Model=W 20 L/B=4.693 B/T=2.30 Cb=0.533 Cp=0.700 Lcb=-0.89A 1963

[Units]
Length=Foot
Area=SqFoot
Weight=LongTon
Speed=Knot
Force=Pound
Power=Horsepower
Density=KgPerCuM
KinemVisc=SqMPerSec

[Condition]
rho=1025.86
nu=1.1883e-06

[Resistance]

[Hull]
HullType=Displ
Loading=LoadDraft
ChineType=RoundBilge
SternShape=Normal
BowShape=Normal
FlapBehind=No
LengthPP=100
LengthWL=103.12
BeamWL=21.31
Draft=9.25
LCBHull=50.89
WettedSurf=2734
MaxSecArea=150.006
HullDispl=300
HalfEntAng=30.6
MidshiCoef=0.761
WaterpCoef=0.829

[Speeds]
Speeds=7,8,9,10,11,12,13,13.5,14,14.5

[Results]
ResiCoef=0.0013101,0.00198168,0.002702,0.00452464,0.00751936,0.00919344,0.010139,0.0111809,0.0125323,0.014508
BareResist=1446.38,2202.45,3218.11,5362.45,9272.37,12876.9,16322.9,19060.3,22536.9,27380.2
ModCfType=ITTC57
ModSource=ModelTest
ModLengthWL=4.125
FroudeLen=0.205115,0.234417,0.263719,0.293022,0.322324,0.351626,0.380928,0.395579,0.41023,0.424881
FroudeVol=0.445163,0.508757,0.572352,0.635947,0.699541,0.763136,0.82673,0.858528,0.890325,0.922122
HullReyNum=9.52507e+07,1.08858e+08,1.22465e+08,1.36072e+08,1.4968e+08,1.63287e+08,1.76894e+08,1.83698e+08,1.90501e+08,1.97305e+08
```
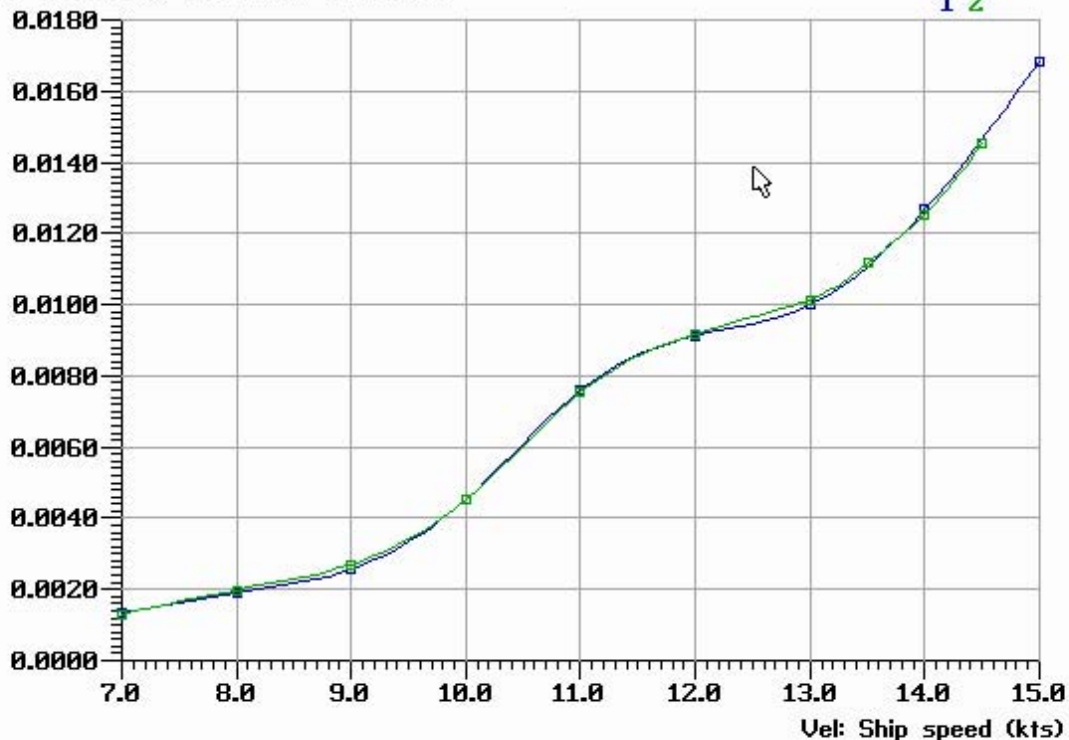
RIDGELEY-NEVITT TRAWLER SERIES RESISTANCE

Webb-C21

Length BP		30.48	m			
Beam Waterline		7.01	m	4.348	Allowable range	3.22 - 5.75
Draft-Midship		3.05	m	2.298	Allowable range	1.94 - 2.42
Displacement volume		297.4	$\Delta/(0.01\Lambda)3$	300.26	Allowable range	200 - 500
Block coefficient		0.456			Allowable range	0.400 - 0.598
Prismatic coefficient		0.600	0.600		Allowable range	0.554 - 0.700
Midship coefficient		0.761			Allowable range	0.729 - 0.810
Wetted surface area	267.397	254.930	m3-Mumford	5.722	Allowable range	5.198 - 6.255
Water density		1.0259	t/m3	1.0250 at 19oC	$\rightarrow$	
Water viscosity		1.18831	x 10-6 m2/s	1.07854 x 10-6 at 19oC		
Correlation allowance		0.0004				

Displacement   305.08 t

V/L	V	10-6Rn	103CF	103CR	103CT	RT	PE
	kn		ITTC'57			kN	kW
0.7	7.00	92.37	2.107	1.234	3.741	6.34	22.8
0.8	8.00	105.56	2.067	1.403	3.870	8.57	35.3
0.9	9.00	118.76	2.032	1.555	3.987	11.18	51.7
1.0	10.00	131.95	2.002	2.227	4.629	16.02	82.4
1.1	11.00	145.15	1.975	2.639	5.014	21.00	118.8
1.2	12.00	158.35	1.951	3.634	5.985	29.83	184.1
1.3	13.00	171.54	1.930	6.735	9.065	53.02	354.6
1.4	14.00	184.74	1.910	12.069	14.379	97.54	702.5
1.5	15.00	197.93	1.892	18.257	20.549	160.01	1234.7

```
;*********************************************
;* NavCad model file         HydroComp, Inc. *
;*********************************************
;

[NavCad]
Version=3.00
Release=PreRelease
Date=03/14/1995
Time=14:53:54.90
Precision=6
Description=WEBB-TRAWLER SERIES Model=W 21 L/B=4.35 B/T=2.30 Cb=0.456 Cp=0.600 1963

[Units]
Length=Foot
Area=SqFoot
Weight=LongTon
Speed=Knot
Force=Pound
Power=Horsepower
Density=KgPerCuM
KinemVisc=SqMPerSec

[Condition]
rho=1025.86
nu=1.1883e-06

[Resistance]

[Hull]
HullType=Displ
Loading=LoadDraft
ChineType=RoundBilge
SternShape=Normal
BowShape=Normal
FlapBehind=No
LengthPP=100
LengthWL=103.12
BeamWL=23
Draft=10
LCBHull=53.11
WettedSurf=2744
MaxSecArea=175.03
HullDispl=300
HalfEntAng=15.7
MidshiCoef=0.761
WaterpCoef=0.735

[Speeds]
Speeds=7,8,9,10,10.5,11,11.5,12,13

[Results]
ResiCoef=0.0012641,0.00140526,0.00154956,0.0023312,0.00258221,0.00274018,0.00301174,0.00375732,0.0068598
BareResist=1434.14,1923.51,2503.67,3675.64,4255.94,4807.44,5521.22,6834.01,12071.2
ModCfType=ITTC57
ModSource=ModelTest
ModLengthWL=4.12
FroudeLen=0.205115,0.234417,0.263719,0.293022,0.307673,0.322324,0.336975,0.351626,0.380928
FroudeVol=0.445163,0.508757,0.572352,0.635947,0.667744,0.699541,0.731339,0.763136,0.82673
HullReyNum=9.52507e+07,1.08858e+08,1.22465e+08,1.36072e+08,1.42876e+08,1.4968e+08,1.56483e+08,1.63287e+08,1.76894e+08
```
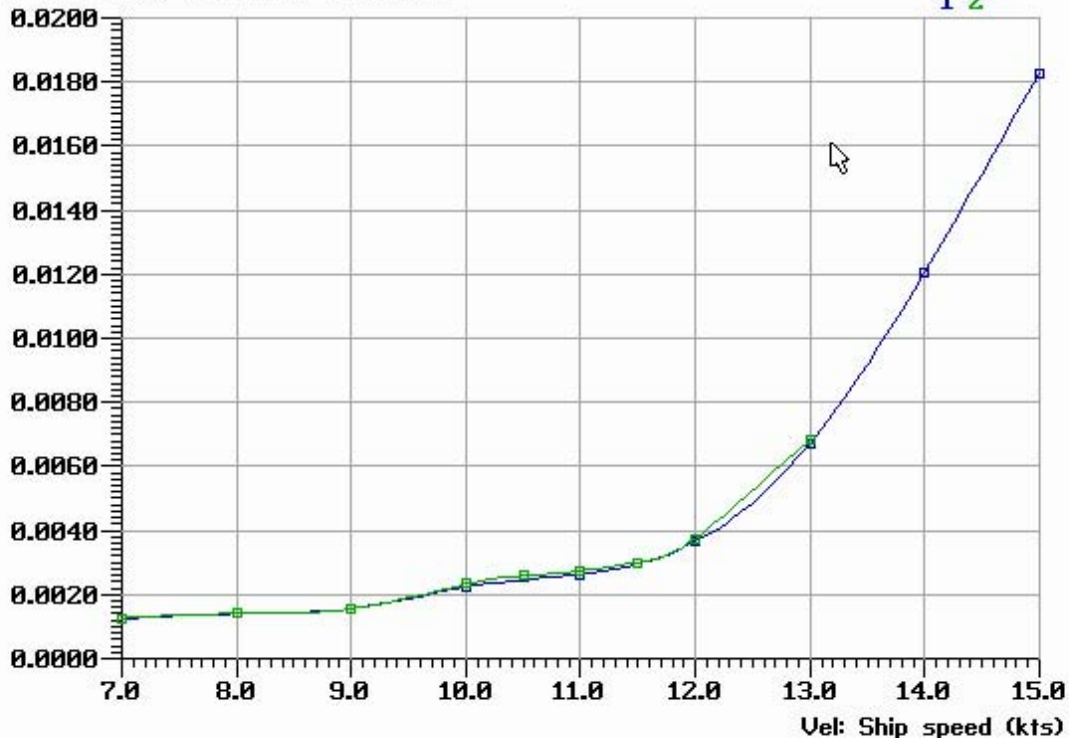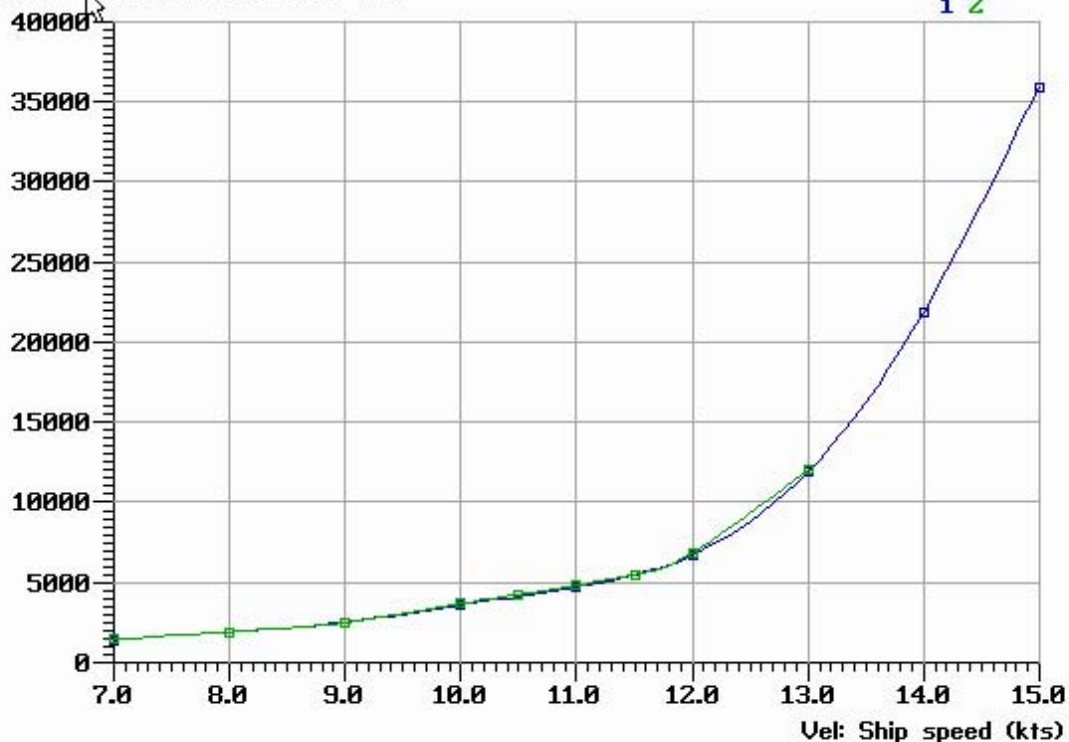
RIDGELEY-NEVITT TRAWLER SERIES RESISTANCE   Webb-C22

Length BP		30.48	m			
Beam Waterline		8.46	m	3.601	Allowable range	3.22 - 5.75
Draft-Midship		3.66	m	2.313	Allowable range	1.94 - 2.42
Displacement volume		396.5	Δ/(0.01Λ)3	400.35	Allowable range	200 - 500
Block coefficient		0.420			Allowable range	0.400 - 0.598
Prismatic coefficient		0.554	0.554		Allowable range	0.554 - 0.700
Midship coefficient		0.758			Allowable range	0.729 - 0.810
Wetted surface area	313.049	300.913	m3-Mumford	5.575	Allowable range	5.198 - 6.255
Water density		1.0259	t/m3	1.0250 at 19oC		→
Water viscosity		1.18831	x 10-6 m2/s	1.07854 x 10-6 at 19oC		
Correlation allowance		0.0004				

Displacement   406.78 t

V/L	V	10-6Rn	103CF	103CR	103CT	RT	PE
	kn		ITTC'57			kN	kW
0.7	7.00	92.37	2.107	1.344	3.852	7.71	27.8
0.8	8.00	105.56	2.067	1.450	3.917	10.24	42.1
0.9	9.00	118.76	2.032	1.673	4.105	13.58	62.9
1.0	10.00	131.95	2.002	1.883	4.285	17.51	90.1
1.1	11.00	145.15	1.975	2.628	5.003	24.73	140.0
1.2	12.00	158.35	1.951	5.415	7.766	45.68	282.0
1.3	13.00	171.54	1.930	11.317	13.646	94.21	630.1
1.4	14.00	184.74	1.910	18.598	20.908	167.40	1205.7
1.5	15.00	197.93	1.892	26.531	28.822	264.91	2044.3

```
;*******************************************
;* NavCad model file        HydroComp, Inc. *
;*******************************************

[NavCad]
Version=3.00
Release=PreRelease
Date=02/02/1996
Time=10:31:24.47
Precision=6
Description=WEBB-TRAWLER Model=W 22 L/B=3.60 B/T=2.31 Cb=0.420 Cp=0.554 Lcb=-3.64A 1963

[Units]
Length=Foot
Area=SqFoot
Weight=LongTon
Speed=Knot
Force=Pound
Power=Horsepower
Density=KgPerCuM
KinemVisc=SqMPerSec

[Condition]
rho=1025.86
nu=1.1883e-06

[Resistance]

[Hull]
HullType=Displ
Loading=LoadDraft
ChineType=RoundBilge
SternShape=Normal
BowShape=Normal
FlapBehind=No
LengthPP=100
LengthWL=103.12
BeamWL=27.77
Draft=12.01
LCBHull=53.64
WettedSurf=3239
MaxSecArea=252.806
HullDispl=400
HalfEntAng=9.8
MidshiCoef=0.758
WaterpCoef=0.687

[Speeds]
Speeds=8,9,10,11,11.5,12,12.5,13,13.5,14

[Results]
ResiCoef=0.001417,0.00169599,0.0019237,0.00257208,0.00359607,0.00412963,0.00535227,0.00806369,0.0112049,0.0139547
BareResist=2277.4,3064.23,3964.49,5487.88,7226.86,8559.14,11025.7,16117.1,22621.1,29259.7
ModCfType=ITTC57
ModSource=ModelTest
ModLengthWL=4.125
FroudeLen=0.234417,0.263719,0.293022,0.322324,0.336975,0.351626,0.366277,0.380928,0.395579,0.41023
FroudeVol=0.484939,0.545557,0.606174,0.666792,0.6971,0.727409,0.757718,0.788027,0.818335,0.848644
HullReyNum=1.08858e+08,1.22465e+08,1.36072e+08,1.4968e+08,1.56483e+08,1.63287e+08,1.70091e+08,1.76894e+08,1.83698e+08,1.90501e+08
```
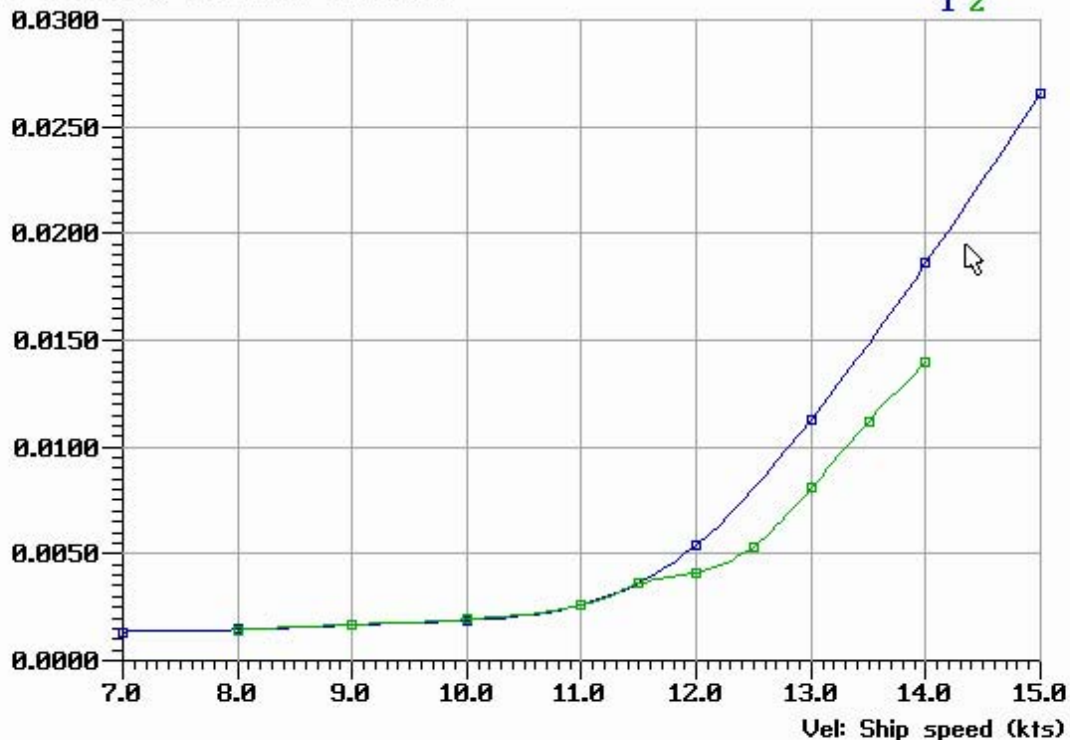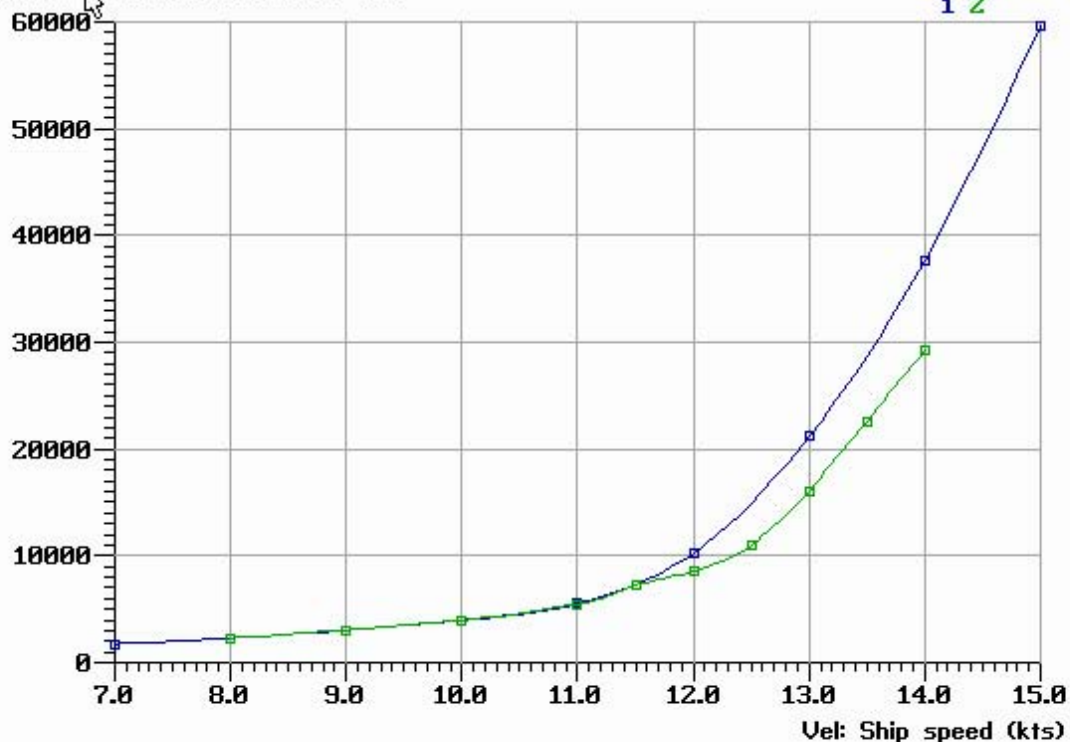
RIDGELEY-NEVITT TRAWLER SERIES RESISTANCE $\qquad$ Webb-C23

15-Mar-2012 21:49:28

Length BP		30.48	m		
Beam Waterline		5.30	m	5.748	Allowable range	3.22 - 5.75
Draft-Midship		2.30	m	2.305	Allowable range	1.94 - 2.42
Displacement volume		198.3	$\Delta/(0.01\Lambda)3$	200.18	Allowable range	200 - 500
Block coefficient		0.533			Allowable range	0.400 - 0.598
Prismatic coefficient		0.700	0.700		Allowable range	0.554 - 0.700
Midship coefficient		0.761			Allowable range	0.729 - 0.810
Wetted surface area	213.366	207.360	m3-Mumford	6.099	Allowable range	5.198 - 6.255
Water density		1.0259	t/m3	1.0250 at 19oC	$\rightarrow$
Water viscosity		1.18831	x 10-6 m2/s	1.07854 x 10-6 at 19oC
Correlation allowance		0.0004			

Displacement $\qquad$ 203.39 t

V/L	V	10-6Rn	103CF	103CR	103CT	RT	PE
	kn		ITTC'57			kN	kW
0.7	7.00	92.37	2.107	1.415	3.923	5.41	19.5
0.8	8.00	105.56	2.067	2.058	4.525	8.15	33.5
0.9	9.00	118.76	2.032	2.867	5.300	12.08	56.0
1.0	10.00	131.95	2.002	4.458	6.860	19.31	99.3
1.1	11.00	145.15	1.975	6.517	8.892	30.29	171.4
1.2	12.00	158.35	1.951	7.093	9.445	38.28	236.3
1.3	13.00	171.54	1.930	7.377	9.706	46.18	308.8
1.4	14.00	184.74	1.910	8.923	11.233	61.98	446.4
1.5	15.00	197.93	1.892	11.444	13.736	87.00	671.3

```
;**********************************************
;* NavCad model file        HydroComp, Inc. *
;**********************************************
;

[NavCad]
Version=3.00
Release=PreRelease
Date=02/01/1996
Time=15:22:39.45
Precision=6
Description=WEBB-TRAWLER Model=W 23 L/B=5.75 B/T=2.31 Cb=0.533 Cp=0.700 Lcb=-0.89A 1963

[Units]
Length=Foot
Area=SqFoot
Weight=LongTon
Speed=Knot
Force=Pound
Power=Horsepower
Density=KgPerCuM
KinemVisc=SqMPerSec

[Condition]
rho=1025.86
nu=1.1883e-06

[Resistance]

[Hull]
HullType=Displ
Loading=LoadDraft
ChineType=RoundBilge
SternShape=Normal
BowShape=Normal
FlapBehind=No
LengthPP=100
LengthWL=103.12
BeamWL=17.4
Draft=7.55
LCBHull=50.89
WettedSurf=2232
MaxSecArea=99.9726
HullDispl=200
HalfEntAng=25.8
MidshiCoef=0.761
WaterpCoef=0.829

[Speeds]
Speeds=7,8,9,10,11,12,12.5,13,14,15

[Results]
ResiCoef=0.0013604,0.00213636,0.00290823,0.00444819,0.0064984,0.00702838,0.00716625,0.00746103,0.00897819,0.0120167
BareResist=1196.39,1860.7,2732.93,4329.46,6788.09,8539.59,9391.46,10461.8,13990.6,20361.2
ModCfType=ITTC57
ModSource=ModelTest
ModLengthWL=4.125
FroudeLen=0.205115,0.234417,0.263719,0.293022,0.322324,0.351626,0.366277,0.380928,0.41023,0.439532
FroudeVol=0.476285,0.544326,0.612367,0.680408,0.748448,0.816489,0.850509,0.88453,0.952571,1.02061
HullReyNum=9.52507e+07,1.08858e+08,1.22465e+08,1.36072e+08,1.4968e+08,1.63287e+08,1.70091e+08,1.76894e+08,1.90501e+08,2.04109e+08
```
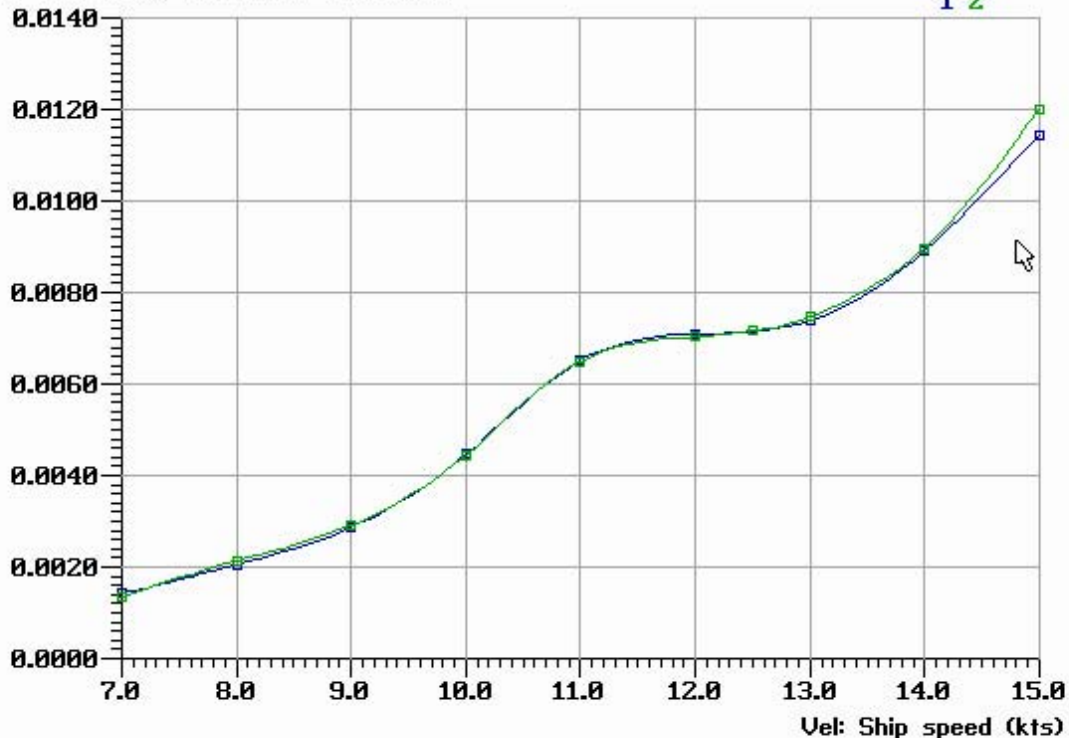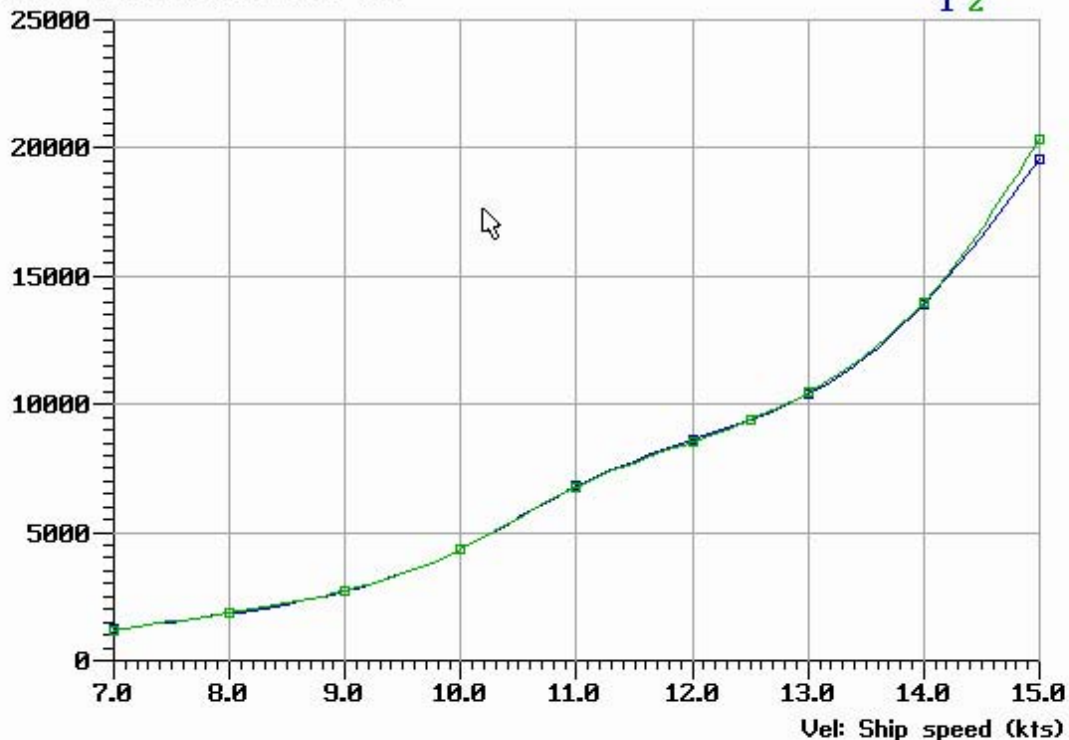
RIDGELEY-NEVITT TRAWLER SERIES RESISTANCE   Webb-C24

Length BP		30.48	m		
Beam Waterline		7.50	m	4.064	Allowable range	3.22 - 5.75
Draft-Midship		3.26	m	2.301	Allowable range	1.94 - 2.42
Displacement volume		396.5	Δ/(0.01Λ)3	400.35	Allowable range	200 - 500
Block coefficient		0.532			Allowable range	0.400 - 0.598
Prismatic coefficient		0.699	0.699		Allowable range	0.554 - 0.700
Midship coefficient		0.761			Allowable range	0.729 - 0.810
Wetted surface area	301.849	293.390	m3-Mumford	5.436	Allowable range	5.198 - 6.255
Water density		1.0259	t/m3	1.0250 at 19oC	→
Water viscosity		1.18831	x 10-6 m2/s	1.07854 x 10-6 at 19oC
Correlation allowance		0.0004			

Displacement   406.78 t

V/L	V	10-6Rn	103CF	103CR	103CT	RT	PE
	kn		ITTC'57			kN	kW
0.7	7.00	92.37	2.107	1.541	4.048	7.90	28.4
0.8	8.00	105.56	2.067	2.106	4.573	11.66	48.0
0.9	9.00	118.76	2.032	2.749	5.181	16.72	77.4
1.0	10.00	131.95	2.002	4.927	7.329	29.19	150.2
1.1	11.00	145.15	1.975	7.945	10.320	49.74	281.5
1.2	12.00	158.35	1.951	9.369	11.721	67.22	415.0
1.3	13.00	171.54	1.930	10.564	12.894	86.79	580.4
1.4	14.00	184.74	1.910	14.452	16.762	130.85	942.4
1.5	15.00	197.93	1.892	19.973	22.265	199.52	1539.7

```
;*********************************************
;* NavCad model file         HydroComp, Inc. *
;*********************************************

[NavCad]
Version=3.00
Release=PreRelease
Date=02/01/1996
Time=15:02:07.37
Precision=6
Description=WEBB-TRAWLER Model=W 24 L/B=4.06 B/T=2.30 Cb=0.533 Cp=0.700 Lcb=-0.89A 1963

[Units]
Length=Foot
Area=SqFoot
Weight=LongTon
Speed=Knot
Force=Pound
Power=Horsepower
Density=KgPerCuM
KinemVisc=SqMPerSec

[Condition]
rho=1025.86
nu=1.1883e-06

[Resistance]

[Hull]
HullType=Displ
Loading=LoadDraft
ChineType=RoundBilge
SternShape=Normal
BowShape=Normal
FlapBehind=No
LengthPP=100
LengthWL=103.12
BeamWL=24.61
Draft=10.68
LCBHull=50.89
WettedSurf=3158
MaxSecArea=200.017
HullDispl=400
HalfEntAng=34.4
MidshiCoef=0.761
WaterpCoef=0.829

[Speeds]
Speeds=7,8,9,10,11,12,12.5,13,13.5,14

[Results]
ResiCoef=0.0016106,0.00224075,0.00279067,0.00503488,0.00792238,0.00931415,0.00997804,0.010786,0.0123093,0.0144192
BareResist=1802.51,2692.47,3781.49,6650.93,11147,15029.5,17221.4,19833.2,23857.5,29343.3
ModCfType=ITTC57
ModSource=ModelTest
ModLengthWL=4.125
FroudeLen=0.205115,0.234417,0.263719,0.293022,0.322324,0.351626,0.366277,0.380928,0.395579,0.41023
FroudeVol=0.424322,0.484939,0.545557,0.606174,0.666792,0.727409,0.757718,0.788027,0.818335,0.848644
HullReyNum=9.52507e+07,1.08858e+08,1.22465e+08,1.36072e+08,1.4968e+08,1.63287e+08,1.70091e+08,1.76894e+08,1.83698e+08,1.90501e+08
```
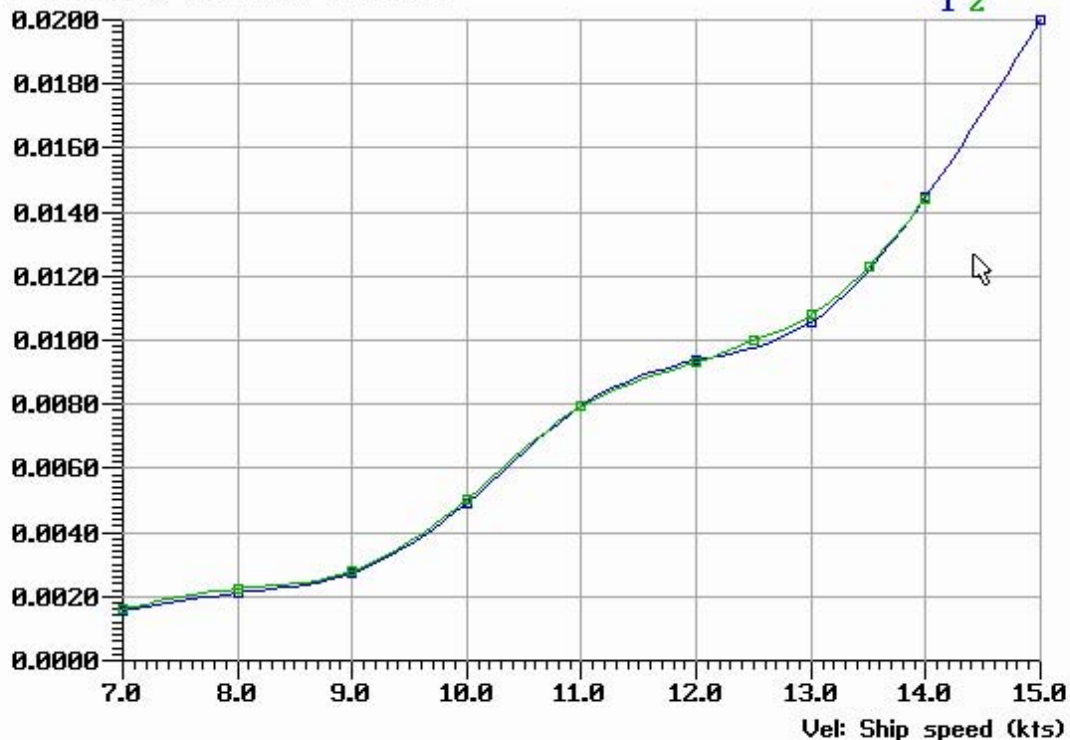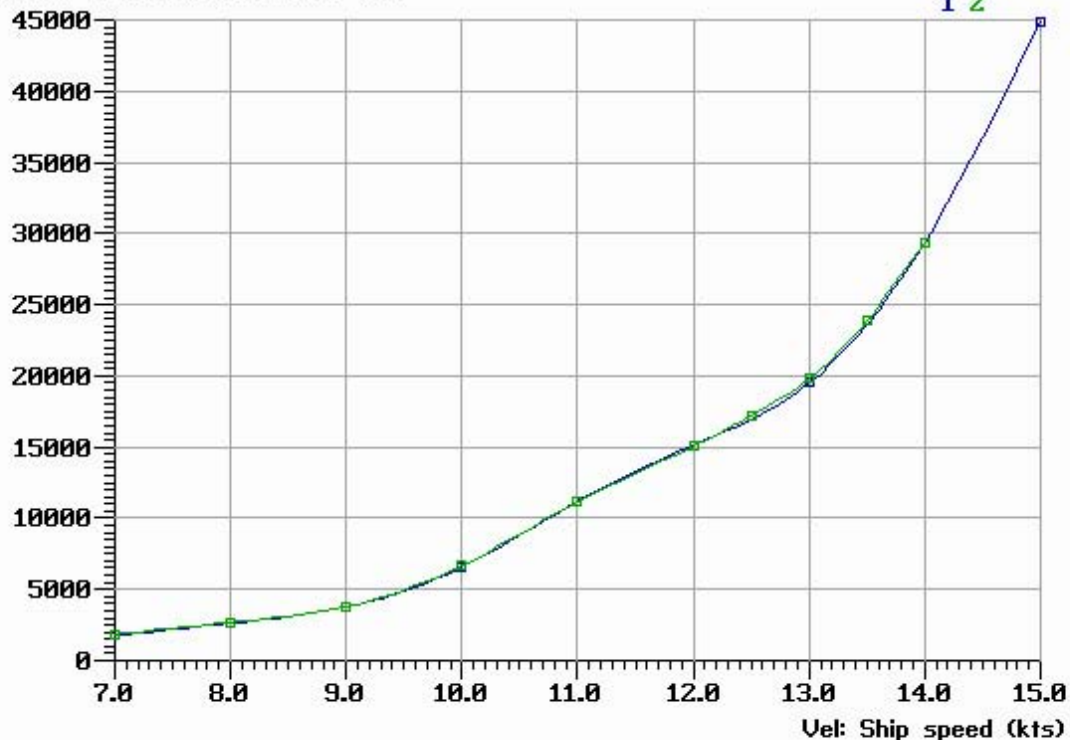
RIDGELEY-NEVITT TRAWLER SERIES RESISTANCE

Webb-C25

Length BP	30.48 m		
Beam Waterline	8.39 m	3.635	Allowable range	3.22 - 5.75
Draft-Midship	3.64 m	2.304	Allowable range	1.94 - 2.42
Displacement volume	495.6 Δ/(0.01Λ)3	500.43 Allowable range	200 - 500
Block coefficient	0.533	Allowable range	0.400 - 0.598
Prismatic coefficient	0.700 0.700	Allowable range	0.554 - 0.700
Midship coefficient	0.761	Allowable range	0.729 - 0.810
Wetted surface area	337.375 327.950 m3-Mumford	5.236 Allowable range	5.198 - 6.255
Water density	1.0259 t/m3 1.0250 at 19oC	→
Water viscosity	1.18831 x 10-6 m2/s 1.07854 x 10-6 at 19oC
Correlation allowance	0.0004

Displacement   508.47 t
exceeds

V/L	V	10-6Rn	103CF	103CR	103CT	RT	PE
	kn		ITTC'57			kN	kW
0.7	7.00	92.37	2.107	1.719	4.227	9.22	33.2
0.8	8.00	105.56	2.067	2.206	4.673	13.31	54.8
0.9	9.00	118.76	2.032	2.804	5.236	18.88	87.4
1.0	10.00	131.95	2.002	5.124	7.526	33.51	172.4
1.1	11.00	145.15	1.975	8.047	10.422	56.14	317.7
1.2	12.00	158.35	1.951	9.521	11.873	76.11	469.9
1.3	13.00	171.54	1.930	11.130	13.460	101.27	677.3
1.4	14.00	184.74	1.910	14.995	17.305	151.00	1087.5
1.5	15.00	197.93	1.892	22.394	24.686	247.28	1908.2

```
;***********************************************
;* NavCad model file        HydroComp, Inc. *
;***********************************************
;

[NavCad]
Version=3.00
Release=PreRelease
Date=02/01/1996
Time=15:16:20.30
Precision=6
Description=WEBB-TRAWLER Model=W 25 L/B=3.64 B/T=2.30 Cb=0.533 Cp=0.700 Lcb=-0.89A 1963

[Units]
Length=Foot
Area=SqFoot
Weight=LongTon
Speed=Knot
Force=Pound
Power=Horsepower
Density=KgPerCuM
KinemVisc=SqMPerSec

[Condition]
rho=1025.86
nu=1.1883e-06

[Resistance]

[Hull]
HullType=Displ
Loading=LoadDraft
ChineType=RoundBilge
SternShape=Normal
BowShape=Normal
FlapBehind=No
LengthPP=100
LengthWL=103.12
BeamWL=27.51
Draft=11.94
LCBHull=50.89
WettedSurf=3530
MaxSecArea=249.965
HullDispl=500
HalfEntAng=37.4
MidshiCoef=0.761
WaterpCoef=0.829

[Speeds]
Speeds=9,10,10.5,11,11.5,12,12.5,13,13.5,14

[Results]
ResiCoef=0.0027325,0.00501397,0.00667337,0.00806147,0.00901735,0.00954242,0.0101523,0.010983,0.012648,0.0147285
BareResist=4180.14,7413.45,9989.19,12628.5,15051.6,17128.9,19522.5,22502.8,27285.6,33406.4
ModCfType=ITTC57
ModSource=ModelTest
ModLengthWL=4.125
FroudeLen=0.263719,0.293022,0.307673,0.322324,0.336975,0.351626,0.366277,0.380928,0.395579,0.41023
FroudeVol=0.52564,0.584044,0.613247,0.642449,0.671651,0.700853,0.730055,0.759258,0.78846,0.817662
HullReyNum=1.22465e+08,1.36072e+08,1.42876e+08,1.4968e+08,1.56483e+08,1.63287e+08,1.70091e+08,1.76894e+08,1.83698e+08,1.90501e+08
```
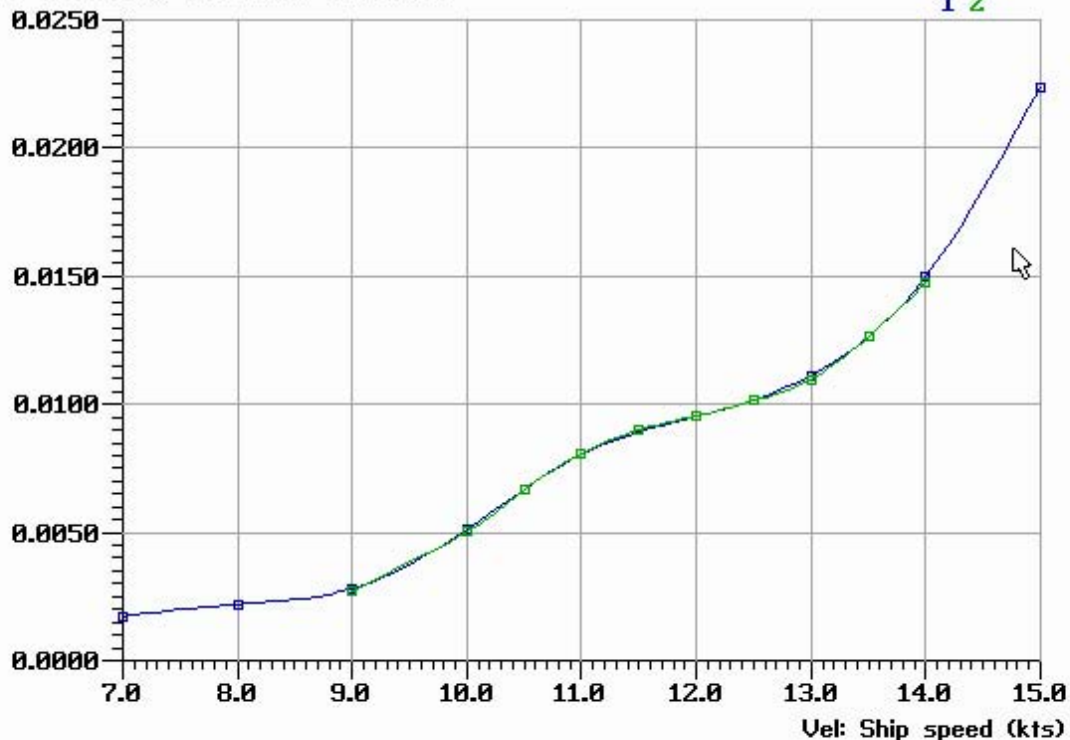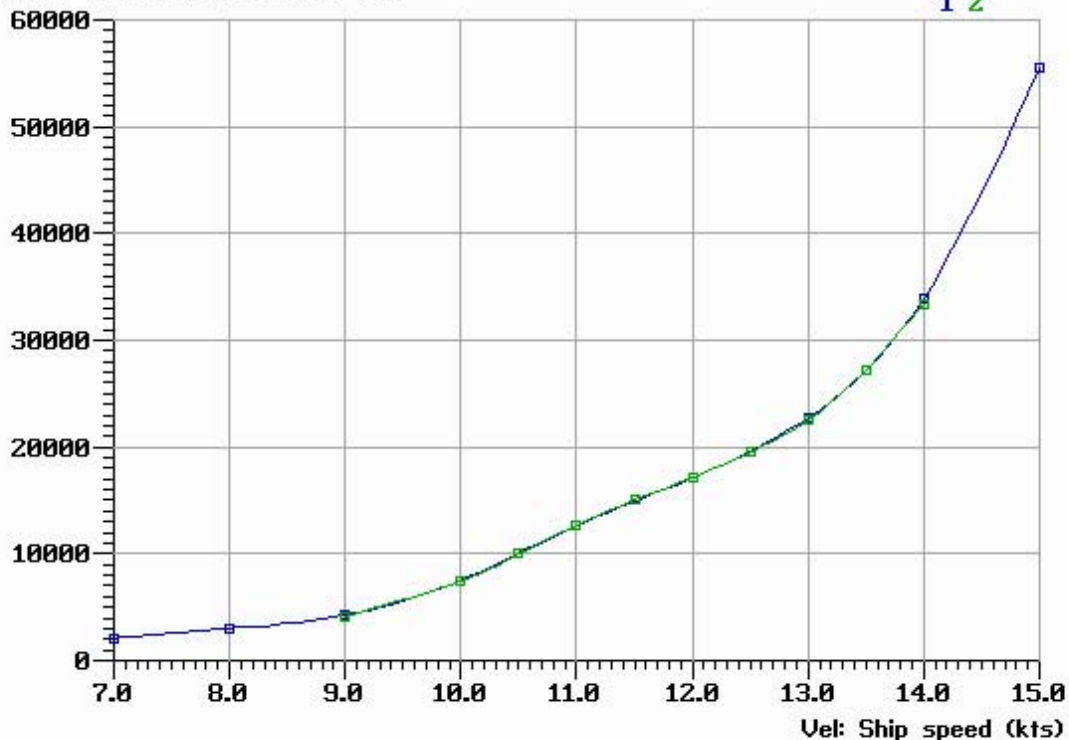
RIDGELEY-NEVITT TRAWLER SERIES RESISTANCE   Webb-C26

Length BP		30.48	m			
Beam Waterline		9.46	m	3.222	Allowable range	3.22 - 5.75
Draft-Midship		4.09	m	2.313	Allowable range	1.94 - 2.42
Displacement volume		495.6	Δ/(0.01Λ)3	500.43	Allowable range	200 - 500
Block coefficient		0.420			Allowable range	0.400 - 0.598
Prismatic coefficient		0.550	0.554		Allowable range	0.554 - 0.700
Midship coefficient		0.758			Allowable range	0.729 - 0.810
Wetted surface area	349.941	336.300	m3-Mumford	5.370	Allowable range	5.198 - 6.255
Water density		1.0259	t/m3	1.0250 at 19oC	$\rightarrow$	
Water viscosity		1.18831	x 10-6 m2/s	1.07854 x 10-6 at 19oC		
Correlation allowance		0.0004				

Displacement   508.47 t

exceeds

V/L	V	10-6Rn	103CF	103CR	103CT	RT	PE
	kn		ITTC'57			kN	kW
0.7	7.00	92.37	2.107	1.982	4.490	10.04	36.2
0.8	8.00	105.56	2.067	2.245	4.712	13.77	56.7
0.9	9.00	118.76	2.032	2.415	4.847	17.92	83.0
1.0	10.00	131.95	2.002	2.464	4.866	22.22	114.3
1.1	11.00	145.15	1.975	3.799	6.174	34.11	193.0
1.2	12.00	158.35	1.951	7.477	9.828	64.61	398.9
1.3	13.00	171.54	1.930	13.961	16.291	125.69	840.6
1.4	14.00	184.74	1.910	22.809	25.119	224.77	1618.8
1.5	15.00	197.93	1.892	32.092	34.384	353.20	2725.5

```
;************************************************
;* NavCad model file          HydroComp, Inc. *
;************************************************
;

[NavCad]
Version=3.00
Release=PreRelease
Date=02/01/1996
Time=15:58:14.90
Precision=6
Description=WEBB-TRAWLER Model=W 26 L/B=3.222 B/T=2.31 Cb=0.420 Cp=0.554 Lcb=-3.64A 1963

[Units]
Length=Foot
Area=SqFoot
Weight=LongTon
Speed=Knot
Force=Pound
Power=Horsepower
Density=KgPerCuM
KinemVisc=SqMPerSec

[Condition]
rho=1025.86
nu=1.1883e-06

[Resistance]

[Hull]
HullType=Displ
Loading=LoadDraft
ChineType=RoundBilge
SternShape=Normal
BowShape=Normal
FlapBehind=No
LengthPP=100
LengthWL=103.12
BeamWL=31.04
Draft=13.43
LCBHull=53.64
WettedSurf=3620
MaxSecArea=315.985
HullDispl=500
HalfEntAng=10.9
MidshiCoef=0.758
WaterpCoef=0.687

[Speeds]
Speeds=7,8,9,10,10.5,11,11.5,12,12.5,13

[Results]
ResiCoef=0.0019406,0.0022854,0.00241528,0.00263775,0.00283254,0.00361355,0.00498666,0.0069948,0.0102329,0.0133737
BareResist=2232.18,3115.69,4022.64,5163.67,5897.87,7426.78,9964.42,13800.4,20149.5,27223.1
ModCfType=ITTC57
ModSource=ModelTest
ModLengthWL=4.125
FroudeLen=0.205115,0.234417,0.263719,0.293022,0.307673,0.322324,0.336975,0.351626,0.366277,0.380928
FroudeVol=0.408831,0.467235,0.52564,0.584044,0.613247,0.642449,0.671651,0.700853,0.730055,0.759258
HullReyNum=9.52507e+07,1.08858e+08,1.22465e+08,1.36072e+08,1.42876e+08,1.4968e+08,1.56483e+08,1.63287e+08,1.70091e+08,1.76894e+08
```
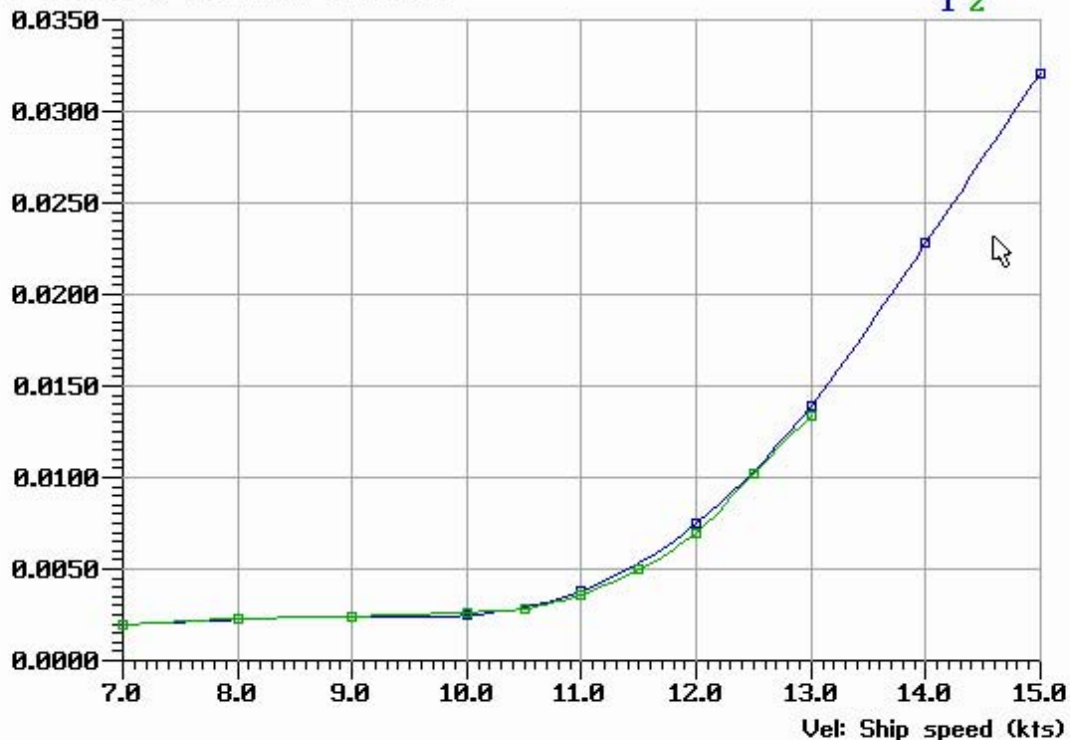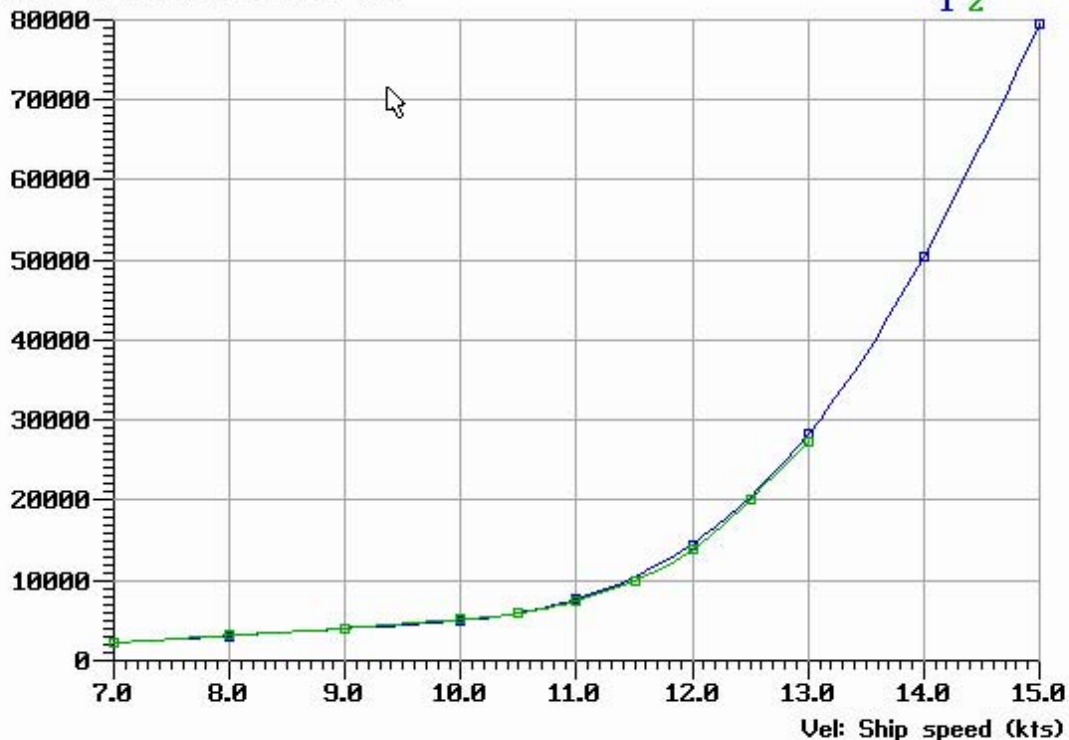
RIDGELEY-NEVITT TRAWLER SERIES RESISTANCE   Webb-C27

15-Mar-2012 21:46:16

Length BP		30.48	m		
Beam Waterline		5.73	m	5.319	Allowable range	3.22 - 5.75
Draft-Midship		2.49	m	2.304	Allowable range	1.94 - 2.42
Displacement volume		198.3	$\Delta/(0.01\Lambda)3$	200.18 Allowable range	200 - 500
Block coefficient		0.456		Allowable range	0.400 - 0.598
Prismatic coefficient		0.597	0.597	Allowable range	0.554 - 0.700
Midship coefficient		0.764		Allowable range	0.729 - 0.810
Wetted surface area	218.273	208.100	m3-Mumford	6.121 Allowable range	5.198 - 6.255
Water density		1.0259	t/m3	1.0250 at 19oC	$\rightarrow$
Water viscosity		1.18831	x 10-6 m2/s	1.07854 x 10-6 at 19oC	
Correlation allowance		0.0004			

Displacement   203.39 t

V/L	V	10-6Rn	103CF	103CR	103CT	RT	PE
	kn		ITTC'57			kN	kW
0.7	7.00	92.37	2.107	1.070	3.577	4.95	17.8
0.8	8.00	105.56	2.067	1.171	3.638	6.58	27.1
0.9	9.00	118.76	2.032	1.307	3.740	8.56	39.6
1.0	10.00	131.95	2.002	1.821	4.224	11.93	61.4
1.1	11.00	145.15	1.975	2.125	4.501	15.38	87.1
1.2	12.00	158.35	1.951	2.946	5.298	21.55	133.0
1.3	13.00	171.54	1.930	5.136	7.466	35.64	238.4
1.4	14.00	184.74	1.910	8.922	11.232	62.19	447.9
1.5	15.00	197.93	1.892	13.212	15.504	98.55	760.5

```
;***********************************************
;* NavCad model file        HydroComp, Inc. *
;***********************************************

[NavCad]
Version=3.00
Release=PreRelease
Date=02/01/1996
Time=15:32:57.42
Precision=6
Description=WEBB-TRAWLER Model=W 27 L/B=5.319 B/T=2.30 Cb=0.456 Cp=0.650 Lcb=-2.65A 1963

[Units]
Length=Foot
Area=SqFoot
Weight=LongTon
Speed=Knot
Force=Pound
Power=Horsepower
Density=KgPerCuM
KinemVisc=SqMPerSec

[Condition]
rho=1025.86
nu=1.1883e-06

[Resistance]

[Hull]
HullType=Displ
Loading=LoadDraft
ChineType=RoundBilge
SternShape=Normal
BowShape=Normal
FlapBehind=No
LengthPP=100
LengthWL=103.12
BeamWL=18.8
Draft=8.16
LCBHull=52.65
WettedSurf=2240
MaxSecArea=117.204
HullDispl=200
HalfEntAng=13.3
MidshiCoef=0.764
WaterpCoef=0.731

[Speeds]
Speeds=7,8,9,10,11,12,13,13.5,14,15

[Results]
ResiCoef=0.0010833,0.00125508,0.0013414,0.00187102,0.00216098,0.00287011,0.00519335,0.00688217,0.0089207,0.0134332
BareResist=1114.46,1509.17,1936.73,2708.27,3479.36,4767.42,8065.44,10640.9,13969.2,22458.3
ModCfType=ITTC57
ModSource=ModelTest
ModLengthWL=4.125
FroudeLen=0.205115,0.234417,0.263719,0.293022,0.322324,0.351626,0.380928,0.395579,0.41023,0.439532
FroudeVol=0.476285,0.544326,0.612367,0.680408,0.748448,0.816489,0.88453,0.91855,0.952571,1.02061
HullReyNum=9.52507e+07,1.08858e+08,1.22465e+08,1.36072e+08,1.4968e+08,1.63287e+08,1.76894e+08,1.83698e+08,1.90501e+08,2.04109e+08
```
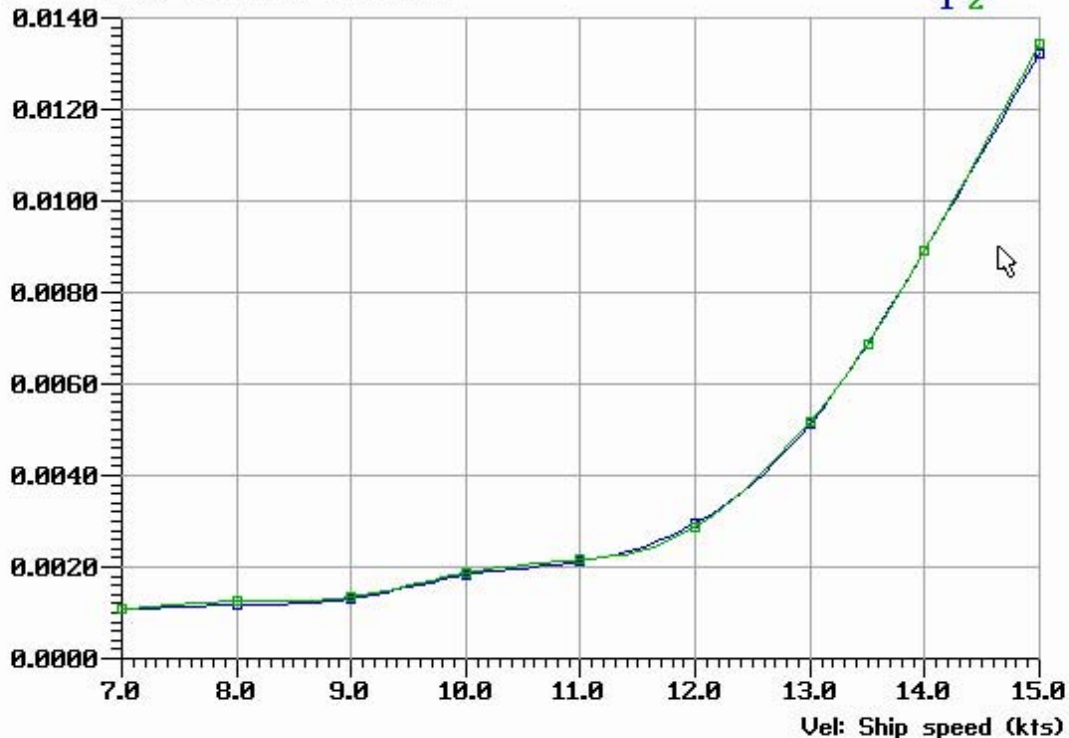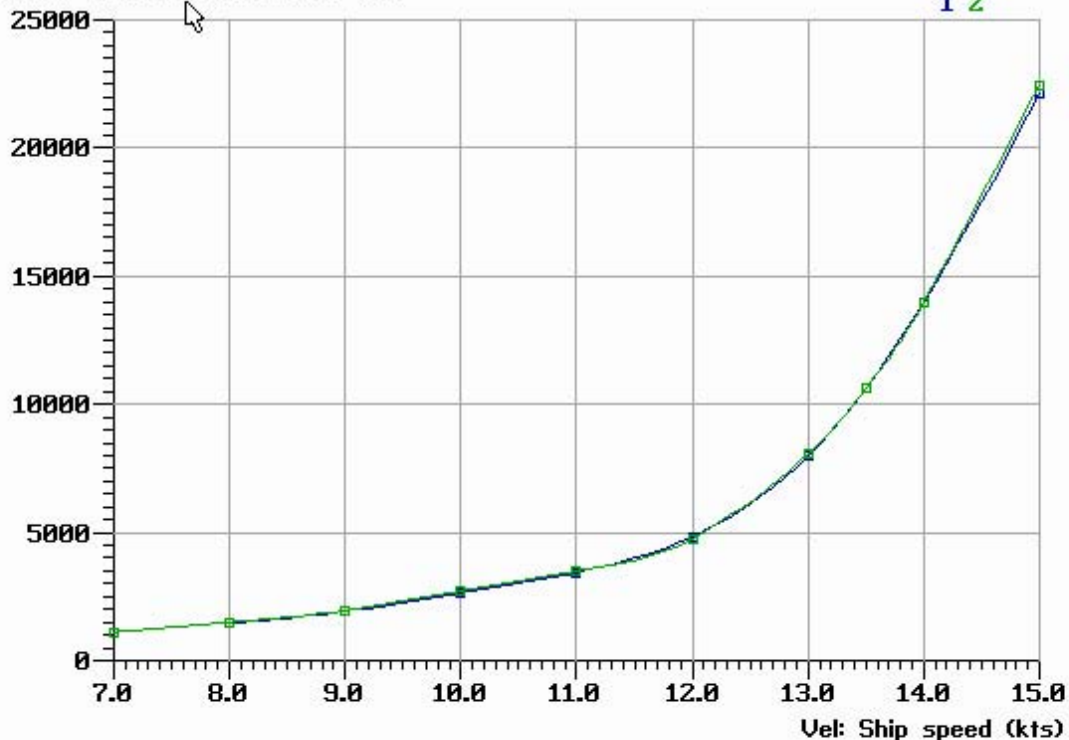
RIDGELEY-NEVITT TRAWLER SERIES RESISTANCE   Webb-C28

Length BP		30.48	m		
Beam Waterline		8.11	m	3.761	Allowable range	3.22 - 5.75
Draft-Midship		3.52	m	2.303	Allowable range	1.94 - 2.42
Displacement volume		396.5	Δ/(0.01Λ)3	400.35	Allowable range	200 - 500
Block coefficient		0.456			Allowable range	0.400 - 0.598
Prismatic coefficient		0.597	0.597		Allowable range	0.554 - 0.700
Midship coefficient		0.764			Allowable range	0.729 - 0.810
Wetted surface area	308.753	294.320	m3-Mumford	5.453	Allowable range	5.198 - 6.255
Water density		1.0259	t/m3	1.0250 at 19oC	$\rightarrow$
Water viscosity		1.18831	x 10-6 m2/s	1.07854 x 10-6 at 19oC
Correlation allowance		0.0004		

Displacement   406.78 t

V/L	V	10-6Rn	103CF	103CR	103CT	RT	PE
	kn		ITTC'57			kN	kW
0.7	7.00	92.37	2.107	1.430	3.938	7.71	27.8
0.8	8.00	105.56	2.067	1.605	4.072	10.41	42.9
0.9	9.00	118.76	2.032	1.899	4.331	14.02	64.9
1.0	10.00	131.95	2.002	2.523	4.925	19.68	101.2
1.1	11.00	145.15	1.975	2.990	5.365	25.94	146.8
1.2	12.00	158.35	1.951	4.223	6.575	37.83	233.5
1.3	13.00	171.54	1.930	8.304	10.633	71.80	480.2
1.4	14.00	184.74	1.910	14.763	17.073	133.70	962.9
1.5	15.00	197.93	1.892	22.640	24.932	224.13	1729.6

```
;**********************************************
;*
;* NavCad model file          HydroComp, Inc. *
;*
;**********************************************

[NavCad]
Version=3.00
Release=PreRelease
Date=02/02/1996
Time=10:25:14.71
Precision=6
Description=WEBB-TRAWLER Model=W 28 L/B=3.76 B/T=2.30 Cb=0.456 Cp=0.597 Lcb=-2.65A 1963

[Units]
Length=Foot
Area=SqFoot
Weight=LongTon
Speed=Knot
Force=Pound
Power=Horsepower
Density=KgPerCuM
KinemVisc=SqMPerSec

[Condition]
rho=1025.86
nu=1.1883e-06

[Resistance]

[Hull]
HullType=Displ
Loading=LoadDraft
ChineType=RoundBilge
SternShape=Normal
BowShape=Normal
FlapBehind=No
LengthPP=100
LengthWL=103.12
BeamWL=26.59
Draft=11.55
LCBHull=52.65
WettedSurf=3168
MaxSecArea=234.635
HullDispl=400
HalfEntAng=18.5
MidshiCoef=0.764
WaterpCoef=0.731

[Speeds]
Speeds=7,8,9,10,11,12,12.5,13,13.5,14

[Results]
ResiCoef=0.0014209,0.00164061,0.00194458,0.00266226,0.00301804,0.00426356,0.00596473,0.0082023,0.0113344,0.0146306
BareResist=1724.76,2356.01,3177.92,4540.94,5852.26,8544.75,11643.6,15974.2,22337.3,29808.4
ModCfType=ITTC57
ModSource=ModelTest
ModLengthWL=4.125
FroudeLen=0.205115,0.234417,0.263719,0.293022,0.322324,0.351626,0.366277,0.380928,0.395579,0.41023
FroudeVol=0.424322,0.484939,0.545557,0.606174,0.666792,0.727409,0.757718,0.788027,0.818335,0.848644
HullReyNum=9.52507e+07,1.08858e+08,1.22465e+08,1.36072e+08,1.4968e+08,1.63287e+08,1.70091e+08,1.76894e+08,1.83698e+08,1.90501e+08
```
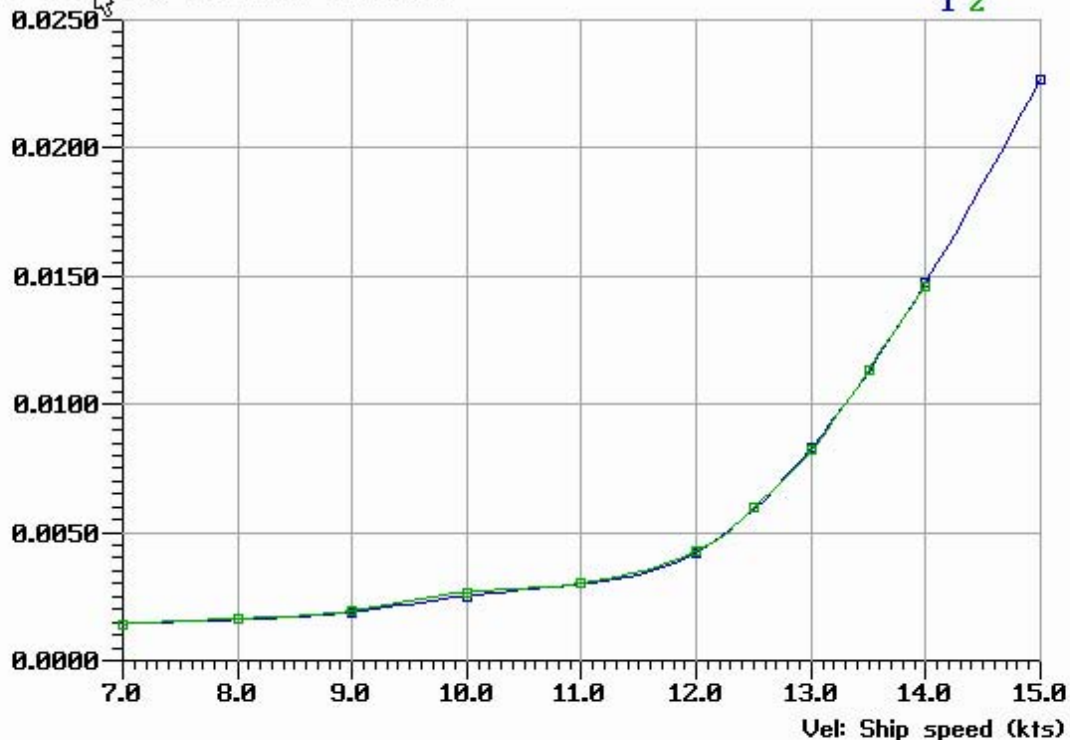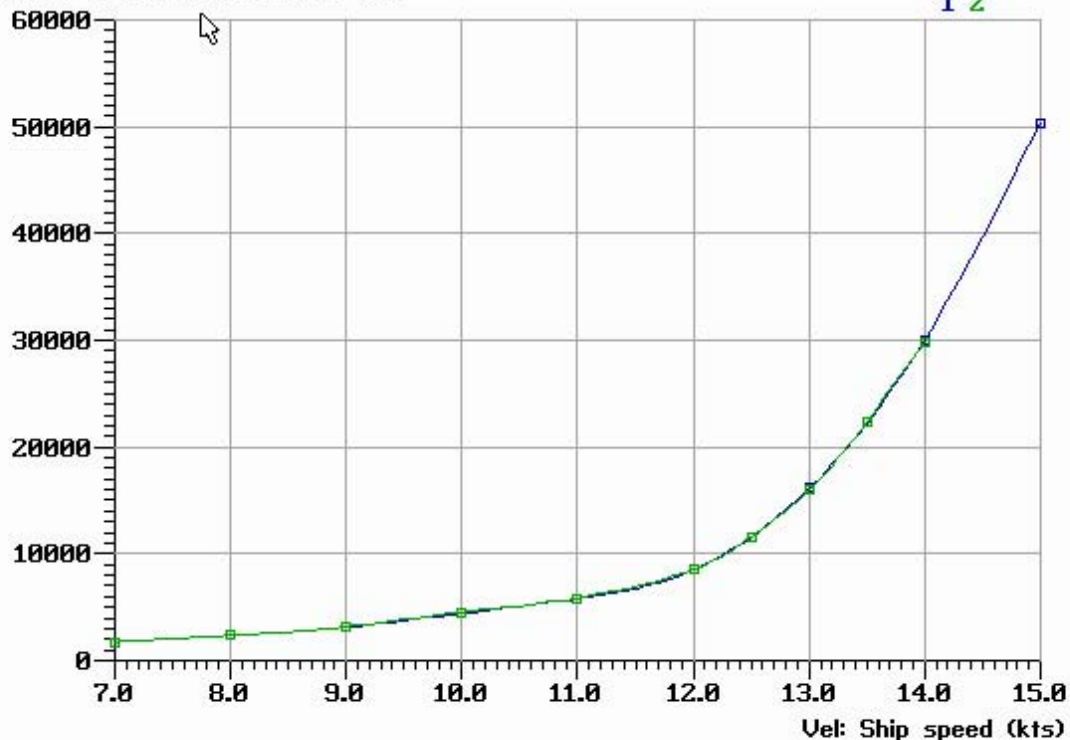
RIDGELEY-NEVITT TRAWLER SERIES RESISTANCE

Webb-C29

Length BP		30.48	m		
Beam Waterline		9.06	m	3.364	Allowable range	3.22 - 5.75
Draft-Midship		3.95	m	2.294	Allowable range	1.94 - 2.42
Displacement volume		495.8	$\Delta/(0.01\Lambda)3$	500.61	Allowable range	200 - 500
Block coefficient		0.455			Allowable range	0.400 - 0.598
Prismatic coefficient		0.595	0.595		Allowable range	0.554 - 0.700
Midship coefficient		0.764			Allowable range	0.729 - 0.810
Wetted surface area	345.557	328.970	m3-Mumford	5.251	Allowable range	5.198 - 6.255
Water density		1.0259	t/m3	1.0250 at 19oC	$\rightarrow$
Water viscosity		1.18831	x 10-6 m2/s	1.07854 x 10-6 at 19oC
Correlation allowance		0.0004		

Displacement   508.65 t

exceeds

V/L	V	10-6Rn	103CF	103CR	103CT	RT	PE
	kn		ITTC'57			kN	kW
0.7	7.00	92.37	2.107	1.773	4.280	9.37	33.7
0.8	8.00	105.56	2.067	1.976	4.443	12.70	52.3
0.9	9.00	118.76	2.032	2.333	4.765	17.24	79.8
1.0	10.00	131.95	2.002	2.880	5.282	23.59	121.4
1.1	11.00	145.15	1.975	3.364	5.740	31.02	175.5
1.2	12.00	158.35	1.951	4.848	7.200	46.30	285.8
1.3	13.00	171.54	1.930	9.747	12.076	91.14	609.5
1.4	14.00	184.74	1.910	17.285	19.595	171.52	1235.3
1.5	15.00	197.93	1.892	26.038	28.330	284.67	2196.7

```
;*********************************************
;* NavCad model file        HydroComp, Inc. *
;*********************************************
;

[NavCad]
Version=3.00
Release=PreRelease
Date=02/01/1996
Time=15:53:24.29
Precision=6
Description=WEBB-TRAWLER Model=W 29 L/B=3.365 B/T=2.30 Cb=0.456 Cp=0.597 Lcb=-2.65A 1963

[Units]
Length=Foot
Area=SqFoot
Weight=LongTon
Speed=Knot
Force=Pound
Power=Horsepower
Density=KgPerCuM
KinemVisc=SqMPerSec

[Condition]
rho=1025.86
nu=1.1883e-06

[Resistance]

[Hull]
HullType=Displ
Loading=LoadDraft
ChineType=RoundBilge
SternShape=Normal
BowShape=Normal
FlapBehind=No
LengthPP=100
LengthWL=103.12
BeamWL=29.72
Draft=12.91
LCBHull=52.65
WettedSurf=3541
MaxSecArea=293.135
HullDispl=500
HalfEntAng=20.5
MidshiCoef=0.764
WaterpCoef=0.731

[Speeds]
Speeds=7,8,9,10,11,12,12.5,13,13.5,14

[Results]
ResiCoef=0.0017008,0.0019709,0.00229348,0.00287626,0.00349994,0.00489155,0.0070111,0.00980941,0.0132398,0.0168606
BareResist=2065.53,2845.63,3835.81,5290.44,7126.69,10458.7,14655.9,20581.7,28453.4,37706
ModCfType=ITTC57
ModSource=ModelTest
ModLengthWL=4.125
FroudeLen=0.205115,0.234417,0.263719,0.293022,0.322324,0.351626,0.366277,0.380928,0.395579,0.41023
FroudeVol=0.408831,0.467235,0.52564,0.584044,0.642449,0.700853,0.730055,0.759258,0.78846,0.817662
HullReyNum=9.52507e+07,1.08858e+08,1.22465e+08,1.36072e+08,1.4968e+08,1.63287e+08,1.70091e+08,1.76894e+08,1.83698e+08,1.90501e+08
```
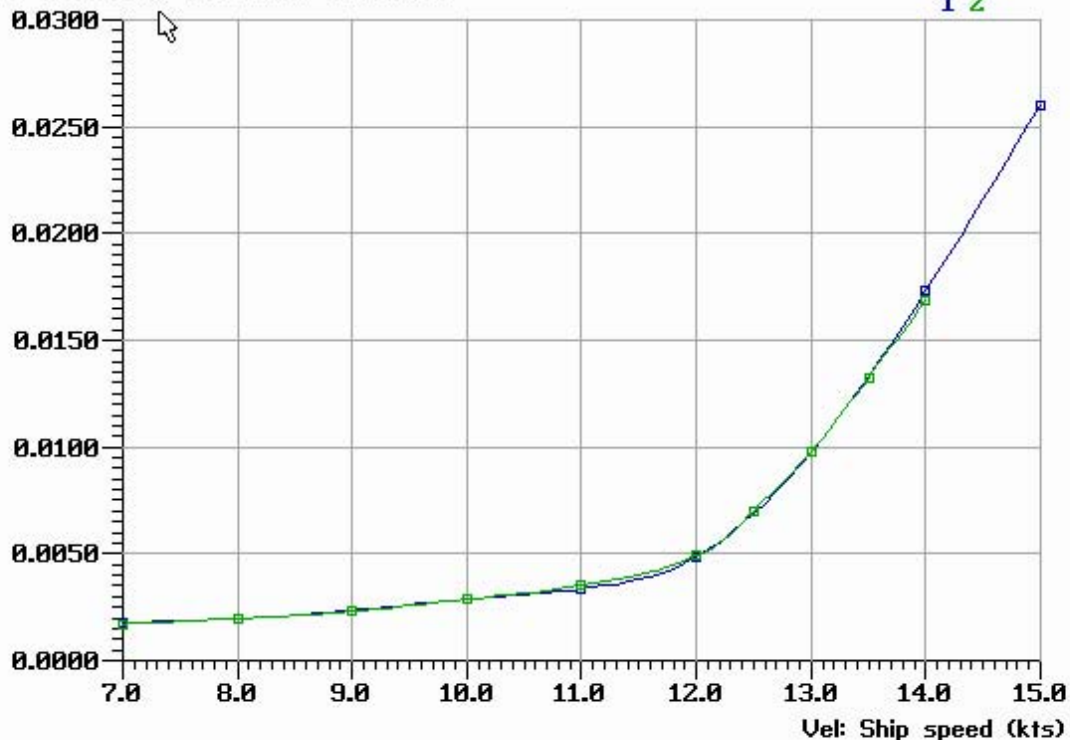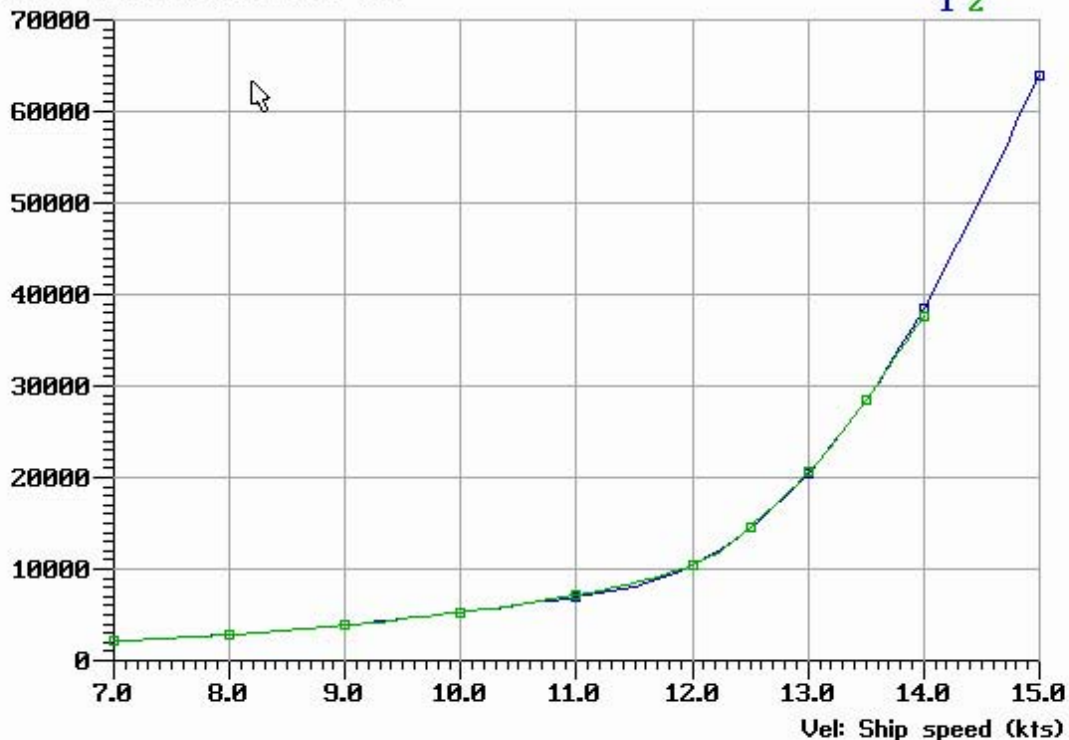
RIDGELEY-NEVITT TRAWLER SERIES RESISTANCE

Webb-C30

15-Mar-2012 21:42:41

Length BP		30.48	m			
Beam Waterline		7.01	m	4.348	Allowable range	3.22 - 5.75
Draft-Midship		3.05	m	2.300	Allowable range	1.94 - 2.42
Displacement volume		297.4	$\Delta/(0.01\Lambda)3$	300.26	Allowable range	200 - 500
Block coefficient		0.457			Allowable range	0.400 - 0.598
Prismatic coefficient		0.599	0.599		Allowable range	0.554 - 0.700
Midship coefficient		0.762			Allowable range	0.729 - 0.810
Wetted surface area	267.353	268.861	m3-Mumford	6.035	Allowable range	5.198 - 6.255
Water density		1.0259	t/m3	1.0250 at 19oC	$\rightarrow$	
Water viscosity		1.18831	x 10-6 m2/s	1.07854 x 10-6 at 19oC		
Correlation allowance		0.0004				

Displacement 305.08 t

V/L	V	10-6Rn	103CF	103CR	103CT	RT	PE
	kn		ITTC'57			kN	kW
0.7	7.00	92.37	2.107	1.231	3.739	6.69	24.1
0.8	8.00	105.56	2.067	1.399	3.866	9.03	37.2
0.9	9.00	118.76	2.032	1.547	3.980	11.77	54.5
1.0	10.00	131.95	2.002	2.203	4.605	16.81	86.5
1.1	11.00	145.15	1.975	2.607	4.982	22.00	124.5
1.2	12.00	158.35	1.951	3.615	5.966	31.36	193.6
1.3	13.00	171.54	1.930	6.746	9.076	55.98	374.4
1.4	14.00	184.74	1.910	12.098	14.407	103.07	742.3
1.5	15.00	197.93	1.892	18.293	20.585	169.05	1304.5

```
;***********************************************
;* NavCad model file          HydroComp, Inc. *
;***********************************************
;
[NavCad]
Version=3.00
Release=PreRelease
Date=02/01/1996
Time=16:44:15.07
Precision=6
Description=WEBB-TRAWLER SERIES Model=W 30 L/B=4.35 B/T=2.30 Cb=0.457 Cp=0.599 1963

[Units]
Length=Foot
Area=SqFoot
Weight=LongTon
Speed=Knot
Force=Pound
Power=Horsepower
Density=KgPerCuM
KinemVisc=SqMPerSec

[Condition]
rho=1025.86
nu=1.1883e-06

[Resistance]

[Hull]
HullType=Displ
Loading=LoadDraft
ChineType=RoundBilge
SternShape=Normal
BowShape=Normal
FlapBehind=No
LengthPP=100
LengthWL=103.12
BeamWL=23
Draft=10
LCBHull=52.46
WettedSurf=2894
MaxSecArea=175.26
BulSecArea=11.111
HullDispl=300
HalfEntAng=7.7
MidshiCoef=0.762
WaterpCoef=0.737

[Speeds]
Speeds=7,8,9,10,10.5,11,11.5,12,12.5,13

[Results]
ResiCoef=0.0010637,0.00113506,0.00120972,0.00164523,0.0018909,0.00202548,0.0023861,0.00310944,0.0045523,0.00631933
BareResist=1431.95,1886.76,2414.67,3313.73,3863.22,4360.68,5144.15,6442.1,8825.76,11981.6
ModCfType=ITTC57
ModSource=ModelTest
ModLengthWL=4.125
FroudeLen=0.205115,0.234417,0.263719,0.293022,0.307673,0.322324,0.336975,0.351626,0.366277,0.380928
FroudeVol=0.445163,0.508757,0.572352,0.635947,0.667744,0.699541,0.731339,0.763136,0.794933,0.82673
HullReyNum=9.52507e+07,1.08858e+08,1.22465e+08,1.36072e+08,1.42876e+08,1.4968e+08,1.56483e+08,1.63287e+08,1.70091e+08,1.76894e+08
```
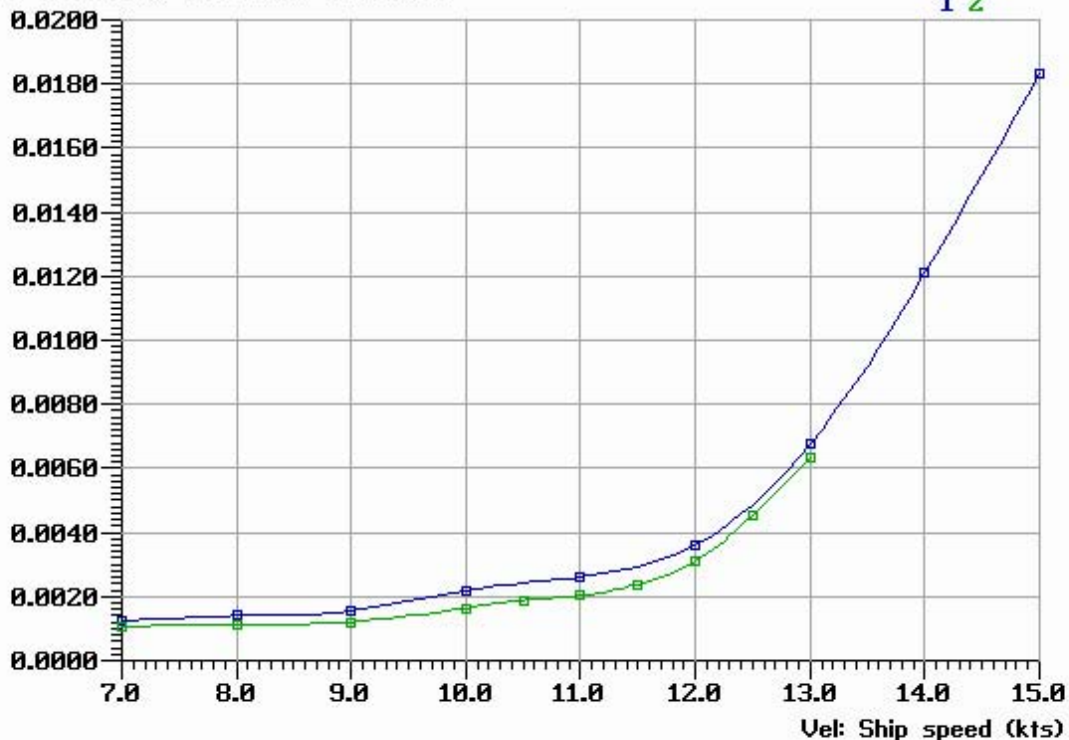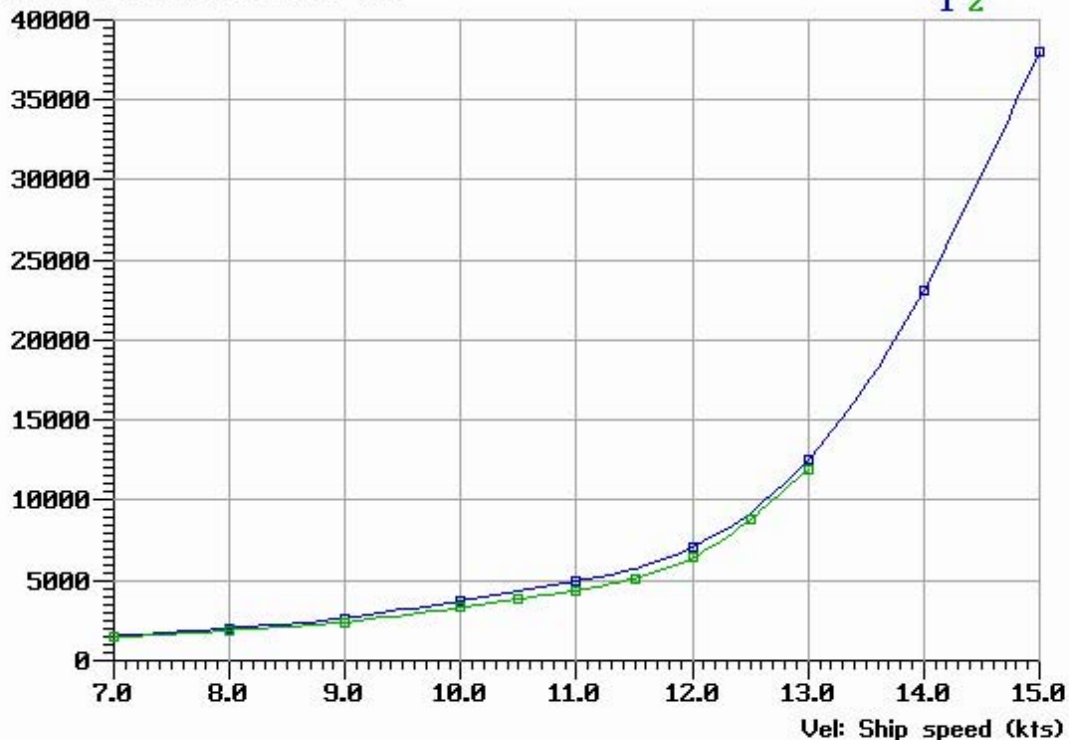
NTNU   TRAWLER MODELS
(Norwegian)

Oktay Çemberci
16/3/2012

RIDGELEY-NEVITT TRAWLER SERIES RESISTANCE   NTNU-M22A

16-Mar-2012   11:05:46

Length BP	28.48 m				
Beam Waterline	6.90 m	4.128	Allowable range	3.22 - 5.75	
Draft-Midship	2.94 m	2.347	Allowable range	1.94 - 2.42	
Displacement volume	303.0 Δ/(0.01Λ)3	375.05	Allowable range	200 - 500	
Block coefficient	0.524		Allowable range	0.400 - 0.598	
Prismatic coefficient	0.697	0.697	Allowable range	0.554 - 0.700	
Midship coefficient	0.752		Allowable range	0.729 - 0.810	
Wetted surface area	255.246	258.682 m3-Mumford	5.734 Allowable range	5.198 - 6.255	
Water density	1.0259 t/m3	1.0250 at 19oC	→		
Water viscosity	1.18831 x 10-6 m2/s	1.07854 x 10-6 at 19oC			
Correlation allowance	0.0004				

Displacement   310.87 t

V/L	V	10-6Rn	103CF	103CR	103CT	RT	PE
	kn		ITTC'57			kN	kW
0.7	6.77	83.43	2.139	1.477	4.016	6.46	22.5
0.8	7.73	95.35	2.098	2.014	4.512	9.48	37.7
0.9	8.70	107.26	2.062	2.657	5.120	13.61	60.9
1.0	9.67	119.18	2.031	4.783	7.214	23.67	117.7
1.1	10.63	131.10	2.004	7.831	10.235	40.63	222.3
1.2	11.60	143.02	1.979	9.240	11.620	54.90	327.6
1.3	12.57	154.94	1.957	10.397	12.754	70.73	457.2
1.4	13.53	166.86	1.937	14.092	16.429	105.66	735.6
1.5	14.50	178.77	1.919	19.327	21.645	159.81	1192.0

```
;*********************************************
;* NavCad model file        HydroComp, Inc. *
;*********************************************
;

[NavCad]
Version=3.00
Release=ReleaseA
Date=03/31/2000
Time=08:51:02.27
Precision=6
Description=Norway-Trondheim 1951 Model= M 22A Cp=0.655 L/B=4.384 B/T=2.347 Lcb=-0.50A

[Units]
Length=Meter
Area=SqMeter
Weight=MetricTon
Speed=Knot
Force=Pound
Power=Horsepower
Density=KgPerCuM
KinemVisc=SqMPerSec

[Condition]
rho=1026
nu=1.1883e-06

[Resistance]
ModShipCa=0.0004

[Hull]
HullType=Displ
Loading=LoadDraft
ChineType=RoundBilge
SternShape=Normal
BowShape=Normal
FlapBehind=No
LengthPP=28.48
LengthWL=30.25
BeamWL=6.9
BeamCh=6.9
Draft=2.94
Trim=0.97
LCBHull=15.276
WettedSurf=258.682
MaxSecArea=15.2551
HullDispl=310.6
HalfEntAng=32
MidshiCoef=0.752001
WaterpCoef=0.78

[Speeds]
Speeds=6.5,7.5,8.5,9,9.5,10,10.5,11,11.5,12

[Results]
ResiCoef=0.001422,0.0017495,0.002131,0.0024057,0.0031041,0.0041734,0.0053522,0.0064194,0.0071047,0.0073285
BareResist=1319.18,1882.28,2613.98,3095.53,3935.53,5193.36,6739.77,8404.02,9888.07,11007.7
ModCfType=ITTC57
ModSource=ModelTest
ModLengthWL=3.78125
FroudeLen=0.194146,0.224015,0.253884,0.268818,0.283752,0.298687,0.313621,0.328555,0.34349,0.358424
FroudeVol=0.412081,0.475478,0.538875,0.570574,0.602272,0.633971,0.66567,0.697368,0.729067,0.760765
HullReyNum=8.51238e+07,9.82198e+07,1.11316e+08,1.17864e+08,1.24412e+08,1.3096e+08,1.37508e+08,1.44056e+08,1.50604e+08,1.57152e+08
ResiMerit=0.000692731,0.00113468,0.00177525,0.0022468,0.00323014,0.00481203,0.00680377,0.00895609,0.0108338,0.0121679
BareMerit=0.00192649,0.00274883,0.00381739,0.00452063,0.00574735,0.00758426,0.00984259,0.012273,0.0144403,0.0160754
```
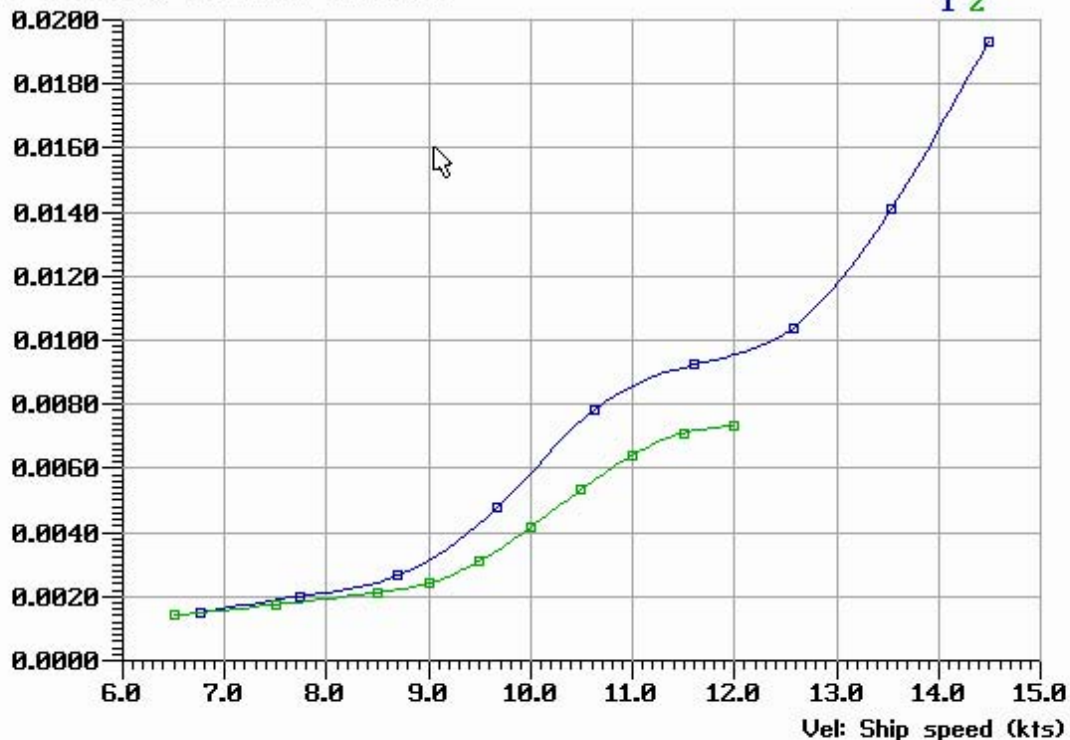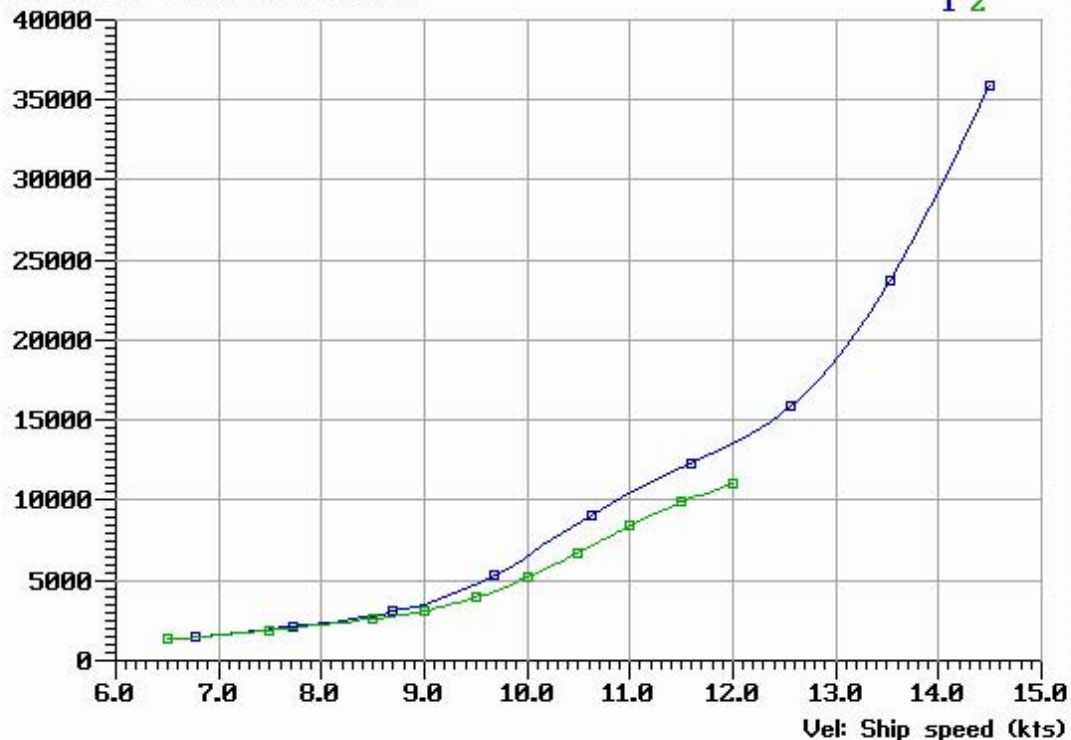
RIDGELEY-NEVITT TRAWLER SERIES RESISTANCE   NTNU-M23B

16-Mar-2012 11:07:33

Length BP		28.15	m			
Beam Waterline		6.60	m	4.265	Allowable range	3.22 - 5.75
Draft-Midship		3.14	m	2.102	Allowable range	1.94 - 2.42
Displacement volume	309.4	301.9	Δ/(0.01Λ)3	386.90	Allowable range	200 - 500
Block coefficient		0.517			Allowable range	0.400 - 0.598
Prismatic coefficient		0.680	0.680		Allowable range	0.554 - 0.700
Midship coefficient		0.761			Allowable range	0.729 - 0.810
Wetted surface area	255.799	253.368	m3-Mumford	5.631 Allowable range		5.198 - 6.255
Water density		1.0259	t/m3	1.0250 at 19oC	→	
Water viscosity		1.18831	x 10-6 m2/s	1.07854 x 10-6 at 19oC		
Correlation allowance		0.0004				

Displacement   309.67 t

V/L	V	10-6Rn	103CF	103CR	103CT	RT	PE
	kn		ITTC'57			kN	kW
0.7	6.73	81.98	2.145	1.380	3.924	6.11	21.1
0.8	7.69	93.69	2.103	1.802	4.305	8.75	34.6
0.9	8.65	105.41	2.068	2.375	4.842	12.46	55.4
1.0	9.61	117.12	2.036	4.459	6.895	21.90	108.3
1.1	10.57	128.83	2.009	6.915	9.324	35.84	194.9
1.2	11.53	140.54	1.984	7.941	10.326	47.23	280.2
1.3	12.49	152.25	1.962	9.524	11.886	63.81	410.1
1.4	13.45	163.96	1.942	13.980	16.322	101.62	703.4
1.5	14.42	175.68	1.923	20.002	22.325	159.57	1183.3

```
;**********************************************
;* NavCad model file        HydroComp, Inc. *
;**********************************************

[NavCad]
Version=3.00
Release=ReleaseA
Date=03/31/2000
Time=12:52:24.97
Precision=6
Description=Norway-Trondheim Mdl=M23BKVL /B=4.55 B/T=2.10 Lpp/Vol=4.294 Lcb/Lwl=-0.3A

[Units]
Length=Meter
Area=SqMeter
Weight=MetricTon
Speed=Knot
Force=Newton
Power=Horsepower
Density=KgPerCuM
KinemVisc=SqMPerSec

[Condition]
rho=1026
nu=1.1883e-06

[Resistance]
ModShipCa=0.0004

[Hull]
HullType=Displ
Loading=LoadDraft
ChineType=RoundBilge
SternShape=Normal
BowShape=Normal
FlapBehind=No
LengthPP=28.15
LengthWL=30
BeamWL=6.6
Draft=3.14
Trim=1
LCBHull=15.09
WettedSurf=253.368
MaxSecArea=15.771
HullDispl=309.4
HalfEntAng=32.7
MidshiCoef=0.761
WaterpCoef=0.78

[Speeds]
Speeds=6.5,7.5,8.5,9,9.5,10,10.5,11,11.5,12

[Results]
ResiCoef=0.0011918,0.0015834,0.0020476,0.0024262,0.0031686,0.0042572,0.0052228,0.0059483,0.0065467,0.0072074
BareResist=5416.38,7884.27,11187.5,13550.6,17354.2,22923.1,28882.2,34663.8,40552.7,47370.4
ModCfType=ITTC57
ModSource=ModelTest
ModLengthWL=3.71
FroudeLen=0.194954,0.224946,0.254939,0.269936,0.284932,0.299929,0.314925,0.329921,0.344918,0.359914
FroudeVol=0.412347,0.475785,0.539223,0.570942,0.602661,0.63438,0.666099,0.697818,0.729537,0.761256
HullReyNum=8.44203e+07,9.74081e+07,1.10396e+08,1.1689e+08,1.23384e+08,1.29877e+08,1.36371e+08,1.42865e+08,1.49359e+08,1.55853e+08
ResiMerit=0.000570867,0.00100976,0.00167721,0.00222801,0.00324205,0.00482647,0.00652811,0.00815987,0.00981575,0.0117665
BareMerit=0.00794062,0.0115587,0.0164013,0.0198657,0.0254419,0.0336061,0.0423425,0.0508185,0.0594518,0.0694468
```
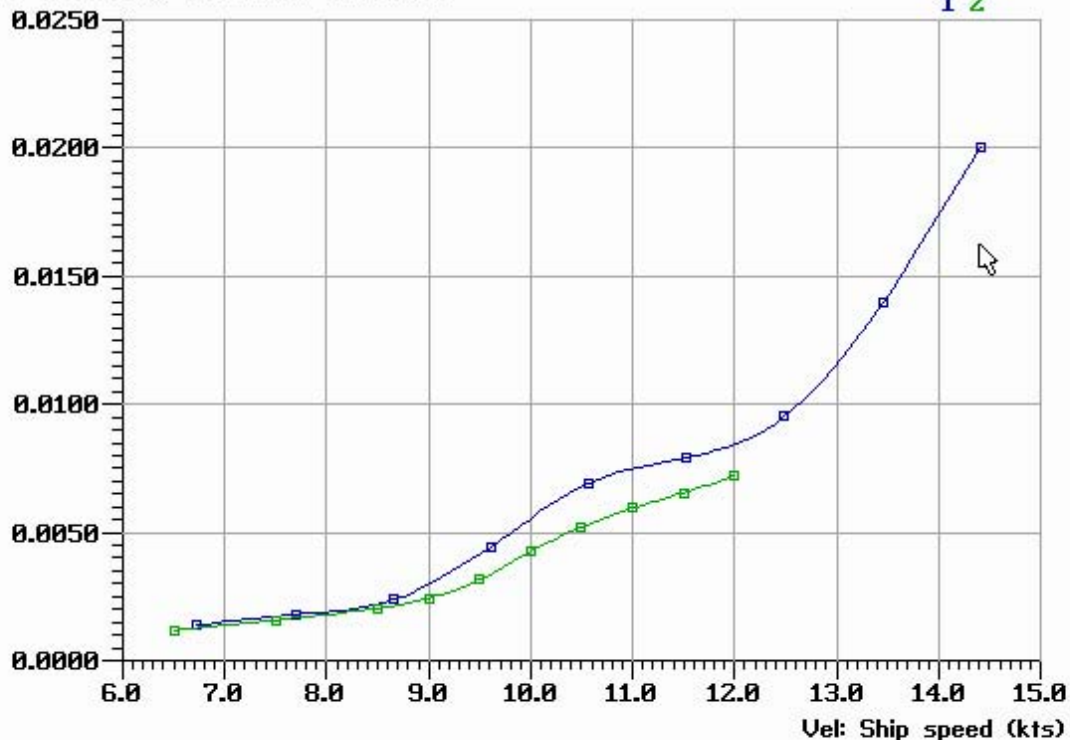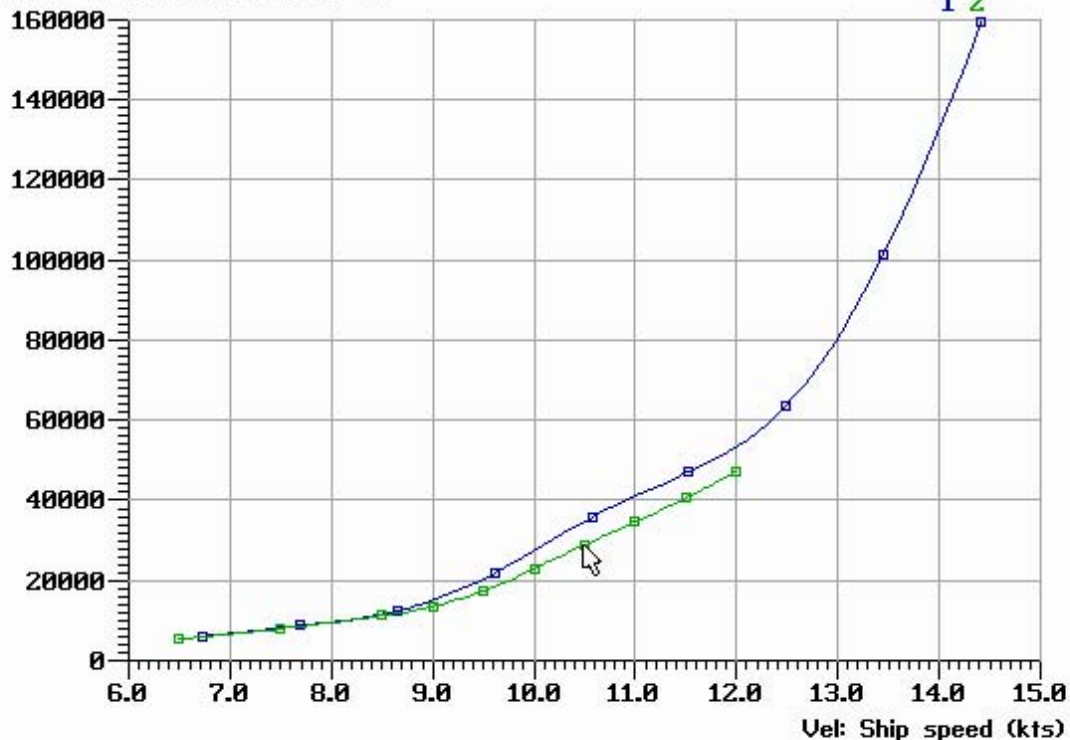
RIDGELEY-NEVITT TRAWLER SERIES RESISTANCE

NTNU-M24

16-Mar-2012 11:08:24

Length BP		28.48 m			
Beam Waterline		7.20 m	3.956	Allowable range	3.22 - 5.75
Draft-Midship		2.88 m	2.500	Allowable range	1.94 - 2.42
Displacement volume	314.8	307.1 Δ/(0.01Λ)3	380.12 Allowable range		200 - 500
Block coefficient		0.520		Allowable range	0.400 - 0.598
Prismatic coefficient		0.639	0.639	Allowable range	0.554 - 0.700
Midship coefficient		0.814		Allowable range	0.729 - 0.810
Wetted surface area	256.412	253.989 m3-Mumford	5.580 Allowable range		5.198 - 6.255
Water density		1.0259 t/m3	1.0250 at 19oC	$\rightarrow$	
Water viscosity		1.18831 x 10-6 m2/s	1.07854 x 10-6 at 19oC		
Correlation allowance		0.0004			

Displacement   315.08 t

V/L	V	10-6Rn	103CF	103CR	103CT	RT	PE
	kn		ITTC'57			kN	kW
0.7	6.77	83.43	2.139	1.357	3.896	6.15	21.4
0.8	7.73	95.35	2.098	1.617	4.115	8.48	33.8
0.9	8.70	107.26	2.062	2.042	4.504	11.75	52.6
1.0	9.67	119.18	2.031	3.466	5.897	19.00	94.5
1.1	10.63	131.10	2.004	4.719	7.123	27.77	151.9
1.2	11.60	143.02	1.979	5.581	7.961	36.93	220.4
1.3	12.57	154.94	1.957	7.985	10.343	56.31	364.0
1.4	13.53	166.86	1.937	13.546	15.883	100.29	698.2
1.5	14.50	178.77	1.919	20.562	22.881	165.86	1237.2

```
;**********************************************
;* NavCad model file        HydroComp, Inc. *
;**********************************************

[NavCad]
Version=3.00
Release=ReleaseA
Date=04/01/2000
Time=08:32:39.42
Precision=6
Description=Norway-Trondheim 1951 Model= M 24D Cp=0.604 L/B=4.167 B/T=2.500 Lcb=-0.37A

[Units]
Length=Meter
Area=SqMeter
Weight=MetricTon
Speed=Knot
Force=Newton
Power=Horsepower
Density=KgPerCuM
KinemVisc=SqMPerSec

[Condition]
rho=1026
nu=1.1883e-06

[Resistance]
ModShipCa=0.0004

[Hull]
HullType=Displ
Loading=LoadDraft
ChineType=RoundBilge
SternShape=Normal
BowShape=Normal
FlapBehind=No
LengthPP=28.48
LengthWL=30
BeamWL=7.2
Draft=2.88
Trim=1
LCBHull=15.111
WettedSurf=253.989
MaxSecArea=16.8791
HullDispl=314.8
HalfEntAng=29.1
MidshiCoef=0.814
WaterpCoef=0.736

[Speeds]
Speeds=6.5,7.5,8.5,9,9.5,10,10.5,11,11.5,12

[Results]
ResiCoef=0.00091,0.0013182,0.001941,0.0023638,0.002908,0.0036012,0.004316,0.0046384,0.0051965,0.0061089
BareResist=5019.09,7389.19,10949.4,13409.5,16585.7,20717.1,25505.6,29283.2,34494.6,42031.7
ModCfType=ITTC57
ModSource=ModelTest
ModLengthWL=3.75
FroudeLen=0.194954,0.224946,0.254939,0.269936,0.284932,0.299929,0.314925,0.329921,0.344918,0.359914
FroudeVol=0.41116,0.474415,0.53767,0.569298,0.600926,0.632553,0.664181,0.695809,0.727436,0.759064
HullReyNum=8.44203e+07,9.74081e+07,1.10396e+08,1.1689e+08,1.23384e+08,1.29877e+08,1.36371e+08,1.42865e+08,1.49359e+08,1.55853e+08
ResiMerit=0.000429459,0.000828243,0.00156645,0.0021387,0.00293154,0.00402255,0.00531513,0.00626913,0.00767645,0.00982606
BareMerit=0.00723196,0.010647,0.0157768,0.0193216,0.0238981,0.0298511,0.0367507,0.0421939,0.049703,0.0605632
```
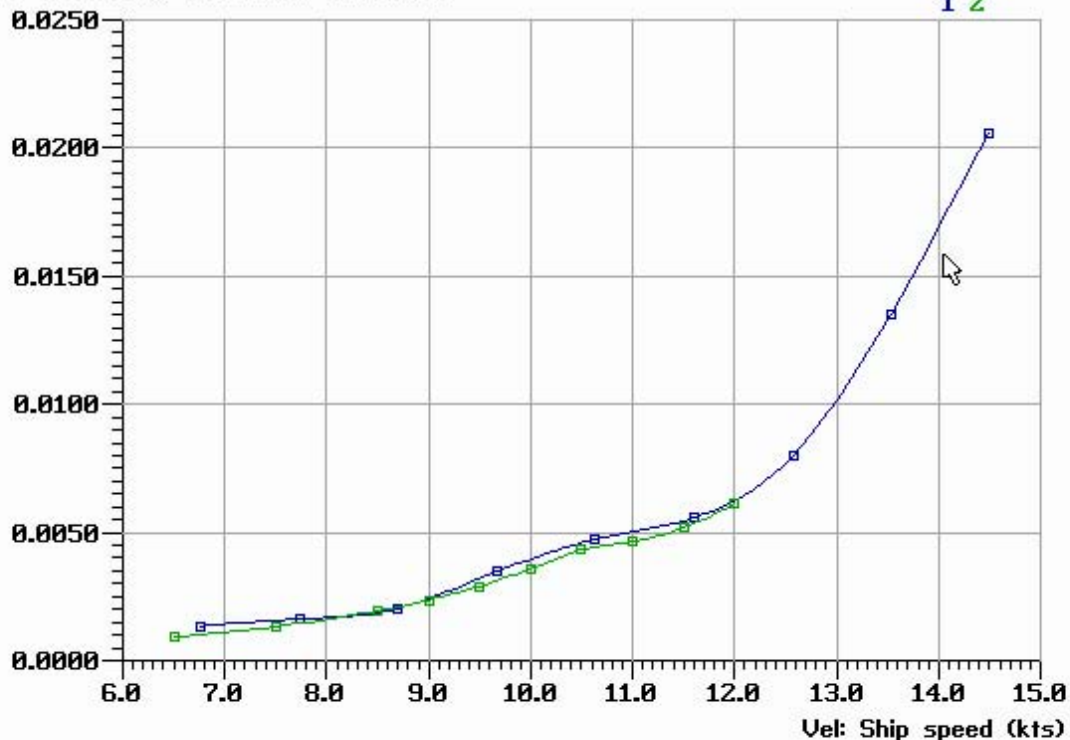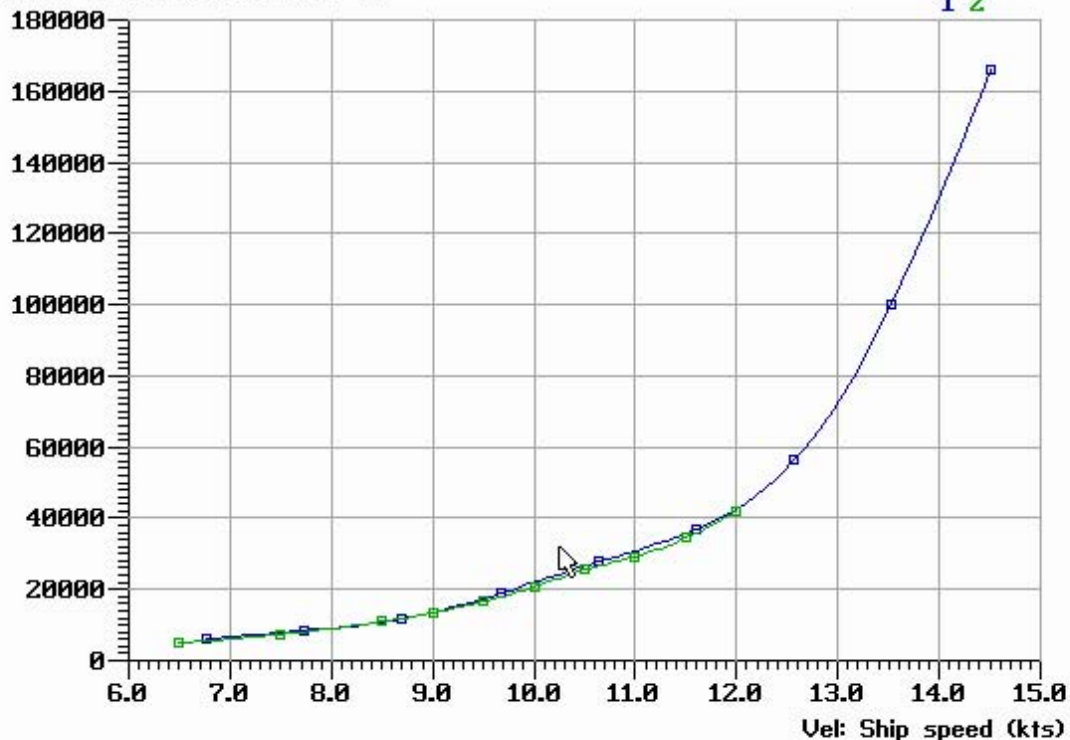
RIDGELEY-NEVITT TRAWLER SERIES RESISTANCE

NTNU-M25

Length BP		18.51	m			
Beam Waterline		5.49	m	3.372	Allowable range	3.22 - 5.75
Draft-Midship		2.33	m	2.356	Allowable range	1.94 - 2.42
Displacement volume	122.3	119.3	$\Delta/(0.01\Lambda)3$	537.92 Allowable range		200 - 500
Block coefficient		0.504			Allowable range	0.400 - 0.598
Prismatic coefficient		0.687	0.687		Allowable range	0.554 - 0.700
Midship coefficient		0.733			Allowable range	0.729 - 0.810
Wetted surface area	129.779	130.190	m3-Mumford	5.372 Allowable range		5.198 - 6.255
Water density		1.0259	t/m3	1.0250 at 19oC	$\rightarrow$	
Water viscosity		1.18831	x 10-6 m2/s	1.07854 x 10-6 at 19oC		
Correlation allowance		0.0004				

Displacement   122.41 t

exceeds

V/L	V	10-6Rn	103CF	103CR	103CT	RT	PE
	kn		ITTC'57			kN	kW
0.7	5.45	43.71	2.357	1.766	4.523	2.38	6.7
0.8	6.23	49.96	2.310	1.941	4.650	3.19	10.2
0.9	7.01	56.20	2.269	2.497	5.165	4.49	16.2
1.0	7.79	62.45	2.233	4.268	6.901	7.41	29.7
1.1	8.57	68.69	2.201	7.083	9.684	12.58	55.5
1.2	9.35	74.94	2.173	8.812	11.385	17.60	84.7
1.3	10.13	81.18	2.148	10.696	13.244	24.02	125.2
1.4	10.91	87.43	2.124	14.638	17.162	36.10	202.6
1.5	11.69	93.67	2.103	23.152	25.655	61.96	372.6

```
;***********************************************
;* NavCad model file         HydroComp, Inc. *
;***********************************************

[NavCad]
Version=3.00
Release=ReleaseA
Date=03/31/2000
Time=08:59:21.49
Precision=6
Description=Norway-Trondheim 1951 Model= M 25A Cp=0.648 L/B=3.581 B/T=2.356 Lcb=-0.18A

[Units]
Length=Meter
Area=SqMeter
Weight=MetricTon
Speed=Knot
Force=Pound
Power=Horsepower
Density=KgPerCuM
KinemVisc=SqMPerSec

[Condition]
rho=1026
nu=1.1883e-06

[Resistance]
ModShipCa=0.0004

[Hull]
HullType=Displ
Loading=LoadDraft
ChineType=RoundBilge
SternShape=Normal
BowShape=Normal
FlapBehind=No
LengthPP=18.51
LengthWL=19.66
BeamWL=5.49
BeamCh=5.49
Draft=2.33
Trim=0.61
LCBHull=9.865
WettedSurf=130.19
MaxSecArea=9.37632
HullDispl=122.3
HalfEntAng=34
MidshiCoef=0.733
WaterpCoef=0.79

[Speeds]
Speeds=5.5,6,6.5,7,7.5,8,8.5,9

[Results]
ResiCoef=0.0016677,0.0019934,0.0023486,0.0027482,0.0034952,0.004798,0.0065811,0.0073461
BareResist=528.972,671.651,843.226,1050.83,1368.1,1882.48,2631.39,3190.37
ModCfType=ITTC57
ModSource=ModelTest
ModLengthWL=4.096
FroudeLen=0.203774,0.222299,0.240824,0.259349,0.277874,0.296399,0.314924,0.333449
FroudeVol=0.407281,0.444307,0.481333,0.518358,0.555384,0.592409,0.629435,0.666461
HullReyNum=4.68122e+07,5.10678e+07,5.53235e+07,5.95791e+07,6.38348e+07,6.80904e+07,7.23461e+07,7.66017e+07
ResiMerit=0.000743478,0.0010576,0.00146238,0.00198458,0.00289747,0.00452548,0.00700747,0.00876934
BareMerit=0.00196188,0.00249105,0.0031274,0.00389736,0.00507406,0.00698184,0.00975941,0.0118326
```
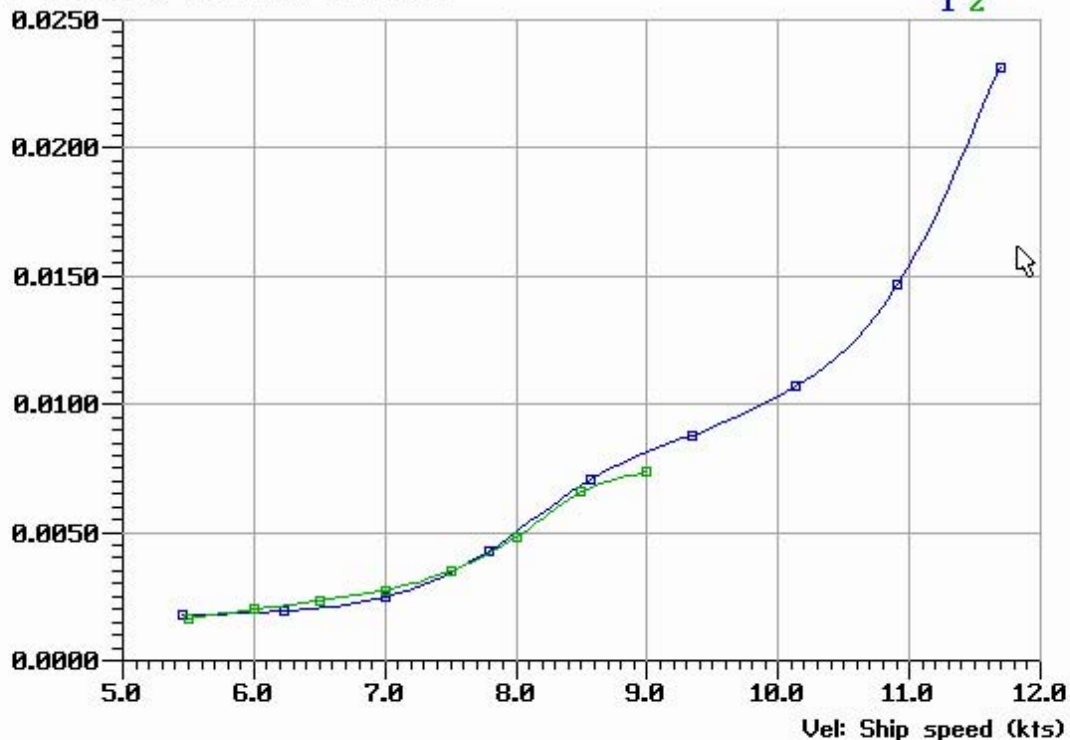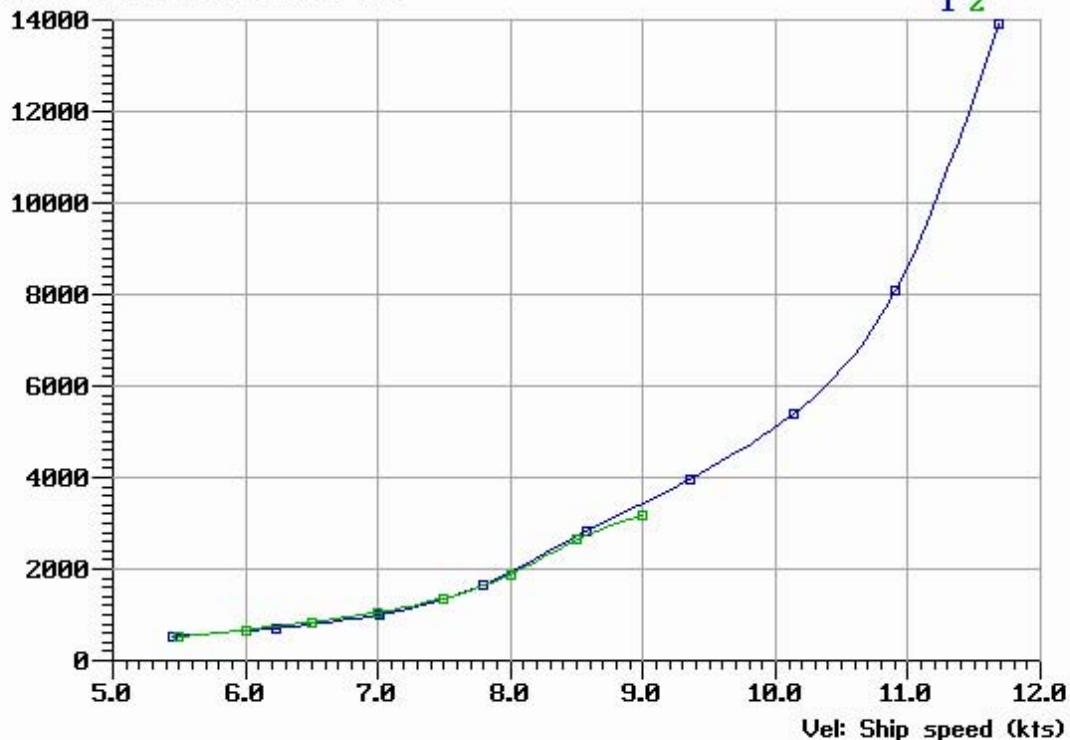
RIDGELEY-NEVITT TRAWLER SERIES RESISTANCE

NTNU-M82

16-Mar-2012 11:10:57

Length BP		18.51 m				
Beam Waterline		5.77 m	3.208	Allowable range	3.22 - 5.75	
Draft-Midship		2.44 m	2.365	Allowable range	1.94 - 2.42	
Displacement volume	124.6	121.6 $\Delta/(0.01\Lambda)3$	548.04 Allowable range	200 - 500	
Block coefficient		0.466		Allowable range	0.400 - 0.598	
Prismatic coefficient		0.633	0.633	Allowable range	0.554 - 0.700	
Midship coefficient		0.737		Allowable range	0.729 - 0.810	
Wetted surface area	132.440	132.026 m3-Mumford	5.380 Allowable range	5.198 - 6.255	
Water density		1.0259 t/m3	1.0250 at 19oC	$\rightarrow$	
Water viscosity		1.18831 x 10-6 m2/s	1.07854 x 10-6 at 19oC		
Correlation allowance		0.0004			

Displacement   124.71 t

*exceeds

V/L	V	10-6Rn	103CF	103CR	103CT	RT	PE
	kn		ITTC'57			kN	kW
0.7	5.45	43.71	2.357	1.905	4.662	2.49	7.0
0.8	6.23	49.96	2.310	1.908	4.618	3.22	10.3
0.9	7.01	56.20	2.269	2.353	5.021	4.43	16.0
1.0	7.79	62.45	2.233	3.032	5.665	6.17	24.7
1.1	8.57	68.69	2.201	4.139	6.740	8.88	39.1
1.2	9.35	74.94	2.173	5.970	8.543	13.39	64.4
1.3	10.13	81.18	2.148	9.292	11.840	21.78	113.5
1.4	10.91	87.43	2.124	16.020	18.544	39.56	222.0
1.5	11.69	93.67	2.103	24.017	26.520	64.95	390.6

```
;*********************************************
;* NavCad model file        HydroComp, Inc. *
;*********************************************

[NavCad]
Version=3.00
Release=ReleaseA
Date=03/31/2000
Time=09:12:59.06
Precision=6
Description=Norway-Trondheim 1951 Model= M82 Cp=0.592 L/B=3.404 B/T=2.365 Lcb=-0.36A

[Units]
Length=Meter
Area=SqMeter
Weight=MetricTon
Speed=Knot
Force=Pound
Power=Horsepower
Density=KgPerCuM
KinemVisc=SqMPerSec

[Condition]
rho=1026
nu=1.1883e-06

[Resistance]
ModShipCa=0.0004

[Hull]
HullType=Displ
Loading=LoadDraft
ChineType=RoundBilge
SternShape=Normal
BowShape=Normal
FlapBehind=No
LengthPP=18.51
LengthWL=19.64
BeamWL=5.77
Draft=2.44
Trim=0.61
LCBHull=9.891
WettedSurf=132.026
MaxSecArea=10.3761
HullDispl=124.6
HalfEntAng=30
MidshiCoef=0.737
WaterpCoef=0.724

[Speeds]
Speeds=5.5,6,6.5,7,7.5,8,8.5,9

[Results]
ResiCoef=0.0014628,0.0017502,0.0020577,0.002419,0.0028958,0.0034507,0.0040698,0.0047628
BareResist=511.455,645.894,805.651,1000.71,1251.6,1561.65,1937.44,2392.28
ModCfType=ITTC57
ModSource=ModelTest
ModLengthWL=3.928
FroudeLen=0.203878,0.222412,0.240947,0.259481,0.278016,0.29655,0.315084,0.333619
FroudeVol=0.406019,0.442929,0.47984,0.516751,0.553662,0.590573,0.627483,0.664394
HullReyNum=4.67645e+07,5.10159e+07,5.52672e+07,5.95185e+07,6.37698e+07,6.80211e+07,7.22725e+07,7.65238e+07
ResiMerit=0.000649121,0.000924284,0.00127533,0.00173879,0.0023895,0.00323968,0.00431346,0.0056593
BareMerit=0.0018619,0.00235131,0.00293288,0.00364298,0.00455632,0.00568501,0.00705305,0.00870881
```
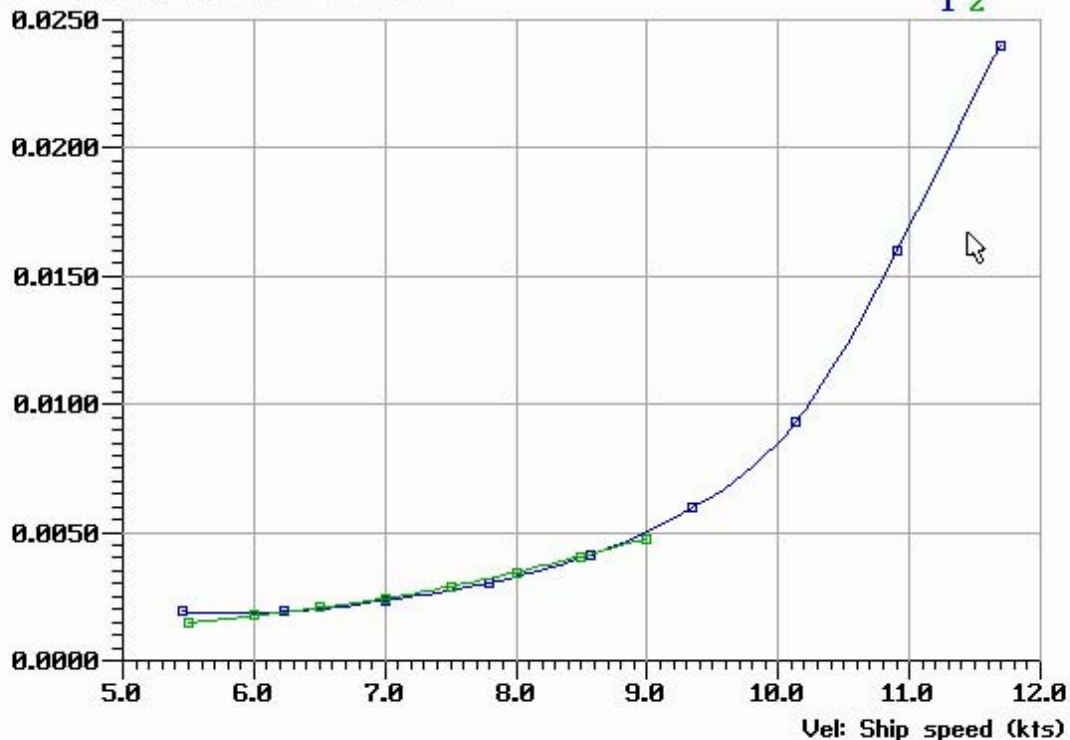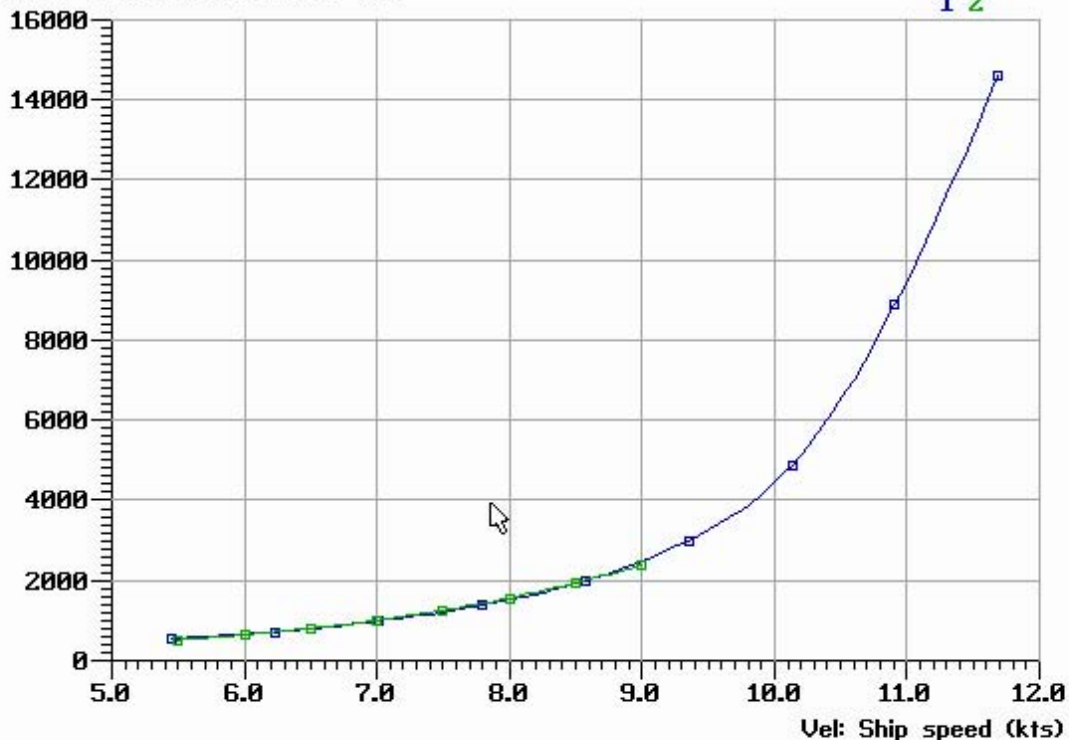
RIDGELEY-NEVITT TRAWLER SERIES RESISTANCE　　　　　　NTNU-M92

16-Mar-2012　11:12:12

Length BP		18.51 m			
Beam Waterline		5.77 m	3.208	Allowable range	3.22 - 5.75
Draft-Midship		2.41 m	2.394	Allowable range	1.94 - 2.42
Displacement volume	124.3	121.3 $\Delta/(0.01\Lambda)3$	546.72 Allowable range		200 - 500
Block coefficient		0.471		Allowable range	0.400 - 0.598
Prismatic coefficient		0.645	0.645	Allowable range	0.554 - 0.700
Midship coefficient		0.730		Allowable range	0.729 - 0.810
Wetted surface area	131.955	131.034 m3-Mumford	5.348 Allowable range		5.198 - 6.255
Water density		1.0259 t/m3	1.0250 at 19oC	$\rightarrow$	
Water viscosity		1.18831 x 10-6 m2/s	1.07854 x 10-6 at 19oC		
Correlation allowance		0.0004			

Displacement　　　　　　124.41 t

exceeds

V/L	V	10-6Rn	103CF	103CR	103CT	RT	PE
	kn		ITTC'57			kN	kW
0.7	5.45	43.71	2.357	1.844	4.601	2.44	6.8
0.8	6.23	49.96	2.310	1.837	4.546	3.14	10.1
0.9	7.01	56.20	2.269	2.298	4.967	4.35	15.7
1.0	7.79	62.45	2.233	3.167	5.800	6.27	25.1
1.1	8.57	68.69	2.201	4.612	7.213	9.43	41.6
1.2	9.35	74.94	2.173	6.498	9.071	14.11	67.9
1.3	10.13	81.18	2.148	9.359	11.907	21.74	113.3
1.4	10.91	87.43	2.124	15.538	18.063	38.24	214.6
1.5	11.69	93.67	2.103	23.558	26.061	63.34	380.9

```
;**********************************************
;* NavCad model file         HydroComp, Inc. *
;**********************************************

[NavCad]
Version=3.00
Release=ReleaseA
Date=03/31/2000
Time=10:08:36.55
Precision=6
Description=Norway-Trondheim 1951 Model= M92 Cp=0.600 L/B=3.411 B/T=2.394 Lcb=+0.19F

[Units]
Length=Meter
Area=SqMeter
Weight=MetricTon
Speed=Knot
Force=Pound
Power=Horsepower
Density=KgPerCuM
KinemVisc=SqMPerSec

[Condition]
rho=1026
nu=1.1883e-06

[Resistance]
ModShipCa=0.0004

[Hull]
HullType=Displ
Loading=LoadDraft
ChineType=RoundBilge
SternShape=Normal
BowShape=Normal
FlapBehind=No
LengthPP=18.51
LengthWL=19.68
BeamWL=5.77
Draft=2.41
Trim=0.61
LCBHull=9.803
WettedSurf=131.034
MaxSecArea=10.1512
HullDispl=124.3
HalfEntAng=31
MidshiCoef=0.73
WaterpCoef=0.732

[Speeds]
Speeds=5.5,6,6.5,7,7.5,8,8.5,9

[Results]
ResiCoef=0.0016289,0.0018894,0.002246,0.0024905,0.0028323,0.0034046,0.0041412,0.0048619
BareResist=527.586,660.98,831.297,1007.07,1227.76,1537.94,1943.33,2406.19
ModCfType=ITTC57
ModSource=ModelTest
ModLengthWL=3.936
FroudeLen=0.203671,0.222186,0.240702,0.259217,0.277733,0.296248,0.314764,0.333279
FroudeVol=0.406182,0.443107,0.480033,0.516959,0.553884,0.59081,0.627736,0.664661
HullReyNum=4.68598e+07,5.11198e+07,5.53797e+07,5.96397e+07,6.38997e+07,6.81597e+07,7.24197e+07,7.66796e+07
ResiMerit=0.000719128,0.000992688,0.00138491,0.00178102,0.00232514,0.00318004,0.00436667,0.00574748
BareMerit=0.00192525,0.00241203,0.00303355,0.00367497,0.00448031,0.00561223,0.00709154,0.00878062
```
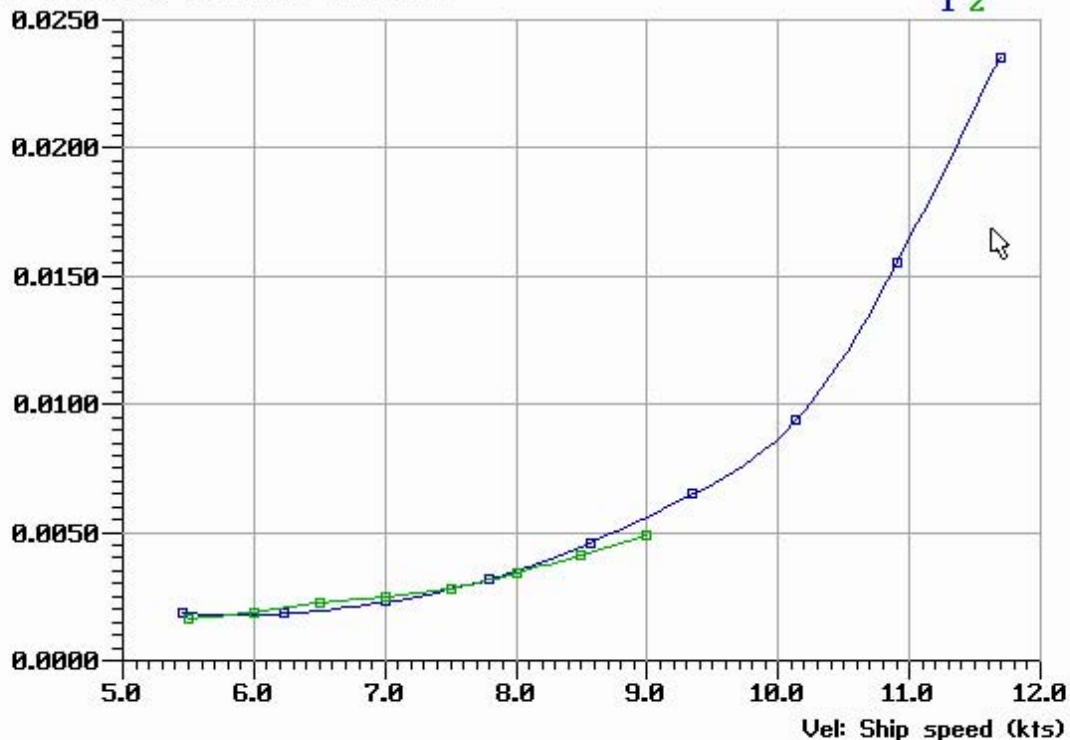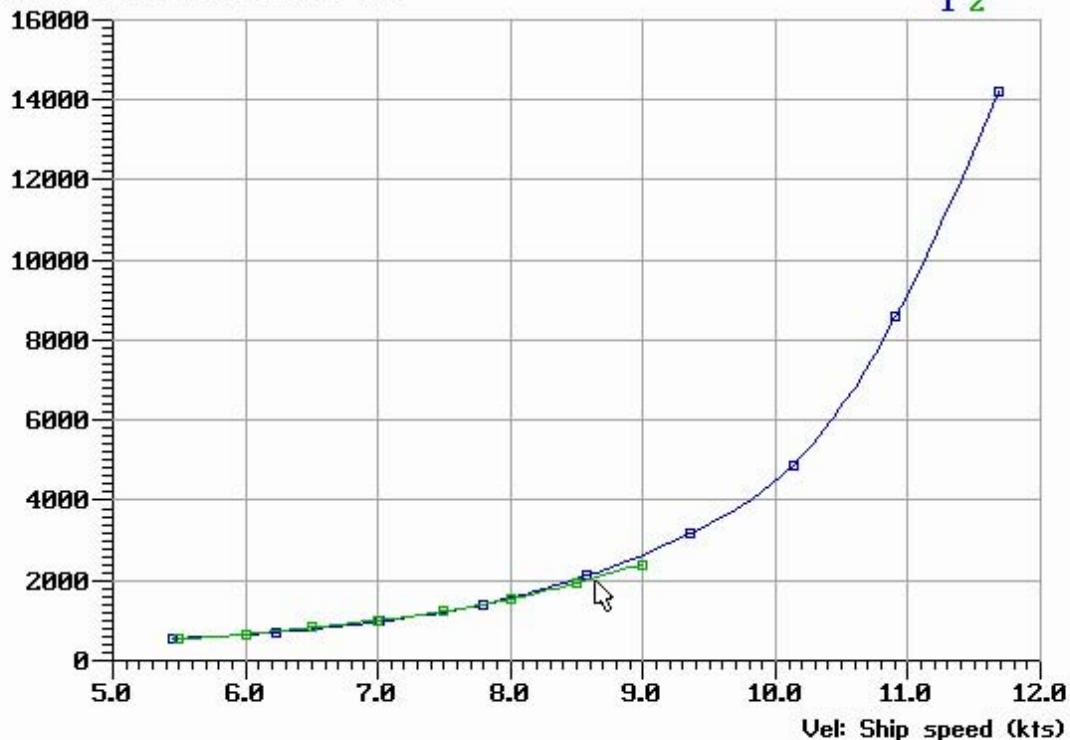
RIDGELEY-NEVITT TRAWLER SERIES RESISTANCE NTNU-M95

16-Mar-2012 11:13:01

Length BP		47.92	m			
Beam Waterline		8.53	m	5.615	Allowable range	3.22 - 5.75
Draft-Midship		3.35	m	2.545	Allowable range	1.94 - 2.42
Displacement volume	724	706.3	$\Delta/(0.01\Lambda)3$	183.53	Allowable range	200 - 500
Block coefficient		0.515			Allowable range	0.400 - 0.598
Prismatic coefficient		0.602	0.602		Allowable range	0.554 - 0.700
Midship coefficient		0.855			Allowable range	0.729 - 0.810
Wetted surface area	504.579	471.000	m3-Mumford	5.939	Allowable range	5.198 - 6.255
Water density		1.0259	t/m3	1.0250 at 19oC		$\rightarrow$
Water viscosity		1.18831	x 10-6 m2/s	1.07854 x 10-6 at 19oC		
Correlation allowance		0.0004				

Displacement   724.64 t

exceeds

V/L	V	10-6Rn	103CF	103CR	103CT	RT	PE
	kn		ITTC'57			kN	kW
0.7	8.78	182.09	1.914	1.070	3.384	16.67	75.3
0.8	10.03	208.10	1.879	1.122	3.400	21.88	112.9
0.9	11.28	234.11	1.849	1.320	3.568	29.05	168.7
1.0	12.54	260.12	1.822	1.903	4.125	41.47	267.5
1.1	13.79	286.13	1.799	2.204	4.403	53.56	380.0
1.2	15.05	312.15	1.778	2.851	5.030	72.81	563.6
1.3	16.30	338.16	1.759	4.812	6.971	118.43	993.1
1.4	17.55	364.17	1.742	8.269	10.411	205.14	1852.5
1.5	18.81	390.18	1.726	11.878	14.004	316.75	3064.8

```
;*********************************************
;* NavCad model file        HydroComp, Inc. *
;*********************************************
;
[NavCad]
Version=3.00
Release=ReleaseA
Date=03/31/2000
Time=16:02:41.90
Precision=6
Description=Norway-Trondheim 1951 Model= M 095 Cp=0.580 L/B=5.615 B/T=2.545 Lcb=-0.65F

[Units]
Length=Meter
Area=SqMeter
Weight=MetricTon
Speed=Knot
Force=Pound
Power=Horsepower
Density=KgPerCuM
KinemVisc=SqMPerSec

[Condition]
rho=1026
nu=1.1883e-06

[Resistance]
ModShipCa=0.0004

[Hull]
HullType=Displ
Loading=LoadDraft
ChineType=RoundBilge
SternShape=Normal
BowShape=Normal
FlapBehind=No
LengthPP=47.92
LengthWL=49.352
BeamWL=8.534
Draft=3.353
LCBHull=24.355
WettedSurf=471
MaxSecArea=24.4654
HullDispl=724
MidshiCoef=0.855

[Speeds]
Speeds=10,11,12,12.5,13,13.5,14

[Results]
ResiCoef=0.0012602,0.0014065,0.0020539,0.0025048,0.0027753,0.0029384,0.0030965
BareResist=5077.78,6356.33,8859.77,10603.7,12102.8,13455,14891
ModCfType=ITTC57
ModSource=ModelTest
ModLengthWL=4.935
FroudeLen=0.233844,0.257228,0.280613,0.292305,0.303997,0.315689,0.327382
FroudeVol=0.550571,0.605628,0.660685,0.688214,0.715742,0.743271,0.770799
HullReyNum=2.13657e+08,2.35023e+08,2.56388e+08,2.67071e+08,2.77754e+08,2.88437e+08,2.9912e+08
ResiMerit=0.001135,0.00153278,0.00266378,0.00352492,0.00422428,0.00482319,0.00546617
BareMerit=0.00318128,0.0039823,0.00555072,0.0066433,0.00758252,0.0084297,0.00932932
```
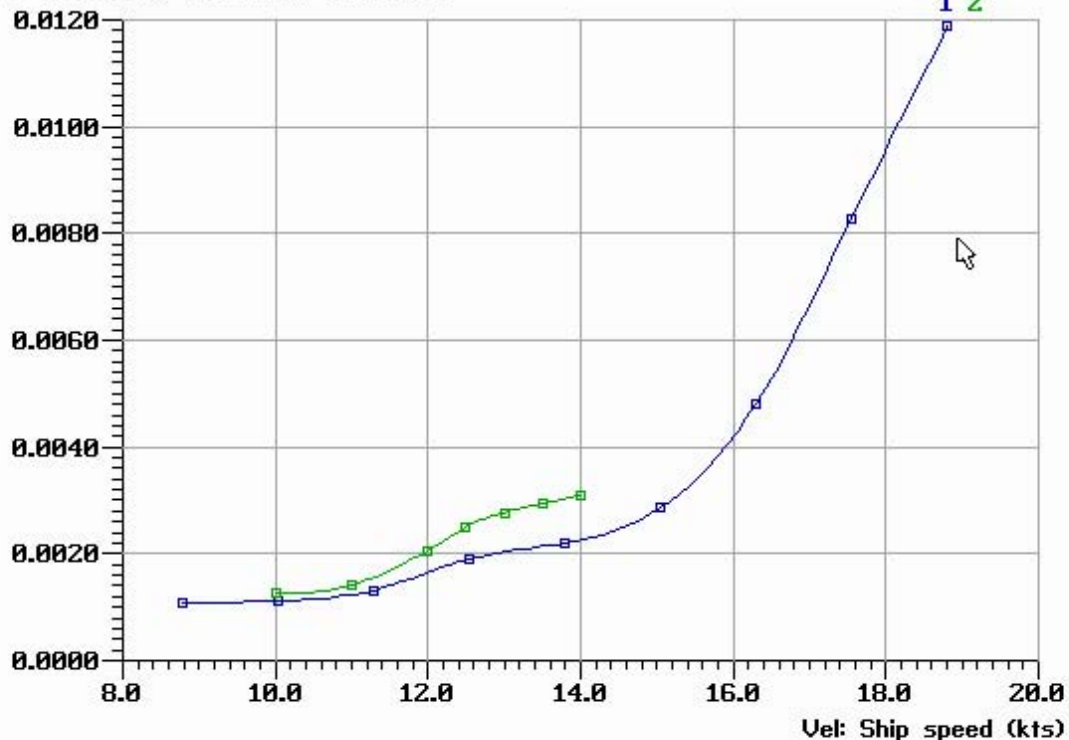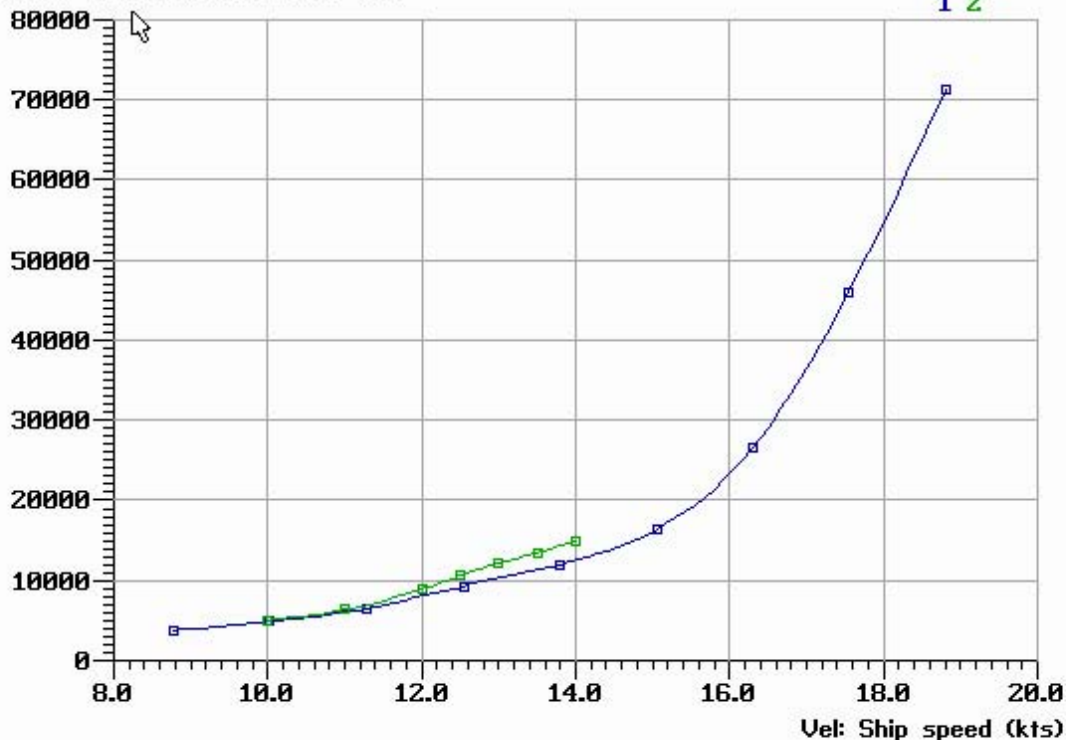
RIDGELEY-NEVITT TRAWLER SERIES RESISTANCE   NTNU-M100

Length BP		36.94 m			
Beam Waterline		7.32 m	5.046	Allowable range	3.22 - 5.75
Draft-Midship		3.50 m	2.091	Allowable range	1.94 - 2.42
Displacement volume	526.2	513.4 $\Delta/(0.01\Lambda)3$	291.19 Allowable range		200 - 500
Block coefficient		0.542		Allowable range	0.400 - 0.598
Prismatic coefficient		0.682	0.682	Allowable range	0.554 - 0.700
Midship coefficient		0.795		Allowable range	0.729 - 0.810
Wetted surface area	379.612	371.739 m3-Mumford	5.798 Allowable range		5.198 - 6.255
Water density		1.0259 t/m3	1.0250 at 19oC	$\rightarrow$	
Water viscosity		1.18831 x 10-6 m2/s	1.07854 x 10-6 at 19oC		
Correlation allowance		0.0004			

Displacement   526.66 t

V/L	V	10-6Rn	103CF	103CR	103CT	RT	PE
	kn		ITTC'57			kN	kW
0.7	7.71	123.24	2.022	1.238	3.660	10.97	43.5
0.8	8.81	140.84	1.984	1.629	4.013	15.71	71.2
0.9	9.91	158.45	1.951	2.136	4.487	22.23	113.3
1.0	11.01	176.05	1.923	4.184	6.507	39.80	225.4
1.1	12.11	193.66	1.897	6.624	8.922	66.02	411.3
1.2	13.21	211.27	1.875	7.589	9.863	86.87	590.4
1.3	14.31	228.87	1.854	8.882	11.137	115.11	847.5
1.4	15.41	246.48	1.836	12.022	14.257	170.91	1355.1
1.5	16.51	264.08	1.819	16.677	18.896	260.03	2209.0

```
;***********************************************
;* NavCad model file          HydroComp, Inc. *
;***********************************************

[NavCad]
Version=3.00
Release=ReleaseA
Date=03/31/2000
Time=10:10:15.25
Precision=6
Description=Norway-Trondheim 1951 Model= M 100 Cp=0.639 L/B=5.344 B/T=2.091 Lcb=-0.73A

[Units]
Length=Meter
Area=SqMeter
Weight=MetricTon
Speed=Knot
Force=Pound
Power=Horsepower
Density=KgPerCuM
KinemVisc=SqMPerSec

[Condition]
rho=1026
nu=1.1883e-06

[Resistance]
ModShipCa=0.0004

[Hull]
HullType=Displ
Loading=LoadDraft
ChineType=RoundBilge
SternShape=Normal
BowShape=Normal
FlapBehind=No
LengthPP=36.94
LengthWL=39.12
BeamWL=7.32
Draft=3.5
Trim=1.3
LCBHull=19.846
WettedSurf=371.739
MaxSecArea=20.3679
HullDispl=526.2
HalfEntAng=27
MidshiCoef=0.795
WaterpCoef=0.79

[Speeds]
Speeds=8,9,9.5,10,10.5,11,11.5,12,13

[Results]
ResiCoef=0.0011033,0.0015648,0.0017561,0.0019857,0.002455,0.0034184,0.0045341,0.0053643,0.0060501
BareResist=2540.29,3608.68,4201.5,4900.13,5973.08,7861.15,10248.6,12497.5,15942.7
ModCfType=ITTC57
ModSource=ModelTest
ModLengthWL=4.89
FroudeLen=0.210121,0.236386,0.249518,0.262651,0.275784,0.288916,0.302049,0.315181,0.341446
FroudeVol=0.464517,0.522581,0.551613,0.580646,0.609678,0.63871,0.667743,0.696775,0.754839
HullReyNum=1.35488e+08,1.52424e+08,1.60892e+08,1.6936e+08,1.77828e+08,1.86296e+08,1.94764e+08,2.03232e+08,2.20168e+08
ResiMerit=0.000690613,0.00123967,0.00155009,0.00194211,0.00264723,0.00404547,0.00586473,0.00755504,0.0100002
BareMerit=0.00218977,0.00311073,0.00362175,0.00422399,0.00514888,0.00677643,0.00883448,0.010773,0.0137428
```
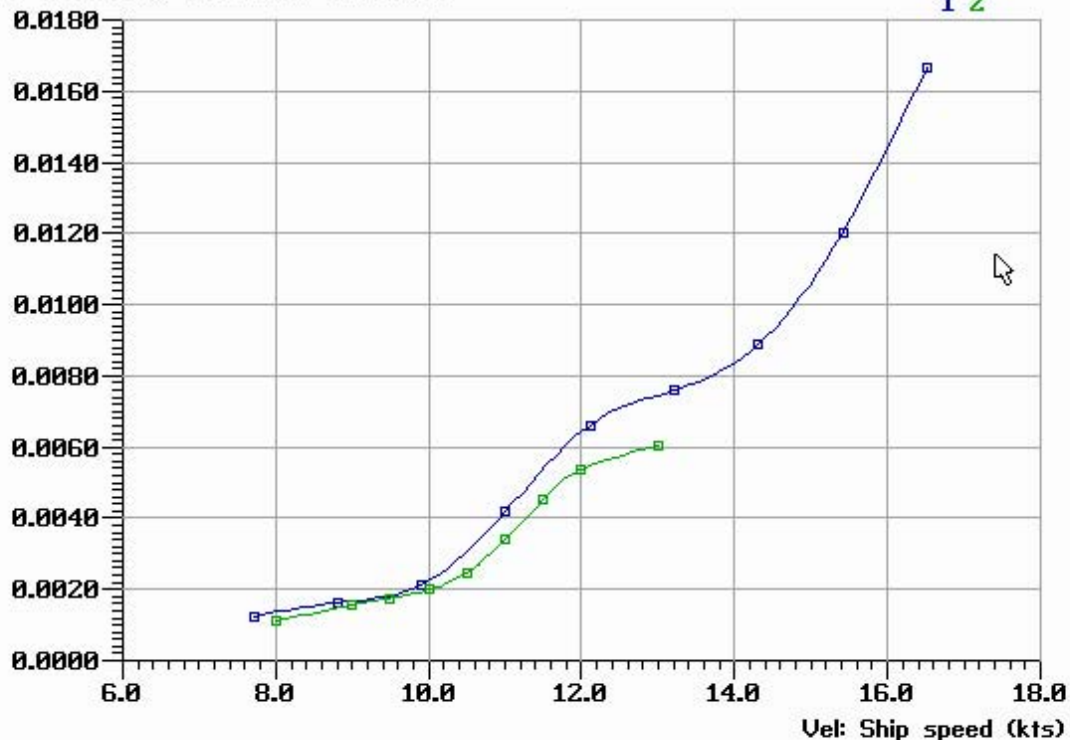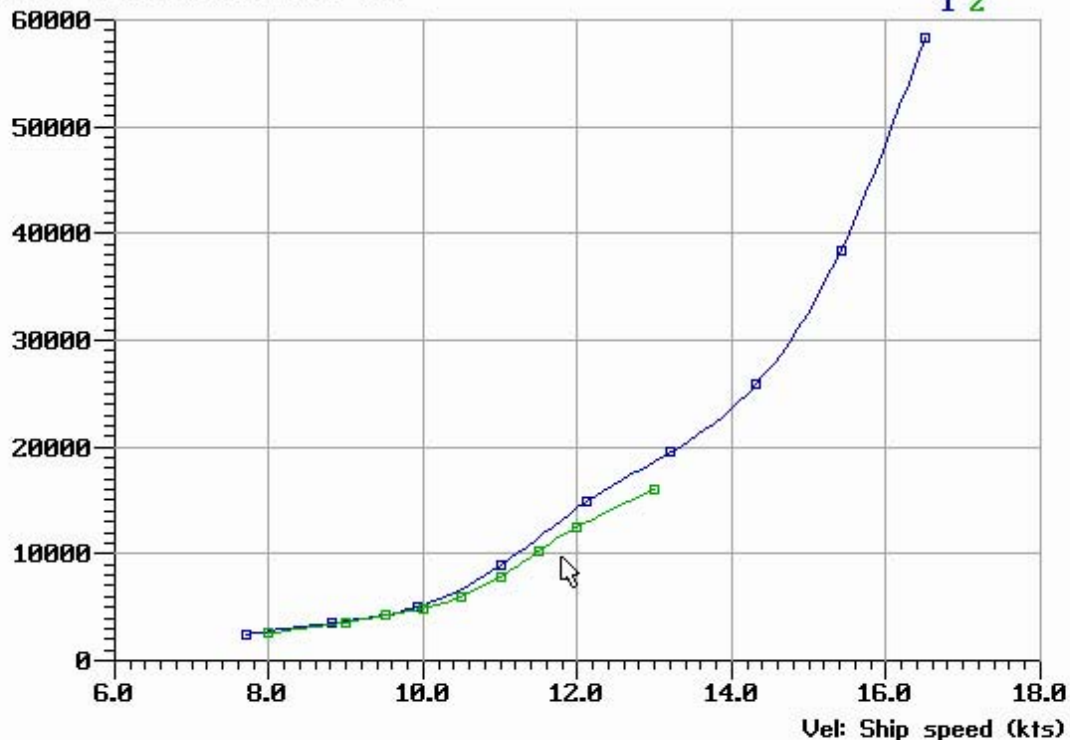
Cr: Residuary resistance coefficient

Graph results

Graph   Parameters

1 2

0.0180
0.0160
0.0140
0.0120
0.0100
0.0080
0.0060
0.0040
0.0020
0.0000

6.0   8.0   10.0   12.0   14.0   16.0   18.0

Vel: Ship speed (kts)

RIDGELEY-NEVITT TRAWLER SERIES RESISTANCE   NTNU-M105

16-Mar-2012 11:14:58

Length BP		47.92 m			
Beam Waterline		8.53 m	5.618	Allowable range	3.22 - 5.75
Draft-Midship		3.36 m	2.539	Allowable range	1.94 - 2.42
Displacement volume	724	706.3 Δ/(0.01Λ)3	183.53	Allowable range	200 - 500
Block coefficient		0.514		Allowable range	0.400 - 0.598
Prismatic coefficient		0.557 0.557		Allowable range	0.554 - 0.700
Midship coefficient		0.924		Allowable range	0.729 - 0.810
Wetted surface area	504.728	479.000 m3-Mumford	6.039	Allowable range	5.198 - 6.255
Water density		1.0259 t/m3	1.0250 at 19oC	$\rightarrow$	
Water viscosity		1.18831 x 10-6 m2/s	1.07854 x 10-6 at 19oC		
Correlation allowance		0.0004			

Displacement   724.64 t

*exceeds

V/L	V	10-6Rn	103CF	103CR	103CT	RT	PE
	kn		ITTC'57			kN	kW
0.7	8.78	182.09	1.914	0.773	3.086	15.46	69.8
0.8	10.03	208.10	1.879	0.784	3.062	20.04	103.4
0.9	11.28	234.11	1.849	0.936	3.185	26.37	153.1
1.0	12.54	260.12	1.822	1.303	3.526	36.04	232.5
1.1	13.79	286.13	1.799	1.329	3.528	43.64	309.7
1.2	15.05	312.15	1.778	2.873	5.051	74.36	575.6
1.3	16.30	338.16	1.759	5.662	7.821	135.13	1133.1
1.4	17.55	364.17	1.742	9.337	11.479	230.02	2077.2
1.5	18.81	390.18	1.726	13.383	15.509	356.75	3451.7

```
;***********************************************
;* NavCad model file        HydroComp, Inc. *
;***********************************************
;
[NavCad]
Version=3.00
Release=ReleaseA
Date=03/31/2000
Time=16:01:09.84
Precision=6
Description=Norway-Trondheim 1951 Model= M 105 Cp=0.537 L/B=5.615 B/T=2.54 Lcb=-0.13F

[Units]
Length=Meter
Area=SqMeter
Weight=MetricTon
Speed=Knot
Force=Pound
Power=Horsepower
Density=KgPerCuM
KinemVisc=SqMPerSec

[Condition]
rho=1026
nu=1.1883e-06

[Resistance]
ModShipCa=0.0004

[Hull]
HullType=Displ
Loading=LoadDraft
ChineType=RoundBilge
SternShape=Normal
BowShape=Normal
FlapBehind=No
LengthPP=47.92
LengthWL=49.35
BeamWL=8.53
Draft=3.36
LCBHull=24.611
WettedSurf=479
MaxSecArea=26.4682
HullDispl=724
MidshiCoef=0.9235

[Speeds]
Speeds=8,9,10,11,12,12.5,13,13.5,14

[Results]
ResiCoef=0.0008206,0.0008993,0.0009809,0.0010833,0.0011821,0.0012682,0.0014041,0.0015857,0.002019
BareResist=2948.86,3787.83,4755.63,5892.57,7174.91,7958.97,8920.51,10079.4,12056.4
ModCfType=ITTC57
ModSource=ModelTest
ModLengthWL=4.935
FroudeLen=0.187079,0.210464,0.233849,0.257234,0.280618,0.292311,0.304003,0.315696,0.327388
FroudeVol=0.440457,0.495514,0.550571,0.605628,0.660685,0.688214,0.715742,0.743271,0.770799
HullReyNum=1.70919e+08,1.92284e+08,2.13648e+08,2.35013e+08,2.56378e+08,2.6706e+08,2.77743e+08,2.88425e+08,2.99108e+08
ResiMerit=0.000481041,0.000667206,0.000898453,0.00120062,0.00155915,0.00181501,0.00217348,0.00264703,0.00362462
BareMerit=0.00184749,0.00237311,0.00297944,0.00369175,0.00449514,0.00498637,0.00558878,0.00631482,0.00755341
```
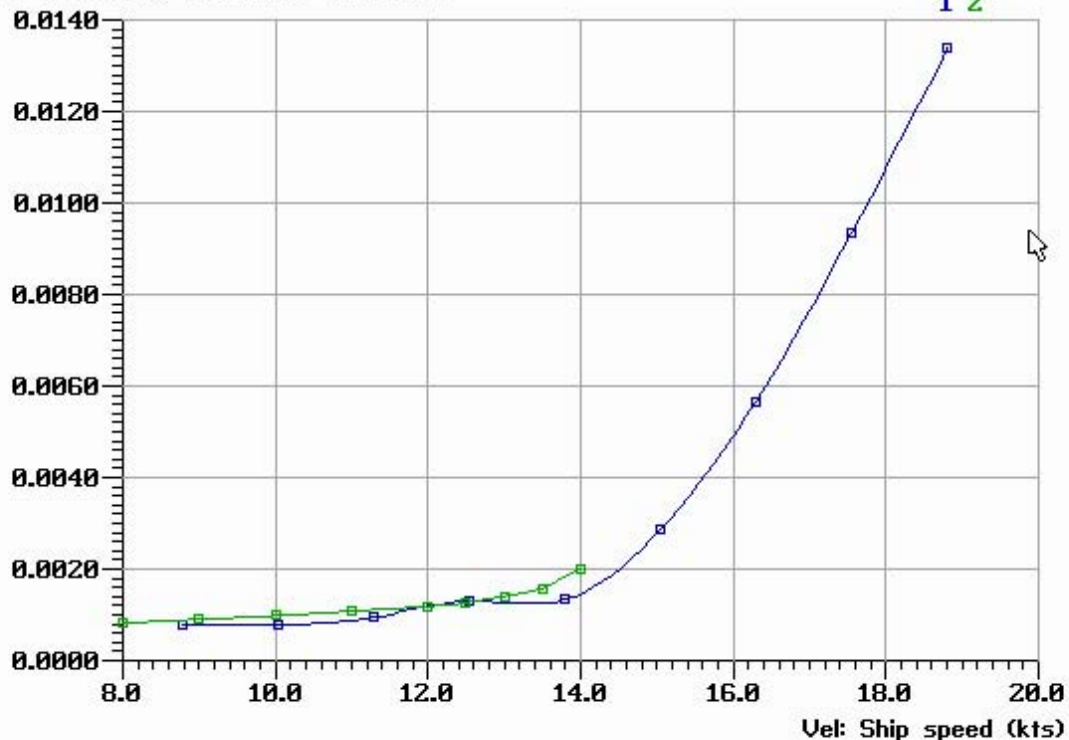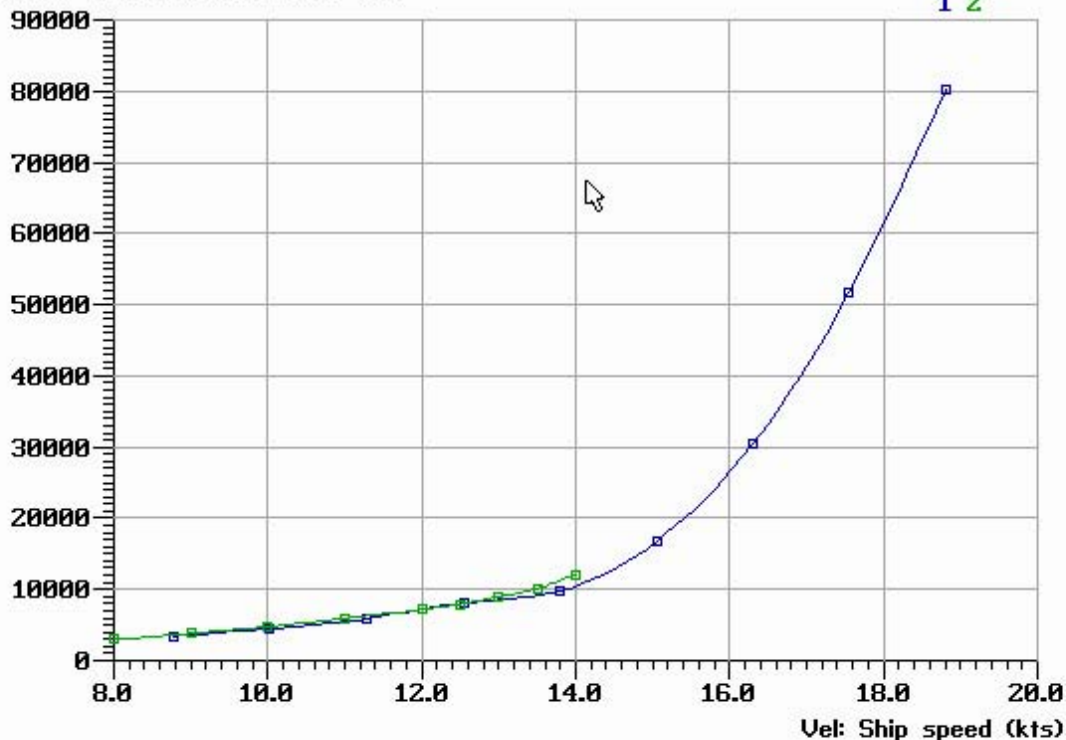
RIDGELEY-NEVITT TRAWLER SERIES RESISTANCE   # NTNU-M106

16-Mar-2012 11:15:28

Length BP		47.92 m		
Beam Waterline		8.53 m	5.618 Allowable range	3.22 - 5.75
Draft-Midship		3.36 m	2.539 Allowable range	1.94 - 2.42
Displacement volume	724	706.3 $\Delta/(0.01\Lambda)3$	183.53 Allowable range	200 - 500
Block coefficient		0.514	Allowable range	0.400 - 0.598
Prismatic coefficient		0.578 0.578	Allowable range	0.554 - 0.700
Midship coefficient		0.890	Allowable range	0.729 - 0.810
Wetted surface area	504.728	476.000 m3-Mumford	6.002 Allowable range	5.198 - 6.255
Water density		1.0259 t/m3	1.0250 at 19oC	$\rightarrow$
Water viscosity		1.18831 x 10-6 m2/s	1.07854 x 10-6 at 19oC	
Correlation allowance		0.0004		

Displacement   724.64 t

exceeds

V/L	V	10-6Rn	103CF	103CR	103CT	RT	PE
	kn		ITTC'57			kN	kW
0.7	8.78	182.09	1.914	0.929	3.243	16.14	72.9
0.8	10.03	208.10	1.879	0.988	3.267	21.24	109.6
0.9	11.28	234.11	1.849	1.141	3.389	27.89	161.9
1.0	12.54	260.12	1.822	1.520	3.743	38.02	245.3
1.1	13.79	286.13	1.799	1.709	3.908	48.05	340.9
1.2	15.05	312.15	1.778	2.739	4.918	71.94	556.9
1.3	16.30	338.16	1.759	5.089	7.248	124.45	1043.6
1.4	17.55	364.17	1.742	8.678	10.820	215.45	1945.7
1.5	18.81	390.18	1.726	12.578	14.705	336.12	3252.2

```
;***********************************************
;* NavCad model file        HydroComp, Inc. *
;***********************************************
;
[NavCad]
Version=3.00
Release=ReleaseA
Date=03/31/2000
Time=15:56:48.50
Precision=6
Description=Norway-Trondheim 1951 Model= M 106 Cp=0.557 L/B=5.618 B/T=2.539 Lcb=-0.06A

[Units]
Length=Meter
Area=SqMeter
Weight=MetricTon
Speed=Knot
Force=Pound
Power=Horsepower
Density=KgPerCuM
KinemVisc=SqMPerSec

[Condition]
rho=1026
nu=1.1883e-06

[Resistance]
ModShipCa=0.0004

[Hull]
HullType=Displ
Loading=LoadDraft
ChineType=RoundBilge
SternShape=Normal
BowShape=Normal
FlapBehind=No
LengthPP=47.92
LengthWL=49.35
BeamWL=8.53
Draft=3.36
LCBHull=24.705
WettedSurf=476
MaxSecArea=25.5081
HullDispl=724
MidshiCoef=0.89

[Speeds]
Speeds=8,9,10,11,12,12.5,13,13.5,14

[Results]
ResiCoef=0.000759,0.000876,0.001038,0.0011456,0.0015325,0.0017503,0.0018701,0.001985,0.0022474
BareResist=2873.4,3737.04,4808.8,5965.18,7863.03,9003.51,10008.8,11073.5,12631.2
ModCfType=ITTC57
ModSource=ModelTest
ModLengthWL=4.935
FroudeLen=0.187079,0.210464,0.233849,0.257234,0.280618,0.292311,0.304003,0.315696,0.327388
FroudeVol=0.440457,0.495514,0.550571,0.605628,0.660685,0.688214,0.715742,0.743271,0.770799
HullReyNum=1.70919e+08,1.92284e+08,2.13648e+08,2.35013e+08,2.56378e+08,2.6706e+08,2.77743e+08,2.88425e+08,2.99108e+08
ResiMerit=0.000442144,0.000645849,0.000944799,0.00126171,0.00200865,0.00248928,0.00287669,0.00329284,0.00400939
BareMerit=0.00180021,0.00234129,0.00301276,0.00373724,0.00492626,0.00564078,0.0062706,0.00693765,0.00791357
```
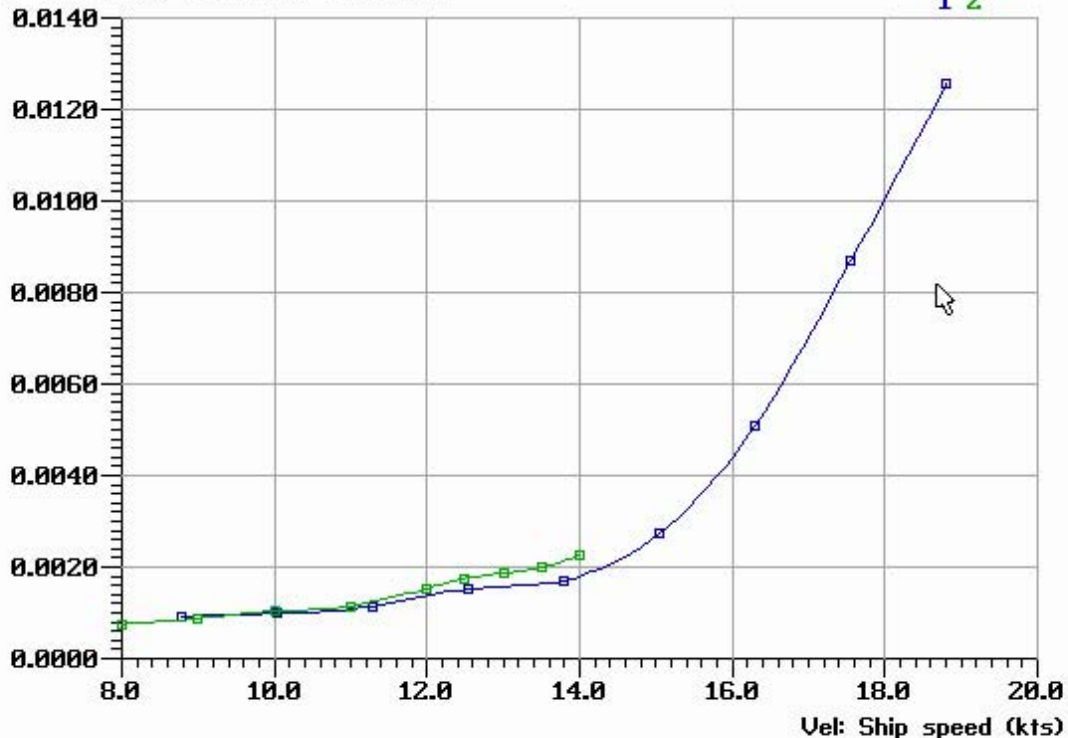
RIDGELEY-NEVITT TRAWLER SERIES RESISTANCE   # NTNU-M110

Length BP		36.83 m			
Beam Waterline		7.76 m	4.746	Allowable range	3.22 - 5.75
Draft-Midship		3.89 m	1.995	Allowable range	1.94 - 2.42
Displacement volume	525.5	512.7 $\Delta/(0.01\Lambda)3$	293.41	Allowable range	200 - 500
Block coefficient		0.461		Allowable range	0.400 - 0.598
Prismatic coefficient		0.617 0.617		Allowable range	0.554 - 0.700
Midship coefficient		0.748		Allowable range	0.729 - 0.810
Wetted surface area	391.102	385.420 m3-Mumford	6.017	Allowable range	5.198 - 6.255
Water density		1.0259 t/m3	1.0250 at 19oC	$\rightarrow$	
Water viscosity		1.18831 x 10-6 m2/s	1.07854 x 10-6 at 19oC		
Correlation allowance		0.0004			

Displacement   525.96 t

V/L	V	10-6Rn	103CF	103CR	103CT	RT	PE
	kn		ITTC'57			kN	kW
0.7	7.69	122.69	2.023	1.247	3.670	11.37	45.0
0.8	8.79	140.21	1.985	1.444	3.829	15.49	70.1
0.9	9.89	157.74	1.952	1.640	3.992	20.45	104.1
1.0	10.99	175.27	1.924	2.613	4.937	31.21	176.5
1.1	12.09	192.80	1.899	3.235	5.534	42.33	263.3
1.2	13.19	210.32	1.876	4.046	6.322	57.55	390.6
1.3	14.29	227.85	1.856	6.605	8.861	94.67	696.0
1.4	15.39	245.38	1.837	11.548	13.785	170.81	1352.3
1.5	16.49	262.90	1.820	17.503	19.723	280.56	2379.9

```
;***********************************************
;* NavCad model file        HydroComp, Inc. *
;***********************************************

[NavCad]
Version=3.00
Release=ReleaseA
Date=03/31/2000
Time=10:11:53.35
Precision=6
Description=Norway-Trondheim Model= M 110 Cs Cp=0.607 L/B=5.041 B/T=1.995 Lcb=+0.14F

[Units]
Length=Meter
Area=SqMeter
Weight=MetricTon
Speed=Knot
Force=Pound
Power=Horsepower
Density=KgPerCuM
KinemVisc=SqMPerSec

[Condition]
rho=1026
nu=1.1883e-06

[Resistance]
ModShipCa=0.0004

[Hull]
HullType=Displ
Loading=LoadDraft
ChineType=RoundBilge
SternShape=Normal
BowShape=Normal
FlapBehind=No
LengthPP=36.83
LengthWL=39.12
BeamWL=7.76
Draft=3.89
Trim=1.3
LCBHull=19.505
WettedSurf=385.42
MaxSecArea=22.5794
HullDispl=525.5
HalfEntAng=24.2
MidshiCoef=0.748
WaterpCoef=0.725

[Speeds]
Speeds=8,9,9.5,10,10.5,11,11.5,12,13

[Results]
ResiCoef=0.0009063,0.001365,0.0015843,0.0018146,0.0021409,0.0026604,0.0033099,0.0038108,0.0043673
BareResist=2485.46,3551.39,4173.73,4879.19,5785.53,7071.53,8721.27,10325.8,13183.9
ModCfType=ITTC57
ModSource=ModelTest
ModLengthWL=4.89
FroudeLen=0.210121,0.236386,0.249518,0.262651,0.275784,0.288916,0.302049,0.315181,0.341446
FroudeVol=0.46462,0.522697,0.551736,0.580774,0.609813,0.638852,0.667891,0.696929,0.755007
HullReyNum=1.35488e+08,1.52424e+08,1.60892e+08,1.6936e+08,1.77828e+08,1.86296e+08,1.94764e+08,2.03232e+08,2.20168e+08
ResiMerit=0.000588962,0.00112267,0.00145184,0.00184254,0.00239668,0.00326864,0.00444473,0.00557204,0.00749437
BareMerit=0.00214536,0.00306543,0.00360261,0.00421154,0.00499386,0.00610388,0.00752788,0.00891289,0.0113799
```
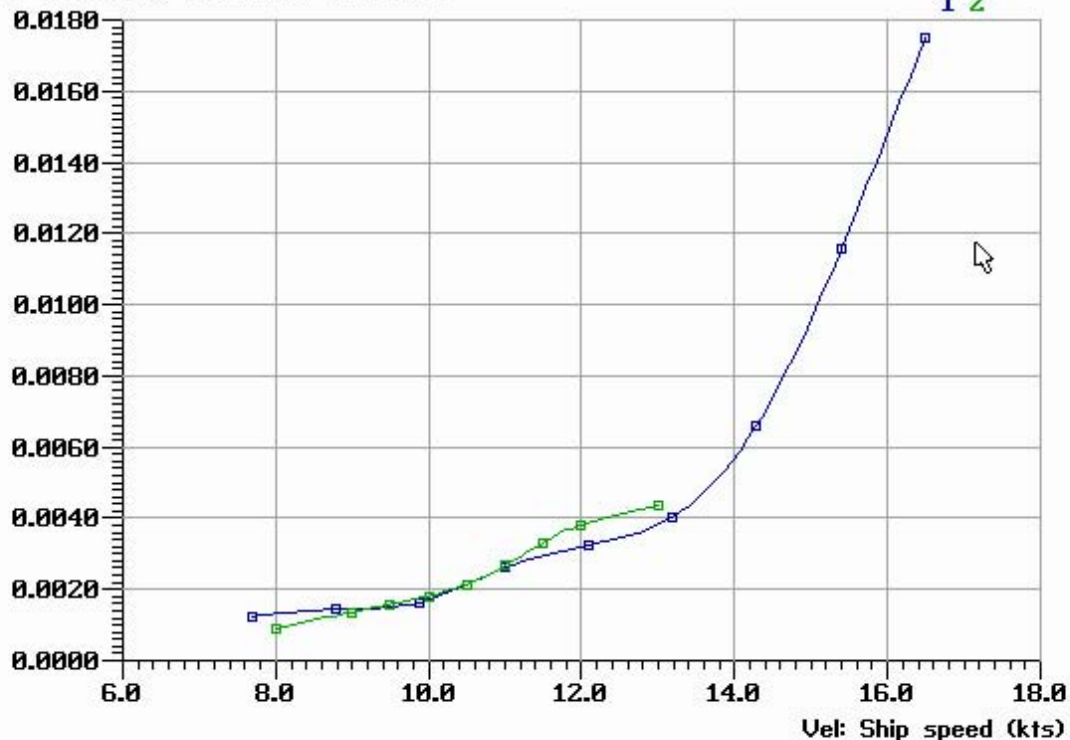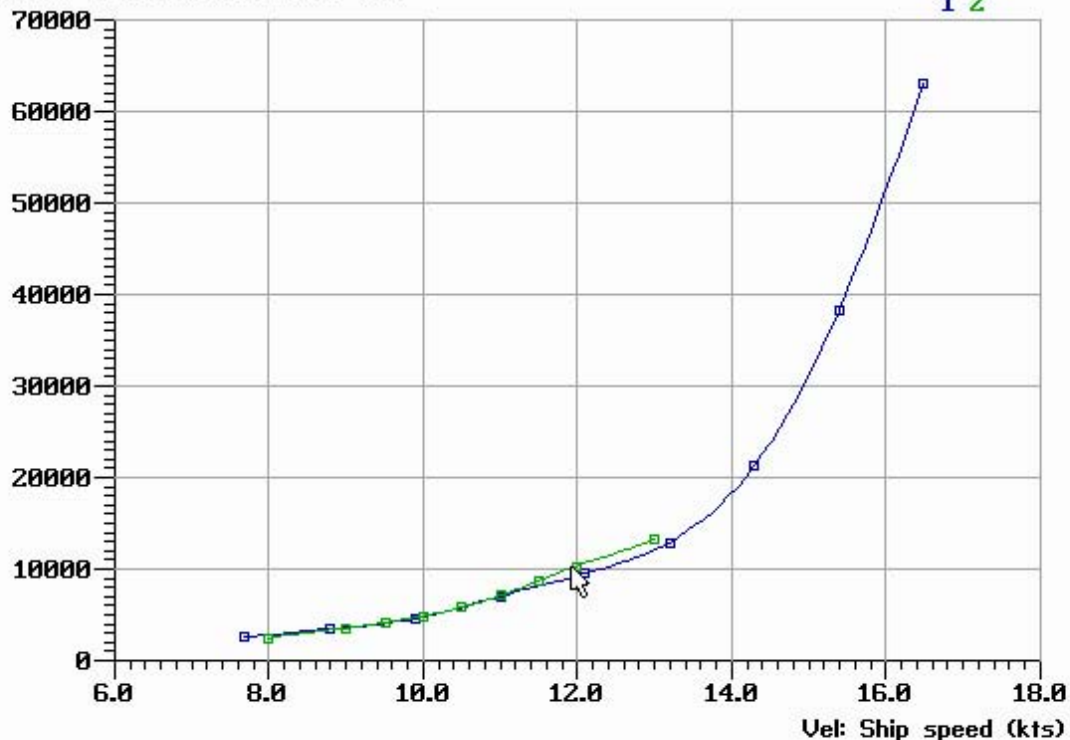
RIDGELEY-NEVITT TRAWLER SERIES RESISTANCE

NTNU-M112

16-Mar-2012 11:17:00

Length BP   28.15 m
Beam Waterline   7.20 m   3.910   Allowable range   3.22 - 5.75
Draft-Midship   3.21 m   2.243   Allowable range   1.94 - 2.42
Displacement volume   313   305.4 $\Delta/(0.01\Lambda)3$ 391.40 Allowable range   200 - 500
Block coefficient   0.469   Allowable range   0.400 - 0.598
Prismatic coefficient   0.638   0.638   Allowable range   0.554 - 0.700
Midship coefficient   0.736   Allowable range   0.729 - 0.810
Wetted surface area   259.780   265.200 m3-Mumford   5.848 Allowable range   5.198 - 6.255
Water density   1.0259 t/m3   1.0250 at 19oC $\rightarrow$
Water viscosity   1.18831 x 10-6 m2/s 1.07854 x 10-6 at 19oC
Correlation allowance   0.0004

Displacement   313.27 t

V/L	V	10-6Rn	103CF	103CR	103CT	RT	PE
	kn		ITTC'57			kN	kW
0.7	6.73	81.98	2.145	1.375	3.919	6.39	22.1
0.8	7.69	93.69	2.103	1.635	4.138	8.81	34.8
0.9	8.65	105.41	2.068	2.069	4.536	12.22	54.4
1.0	9.61	117.12	2.036	3.460	5.896	19.61	96.9
1.1	10.57	128.83	2.009	4.681	7.090	28.52	155.1
1.2	11.53	140.54	1.984	5.584	7.968	38.15	226.3
1.3	12.49	152.25	1.962	8.084	10.446	58.70	377.3
1.4	13.45	163.96	1.942	13.796	16.138	105.17	727.9
1.5	14.42	175.68	1.923	20.974	23.297	174.29	1292.5

```
;***********************************************
;* NavCad model file        HydroComp, Inc. *
;***********************************************

[NavCad]
Version=3.00
Release=ReleaseA
Date=03/31/2000
Time=11:45:12.51
Precision=6
Description=Norwegian Trawler Mdl= M112 1951 Lpp/B= 3.91 B/T=2.24 Lcb=+0.034F

[Units]
Length=Meter
Area=SqMeter
Weight=MetricTon
Speed=Knot
Force=Newton
Power=Horsepower
Density=KgPerCuM
KinemVisc=SqMPerSec

[Condition]
rho=1026
nu=1.1883e-06

[Resistance]
ModShipCa=0.0004

[Hull]
HullType=Displ
Loading=LoadDraft
ChineType=RoundBilge
SternShape=Normal
BowShape=Normal
FlapBehind=No
LengthPP=28.15
LengthWL=30
BeamWL=7.2
Draft=3.21
Trim=1
LCBHull=14.99
WettedSurf=265.2
MaxSecArea=17.0104
HullDispl=313
HalfEntAng=23.5
MidshiCoef=0.736
WaterpCoef=0.715

[Speeds]
Speeds=6,7,8,9,9.5,10,10.5,11,11.5,12

[Results]
ResiCoef=0.0011666,0.0013773,0.0017127,0.0023233,0.0027696,0.003358,0.0038715,0.0041842,0.0046002,0.0053779
BareResist=4831.7,6862.39,9642.62,13883.3,16868,20755.9,24866.9,28597,33177.8,40096.9
ModCfType=ITTC57
ModSource=ModelTest
ModLengthWL=3.75
FroudeLen=0.179957,0.20995,0.239943,0.269936,0.284932,0.299929,0.314925,0.329921,0.344918,0.359914
FroudeVol=0.379895,0.443211,0.506527,0.569842,0.6015,0.633158,0.664816,0.696474,0.728132,0.75979
HullReyNum=7.79265e+07,9.09142e+07,1.03902e+08,1.1689e+08,1.23384e+08,1.29877e+08,1.36371e+08,1.42865e+08,1.49359e+08,1.55853e+08
ResiMerit=0.000492637,0.00079164,0.00128577,0.00220746,0.00293202,0.00393898,0.00500681,0.00593883,0.00713634,0.00908402
BareMerit=0.00700198,0.00994482,0.0139739,0.0201193,0.0244447,0.030079,0.0360365,0.0414421,0.0480805,0.0581076
```
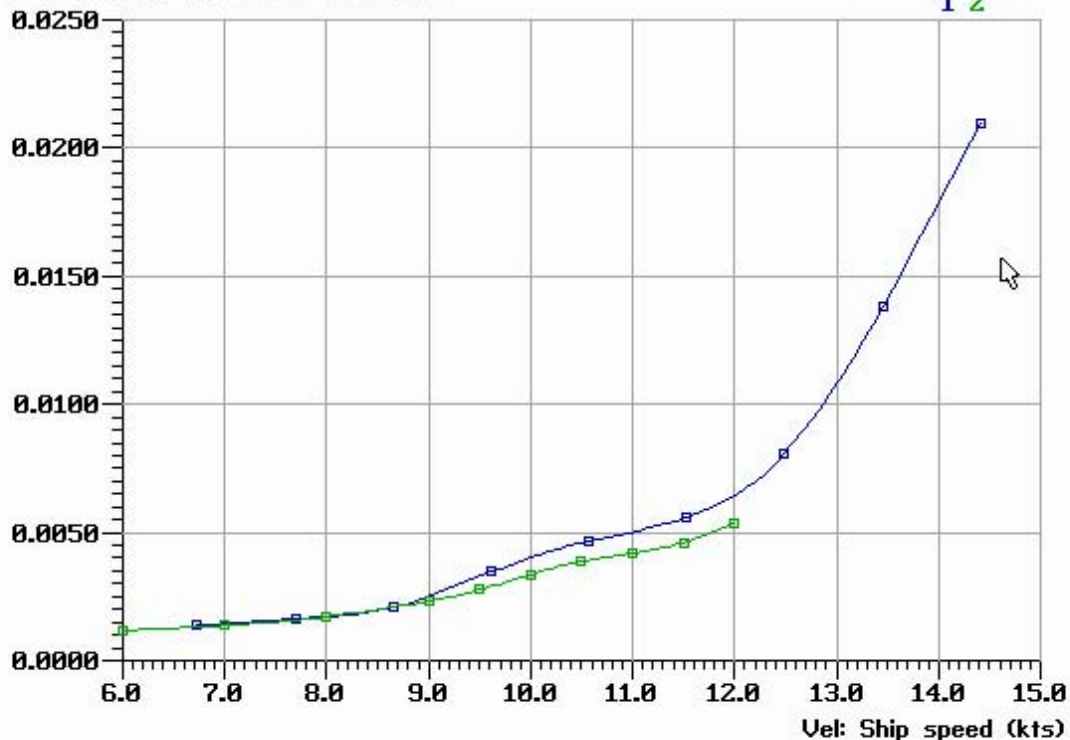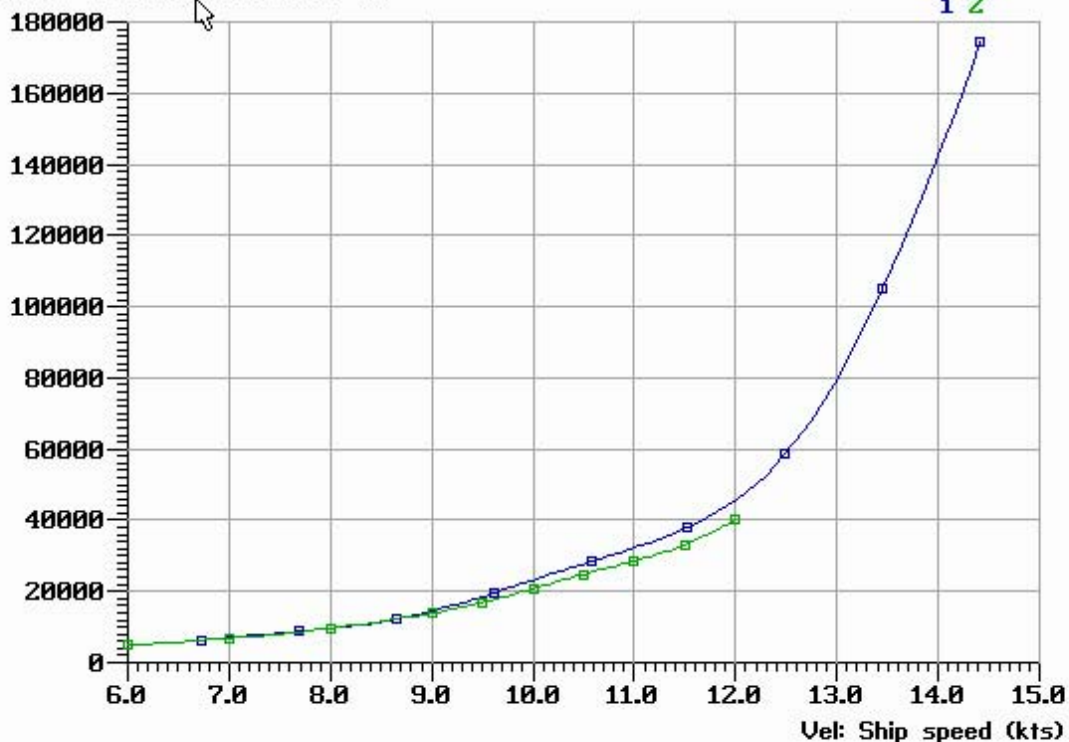
Graph results

Graph **Parameters**

Rbare: Bare-hull resistance (N)

1 2

RIDGELEY-NEVITT TRAWLER SERIES RESISTANCE

NTNU-M113

16-Mar-2012 11:17:41

Length BP		36.71 m		
Beam Waterline		7.76 m	4.730	Allowable range	3.22 - 5.75
Draft-Midship		3.69 m	2.103	Allowable range	1.94 - 2.42
Displacement volume	526.5	513.7 $\Delta/(0.01\Lambda)3$	296.91 Allowable range	200 - 500
Block coefficient		0.489	Allowable range	0.400 - 0.598
Prismatic coefficient		0.653	0.653	Allowable range	0.554 - 0.700
Midship coefficient		0.748	Allowable range	0.729 - 0.810
Wetted surface area	384.542	373.914 m3-Mumford	5.830 Allowable range	5.198 - 6.255
Water density		1.0259 t/m3	1.0250 at 19oC	$\rightarrow$
Water viscosity		1.18831 x 10-6 m2/s	1.07854 x 10-6 at 19oC
Correlation allowance		0.0004	

Displacement   526.96 t

V/L	V	10-6Rn	103CF	103CR	103CT	RT	PE
	kn		ITTC'57			kN	kW
0.7	7.68	122.08	2.024	1.227	3.651	10.94	43.2
0.8	8.78	139.52	1.986	1.489	3.875	15.16	68.5
0.9	9.88	156.96	1.954	1.840	4.194	20.77	105.5
1.0	10.97	174.40	1.925	3.575	5.900	36.07	203.6
1.1	12.07	191.84	1.900	5.115	7.415	54.85	340.6
1.2	13.17	209.28	1.877	5.766	8.043	70.80	479.7
1.3	14.27	226.72	1.857	7.495	9.752	100.75	739.4
1.4	15.36	244.16	1.838	11.620	13.858	166.05	1312.4
1.5	16.46	261.60	1.821	17.186	19.407	266.93	2260.5

```
;**********************************************
;* NavCad model file        HydroComp, Inc. *
;**********************************************
;

[NavCad]
Version=3.00
Release=ReleaseA
Date=03/31/2000
Time=12:55:32.21
Precision=6
Description=Norway-Trondheim Mdl=M113KVL L/B=5.04 B/T=2.10 Lpp/Vol=4.694 Lcb/Lwl=-0.02A

[Units]
Length=Meter
Area=SqMeter
Weight=MetricTon
Speed=Knot
Force=Pound
Power=Horsepower
Density=KgPerCuM
KinemVisc=SqMPerSec

[Condition]
rho=1026
nu=1.1883e-06

[Resistance]
ModShipCa=0.0004

[Hull]
HullType=Displ
Loading=LoadDraft
ChineType=RoundBilge
SternShape=Normal
BowShape=Normal
FlapBehind=No
LengthPP=36.708
LengthWL=39.12
BeamWL=7.76
Draft=3.69
Trim=1.3
LCBHull=19.568
WettedSurf=373.914
MaxSecArea=21.4185
HullDispl=526.5
HalfEntAng=24.5
MidshiCoef=0.748
WaterpCoef=0.728

[Speeds]
Speeds=8,9,9.5,10,10.5,11,11.5,12,12.5,13

[Results]
ResiCoef=0.0010024,0.0015183,0.0017828,0.0020547,0.0023779,0.0028351,0.0034003,0.0038863,0.0041929,0.0043638
BareResist=2481.45,3586.81,4253.58,5007.55,5911.01,7101.66,8597.35,10141.7,11532.3,12783.6
ModCfType=ITTC57
ModSource=ModelTest
ModLengthWL=4.89
FroudeLen=0.210121,0.236386,0.249518,0.262651,0.275784,0.288916,0.302049,0.315181,0.328314,0.341446
FroudeVol=0.464472,0.522531,0.551561,0.580591,0.60962,0.63865,0.667679,0.696709,0.725738,0.754768
HullReyNum=1.35488e+08,1.52424e+08,1.60892e+08,1.6936e+08,1.77828e+08,1.86296e+08,1.94764e+08,2.03232e+08,2.117e+08,2.20168e+08
ResiMerit=0.000630766,0.00120918,0.00158197,0.00202021,0.00257762,0.00337288,0.0044214,0.00550232,0.00644142,0.00725101
BareMerit=0.00213783,0.00309012,0.00366456,0.00431412,0.00509248,0.00611825,0.00740682,0.00873728,0.00993537,0.0110134
```
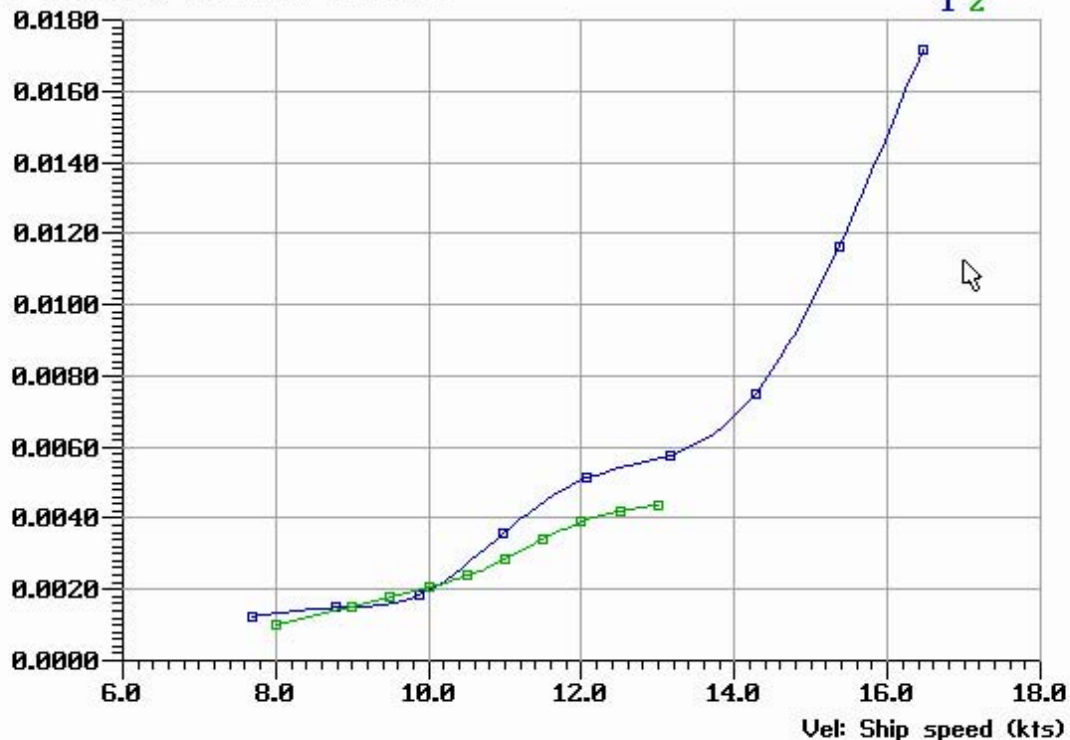
Graph results
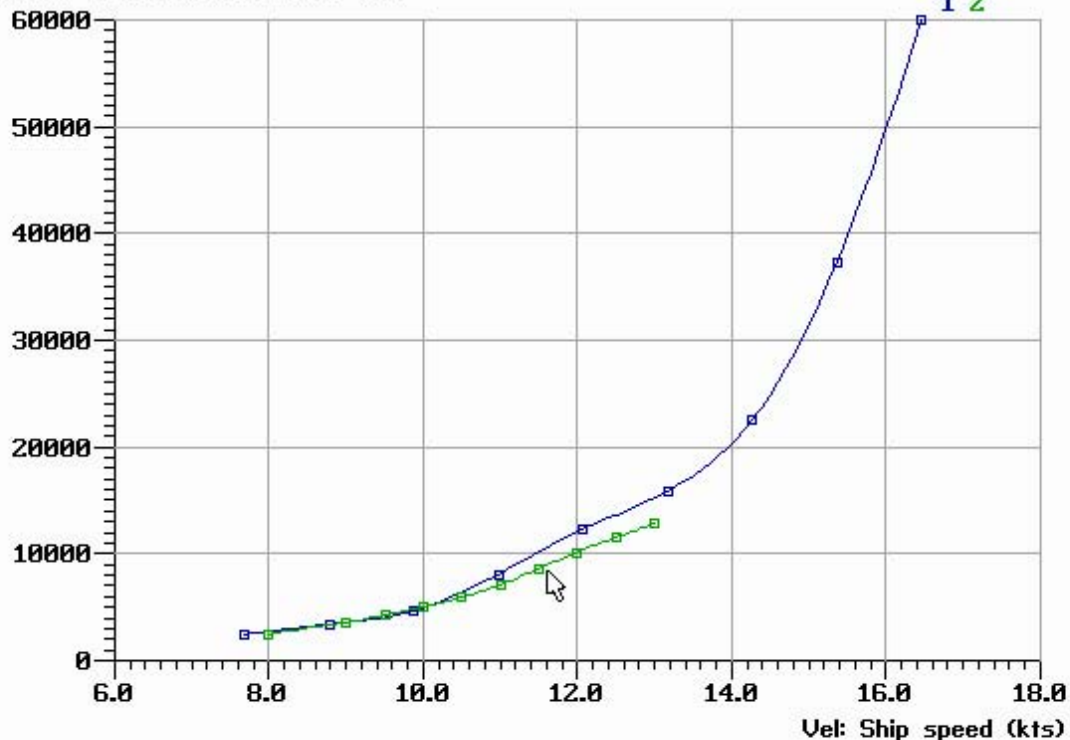
Graph | Parameters

Rbare: Bare-hull resistance (lbs)

1 2

60000

50000

40000

30000

20000

10000

0

6.0   8.0   10.0   12.0   14.0   16.0   18.0

Vel: Ship speed (kts)

RIDGELEY-NEVITT TRAWLER SERIES RESISTANCE   # NTNU-M128

Length BP		47.59	m		
Beam Waterline		8.53	m	5.577	Allowable range	3.22 - 5.75
Draft-Midship		3.35	m	2.545	Allowable range	1.94 - 2.42
Displacement volume	738	720.0	Δ/(0.01Λ)3	190.95	Allowable range	200 - 500
Block coefficient		0.529			Allowable range	0.400 - 0.598
Prismatic coefficient		0.568	0.568		Allowable range	0.554 - 0.700
Midship coefficient		0.931			Allowable range	0.729 - 0.810
Wetted surface area	506.212	475.000	m3-Mumford	5.913	Allowable range	5.198 - 6.255
Water density		1.0259	t/m3	1.0250 at 19oC	→
Water viscosity		1.18831	x 10-6 m2/s	1.07854 x 10-6 at 19oC
Correlation allowance		0.0004		

Displacement   738.65 t

exceeds

V/L	V	10-6Rn	103CF	103CR	103CT	RT	PE
	kn		ITTC'57			kN	kW
0.7	8.75	180.23	1.916	0.872	3.188	15.73	70.8
0.8	10.00	205.98	1.881	0.926	3.208	20.67	106.3
0.9	11.25	231.72	1.851	1.051	3.303	26.94	155.8
1.0	12.50	257.47	1.825	1.384	3.609	36.34	233.6
1.1	13.75	283.22	1.802	1.565	3.766	45.89	324.5
1.2	15.00	308.97	1.781	2.844	5.024	72.85	562.0
1.3	16.24	334.71	1.762	5.458	7.620	129.67	1083.6
1.4	17.49	360.46	1.744	9.272	11.417	225.31	2027.8
1.5	18.74	386.21	1.729	13.589	15.717	356.08	3433.6

```
;**********************************************
;* NavCad model file         HydroComp, Inc. *
;**********************************************
;

[NavCad]
Version=3.00
Release=ReleaseA
Date=03/31/2000
Time=16:09:50.04
Precision=6
Description=Norway-Trondheim 1951 Model= M 128 Cp=0.541 L/B=5.577 B/T=2.545 Lcb=+0.6F

[Units]
Length=Meter
Area=SqMeter
Weight=MetricTon
Speed=Knot
Force=Pound
Power=Horsepower
Density=KgPerCuM
KinemVisc=SqMPerSec

[Condition]
rho=1026
nu=1.1883e-06

[Resistance]
ModShipCa=0.0004

[Hull]
HullType=Displ
Loading=LoadDraft
ChineType=RoundBilge
SternShape=Normal
BowShape=Normal
FlapBehind=No
LengthPP=47.594
LengthWL=49.486
BeamWL=8.534
Draft=3.353
LCBHull=24.446
WettedSurf=475
MaxSecArea=26.6401
HullDispl=738
HalfEntAng=14
MidshiCoef=0.931

[Speeds]
Speeds=9,10,11,12,13,14,14.5,15,15.5,16

[Results]
ResiCoef=0.0012871,0.0014511,0.0016022,0.0018141,0.0021563,0.0026377,0.0031439,0.0038858,0.0048807,0.0060513
BareResist=4211.23,5396.58,6752.42,8432.98,10687.4,13711.9,16226.2,19758.4,24536,30461.5
ModCfType=ITTC57
ModSource=ModelTest
ModLengthWL=4.935
FroudeLen=0.210174,0.233527,0.25688,0.280233,0.303585,0.326938,0.338614,0.350291,0.361967,0.373643
FroudeVol=0.493935,0.548816,0.603698,0.658579,0.713461,0.768343,0.795784,0.823224,0.850665,0.878106
HullReyNum=1.92813e+08,2.14237e+08,2.35661e+08,2.57085e+08,2.78508e+08,2.99932e+08,3.10644e+08,3.21356e+08,3.32068e+08,3.42779e+08
ResiMerit=0.000928984,0.00129303,0.00172748,0.00232774,0.00324718,0.00460673,0.00589001,0.00779065,0.0104486,0.0138038
BareMerit=0.00258832,0.00331686,0.0041502,0.00518311,0.00656871,0.00842764,0.00997301,0.012144,0.0150804,0.0187224
```
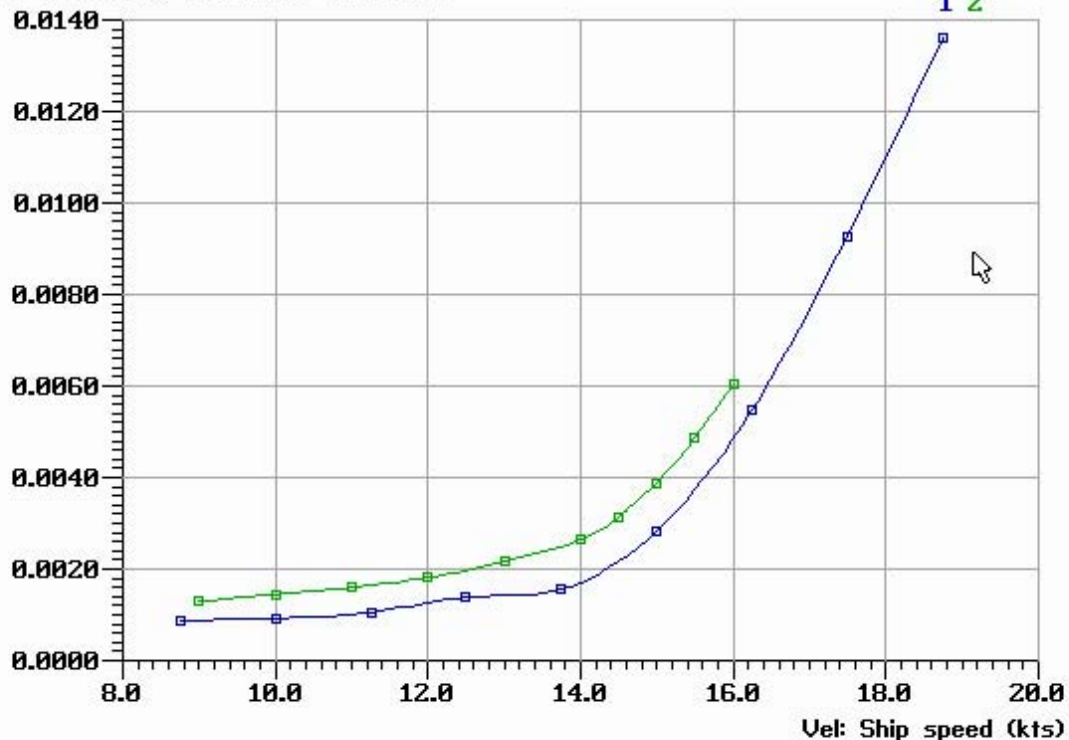
Graph results
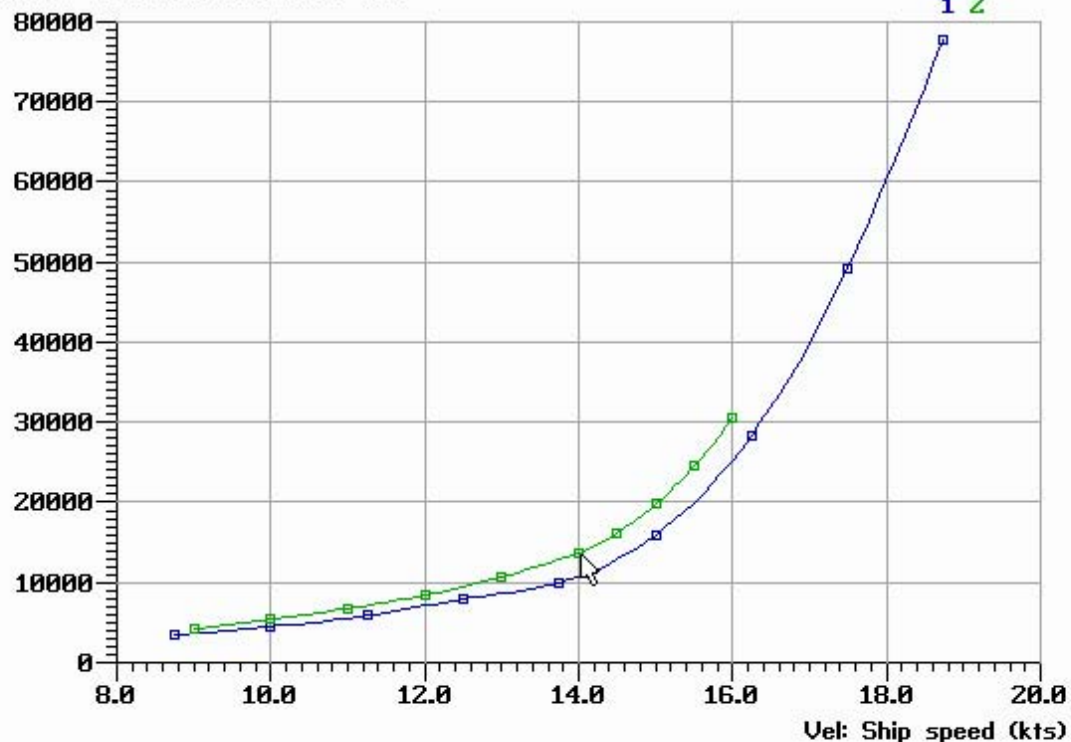
Graph   Parameters

Rbare: Bare-hull resistance (lbs)

1 2

Vel: Ship speed (kts)

RIDGELEY-NEVITT TRAWLER SERIES RESISTANCE   # NTNU-M135

16-Mar-2012 11:18:58

Length BP		47.92	m		
Beam Waterline		8.53	m	5.615	Allowable range	3.22 - 5.75
Draft-Midship		3.23	m	2.641	Allowable range	1.94 - 2.42
Displacement volume	724	706.3	Δ/(0.01Λ)3	183.53 Allowable range	200 - 500
Block coefficient		0.535			Allowable range	0.400 - 0.598
Prismatic coefficient		0.579	0.579		Allowable range	0.554 - 0.700
Midship coefficient		0.923			Allowable range	0.729 - 0.810
Wetted surface area	501.958	472.000	m3-Mumford	5.951 Allowable range	5.198 - 6.255
Water density		1.0259	t/m3	1.0250 at 19oC	→
Water viscosity		1.18831	x 10-6 m2/s 1.07854 x 10-6 at 19oC		
Correlation allowance		0.0004			

Displacement   724.64 t

*exceeds

V/L	V	10-6Rn	103CF	103CR	103CT	RT	PE
	kn		ITTC'57			kN	kW
0.7	8.78	182.09	1.914	0.938	3.252	16.05	72.5
0.8	10.03	208.10	1.879	0.998	3.276	21.12	109.0
0.9	11.28	234.11	1.849	1.152	3.401	27.75	161.1
1.0	12.54	260.12	1.822	1.537	3.759	37.87	244.3
1.1	13.79	286.13	1.799	1.732	3.931	47.91	340.0
1.2	15.05	312.15	1.778	2.738	4.916	71.32	552.0
1.3	16.30	338.16	1.759	5.067	7.226	123.02	1031.6
1.4	17.55	364.17	1.742	8.650	10.793	213.10	1924.4
1.5	18.81	390.18	1.726	12.534	14.661	332.30	3215.2

```
;*********************************************
;* NavCad model file        HydroComp, Inc. *
;*********************************************
;
[NavCad]
Version=3.00
Release=ReleaseA
Date=03/31/2000
Time=16:14:16.48
Precision=6
Description=Norway-Trondheim 1951 Model= M 135 Cp=0.558 L/B=5.618 B/T=2.640 Lcb=+0.15F

[Units]
Length=Meter
Area=SqMeter
Weight=MetricTon
Speed=Knot
Force=Pound
Power=Horsepower
Density=KgPerCuM
KinemVisc=SqMPerSec

[Condition]
rho=1026
nu=1.1883e-06

[Resistance]
ModShipCa=0.0004

[Hull]
HullType=Displ
Loading=LoadDraft
ChineType=RoundBilge
SternShape=Normal
BowShape=Normal
FlapBehind=No
LengthPP=47.92
LengthWL=49.35
BeamWL=8.53
Draft=3.231
LCBHull=24.601
WettedSurf=472
MaxSecArea=25.4383
HullDispl=724
MidshiCoef=0.923

[Speeds]
Speeds=8,9,10,11,12,12.5,13,13.5,14

[Results]
ResiCoef=0.0007845,0.0008764,0.0009501,0.0010705,0.0014136,0.0015819,0.0017409,0.0019506,0.0022237
BareResist=2872.48,3705.75,4641.76,5784.14,7550.3,8548.79,9610.14,10890.1,12458.2
ModCfType=ITTC57
ModSource=ModelTest
ModLengthWL=4.935
FroudeLen=0.187079,0.210464,0.233849,0.257234,0.280618,0.292311,0.304003,0.315696,0.327388
FroudeVol=0.440457,0.495514,0.550571,0.605628,0.660685,0.688214,0.715742,0.743271,0.770799
HullReyNum=1.70919e+08,1.92284e+08,2.13648e+08,2.35013e+08,2.56378e+08,2.6706e+08,2.77743e+08,2.88425e+08,2.99108e+08
ResiMerit=0.000453158,0.000640714,0.000857524,0.00116909,0.00183724,0.00223088,0.00265545,0.00320858,0.00393377
BareMerit=0.00179964,0.00232169,0.0029081,0.00362382,0.00473033,0.00535589,0.00602084,0.00682277,0.00780514
```
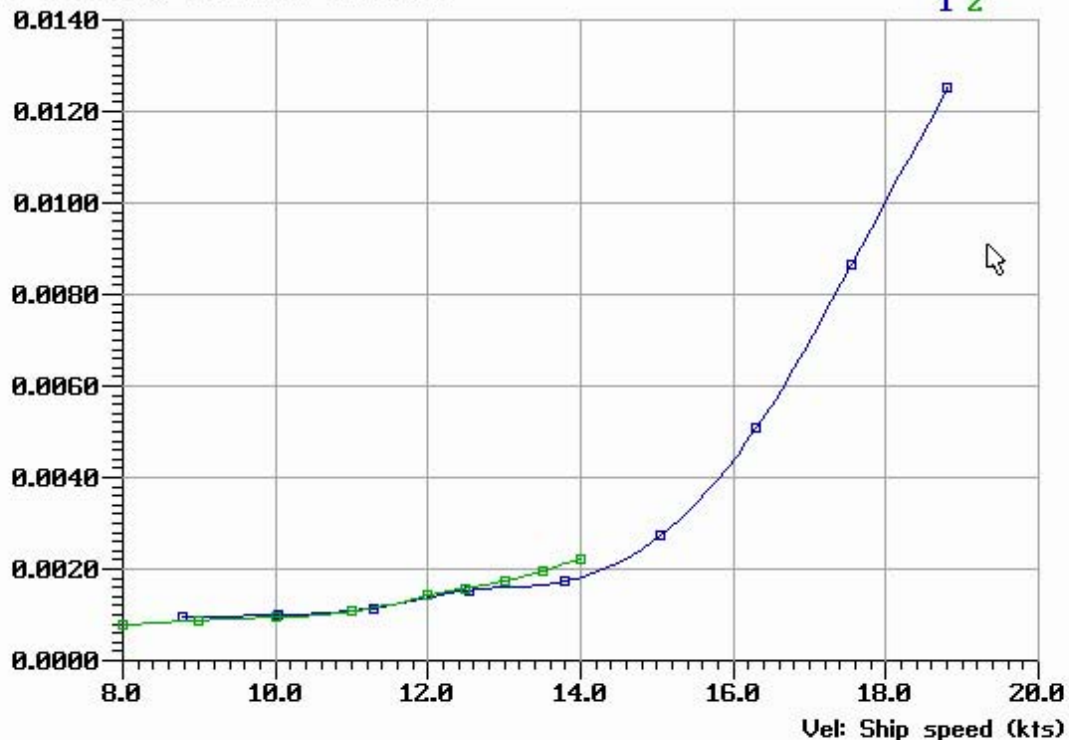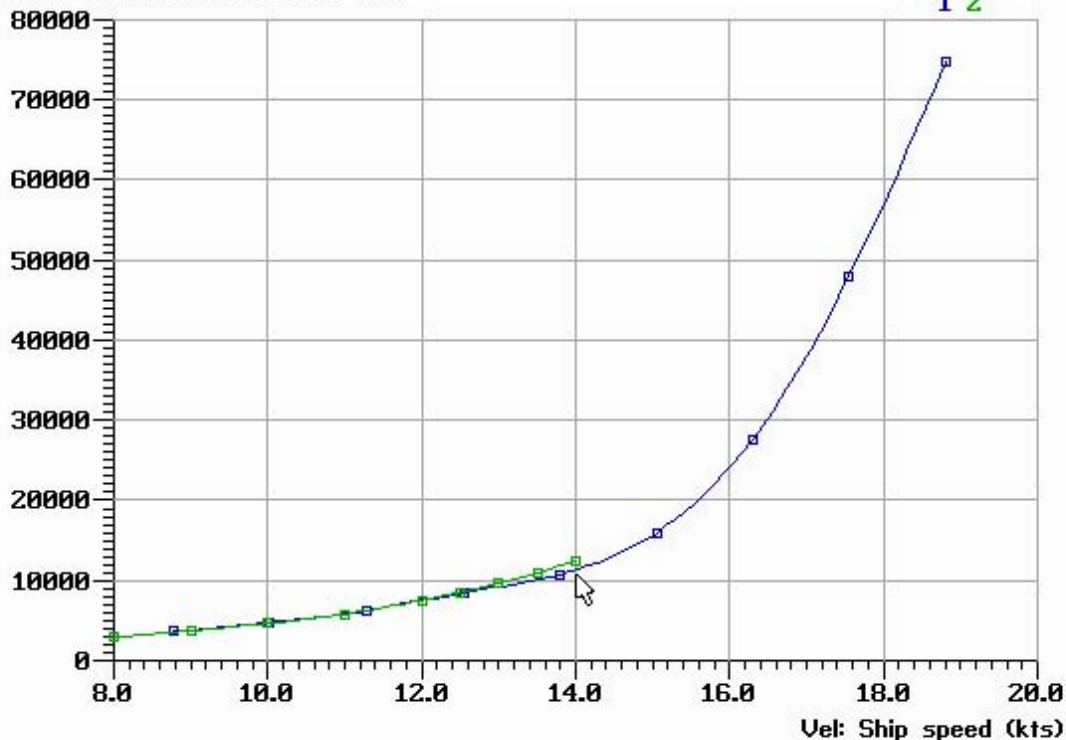
RIDGELEY-NEVITT TRAWLER SERIES RESISTANCE

NTNU-M136

16-Mar-2012 11:19:31

Length BP	47.92 m			
Beam Waterline	8.85 m	5.415	Allowable range	3.22 - 5.75
Draft-Midship	3.23 m	2.739	Allowable range	1.94 - 2.42
Displacement volume	724	706.3 Δ/(0.01Λ)3	183.53 Allowable range	200 - 500
Block coefficient	0.515		Allowable range	0.400 - 0.598
Prismatic coefficient	0.579	0.579	Allowable range	0.554 - 0.700
Midship coefficient	0.891		Allowable range	0.729 - 0.810
Wetted surface area	503.351	464.000 m3-Mumford	5.850 Allowable range	5.198 - 6.255
Water density	1.0259 t/m3	1.0250 at 19oC	→	
Water viscosity	1.18831 x 10-6 m2/s	1.07854 x 10-6 at 19oC		
Correlation allowance	0.0004			

Displacement   724.64 t

exceeds

V/L	V	10-6Rn	103CF	103CR	103CT	RT	PE
	kn		ITTC'57			kN	kW
0.7	8.78	182.09	1.914	0.934	3.248	15.76	71.2
0.8	10.03	208.10	1.879	0.993	3.272	20.74	107.0
0.9	11.28	234.11	1.849	1.147	3.396	27.24	158.1
1.0	12.54	260.12	1.822	1.529	3.751	37.15	239.6
1.1	13.79	286.13	1.799	1.721	3.920	46.98	333.3
1.2	15.05	312.15	1.778	2.739	4.917	70.12	542.7
1.3	16.30	338.16	1.759	5.077	7.236	121.11	1015.6
1.4	17.55	364.17	1.742	8.663	10.806	209.74	1894.1
1.5	18.81	390.18	1.726	12.555	14.681	327.13	3165.2

```
;**********************************************
;* NavCad model file        HydroComp, Inc. *
;**********************************************
;
[NavCad]
Version=3.00
Release=ReleaseA
Date=03/31/2000
Time=16:11:23.52
Precision=6
Description=Norway-Trondheim 1951 Model= M 136 Cp=0.558 L/B=5.415 B/T=2.739 Lcb=+0.18F

[Units]
Length=Meter
Area=SqMeter
Weight=MetricTon
Speed=Knot
Force=Pound
Power=Horsepower
Density=KgPerCuM
KinemVisc=SqMPerSec

[Condition]
rho=1026
nu=1.1883e-06

[Resistance]
ModShipCa=0.0004

[Hull]
HullType=Displ
Loading=LoadDraft
ChineType=RoundBilge
SternShape=Normal
BowShape=Normal
FlapBehind=No
LengthPP=47.92
LengthWL=49.35
BeamWL=8.85
Draft=3.231
LCBHull=24.586
WettedSurf=464
MaxSecArea=25.4776
HullDispl=724
MidshiCoef=0.891

[Speeds]
Speeds=8,9,10,11,12,12.5,13,13.5,14

[Results]
ResiCoef=0.0008751,0.0009722,0.0011593,0.0012682,0.0015429,0.0017095,0.0018406,0.0020103,0.0023269
BareResist=2905.92,3752.84,4859.36,6024.89,7686.01,8686.25,9685.87,10859.6,12533.5
ModCfType=ITTC57
ModSource=ModelTest
ModLengthWL=4.935
FroudeLen=0.187079,0.210464,0.233849,0.257234,0.280618,0.292311,0.304003,0.315696,0.327388
FroudeVol=0.440457,0.495514,0.550571,0.605628,0.660685,0.688214,0.715742,0.743271,0.770799
HullReyNum=1.70919e+08,1.92284e+08,2.13648e+08,2.35013e+08,2.56378e+08,2.6706e+08,2.77743e+08,2.88425e+08,2.99108e+08
ResiMerit=0.000496925,0.000698705,0.00102861,0.00136153,0.0019713,0.00236997,0.00275994,0.00325073,0.00404657
BareMerit=0.00182058,0.00235119,0.00304443,0.00377464,0.00481535,0.00544201,0.00606829,0.00680366,0.00785232
```
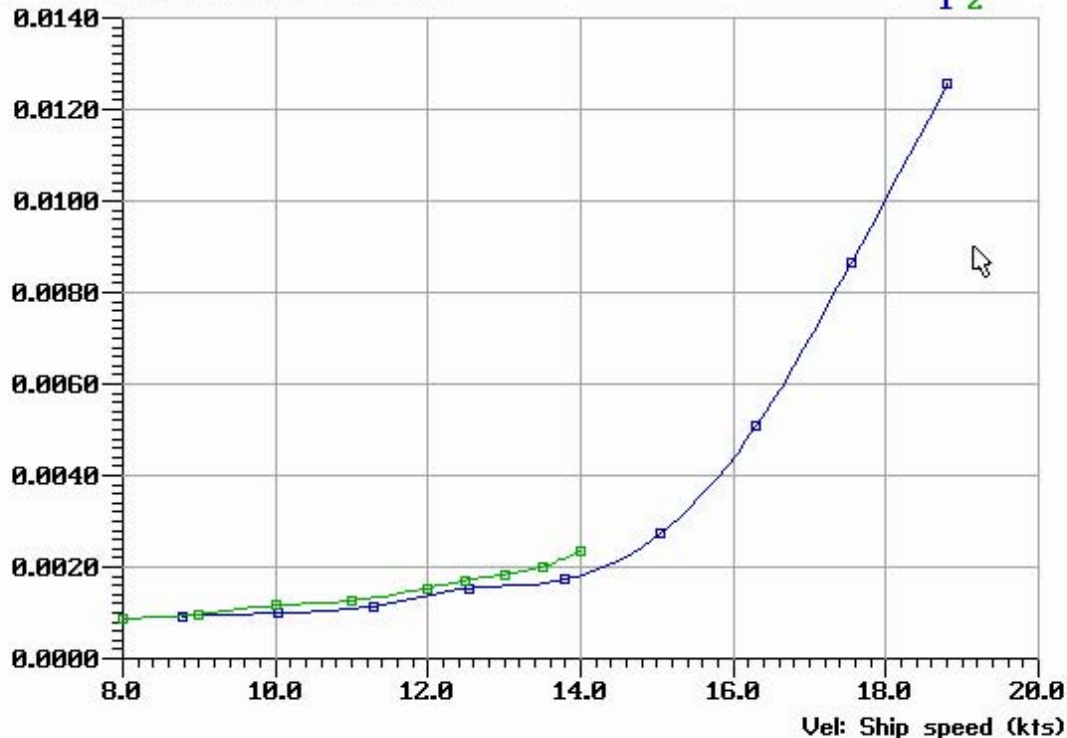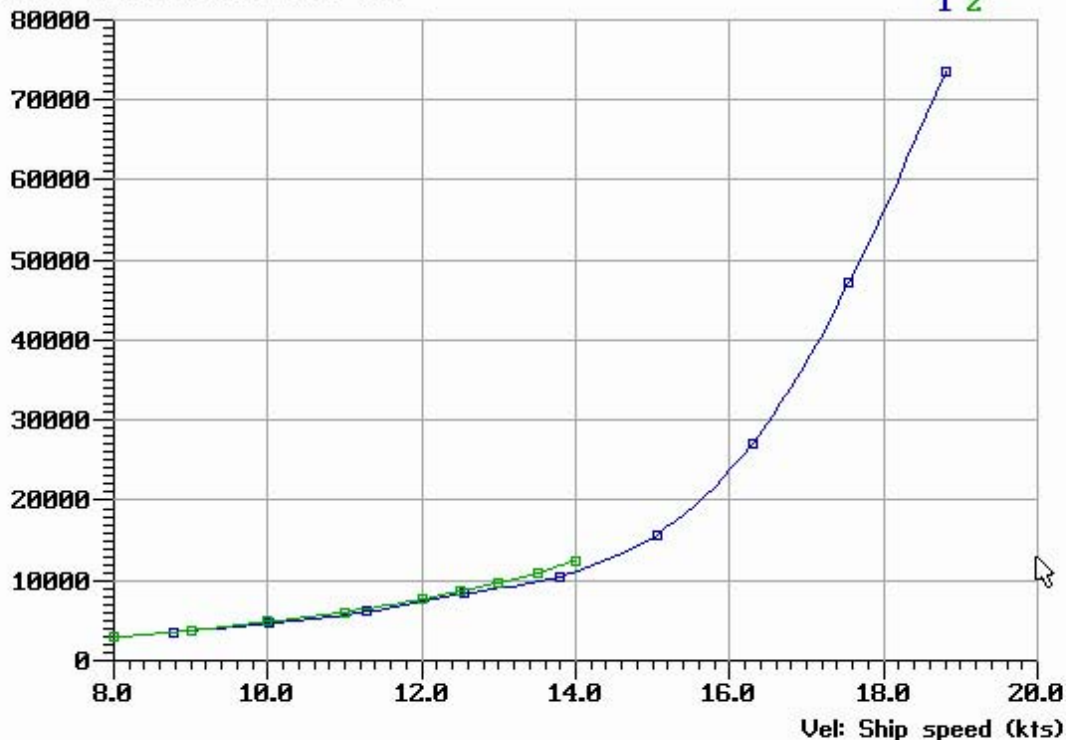
RIDGELEY-NEVITT TRAWLER SERIES RESISTANCE   NTNU-M166

16-Mar-2012 11:20:58

Length BP		47.92	m		
Beam Waterline		8.53	m	5.615	Allowable range	3.22 - 5.75
Draft-Midship		3.35	m	2.545	Allowable range	1.94 - 2.42
Displacement volume	727	709.3	Δ/(0.01Λ)3	184.29	Allowable range	200 - 500
Block coefficient		0.517			Allowable range	0.400 - 0.598
Prismatic coefficient		0.570	0.570		Allowable range	0.554 - 0.700
Midship coefficient		0.907			Allowable range	0.729 - 0.810
Wetted surface area	505.382	470.000	m3-Mumford	5.910	Allowable range	5.198 - 6.255
Water density		1.0259	t/m3	1.0250 at 19oC	$\rightarrow$	
Water viscosity		1.18831	x 10-6 m2/s	1.07854 x 10-6 at 19oC		
Correlation allowance		0.0004				

Displacement   727.64 t

exceeds

V/L	V	10-6Rn	103CF	103CR	103CT	RT	PE
	kn		ITTC'57			kN	kW
0.7	8.78	182.09	1.914	0.878	3.191	15.69	70.8
0.8	10.03	208.10	1.879	0.927	3.206	20.58	106.2
0.9	11.28	234.11	1.849	1.071	3.320	26.97	156.6
1.0	12.54	260.12	1.822	1.429	3.651	36.62	236.2
1.1	13.79	286.13	1.799	1.585	3.784	45.92	325.9
1.2	15.05	312.15	1.778	2.770	4.948	71.48	553.3
1.3	16.30	338.16	1.759	5.259	7.418	125.75	1054.5
1.4	17.55	364.17	1.742	8.895	11.037	217.00	1959.6
1.5	18.81	390.18	1.726	12.914	15.040	339.46	3284.5

```
;************************************************
;* NavCad model file          HydroComp, Inc. *
;************************************************
;

[NavCad]
Version=3.00
Release=ReleaseA
Date=03/31/2000
Time=16:29:27.09
Precision=6
Description=Norway-Trondheim 1951 Model= M 166 Cp=0.550 L/B=5.615 B/T=2.545 Lcb=-1.90A

[Units]
Length=Meter
Area=SqMeter
Weight=MetricTon
Speed=Knot
Force=Pound
Power=Horsepower
Density=KgPerCuM
KinemVisc=SqMPerSec

[Condition]
rho=1026
nu=1.1883e-06

[Resistance]
ModShipCa=0.0004

[Hull]
HullType=Displ
Loading=LoadDraft
ChineType=RoundBilge
SternShape=Normal
BowShape=Normal
FlapBehind=No
LengthPP=47.92
LengthWL=49.35
BeamWL=8.534
Draft=3.353
LCBHull=25.613
WettedSurf=470
MaxSecArea=25.9534
HullDispl=727
HalfEntAng=12.2
MidshiCoef=0.907

[Speeds]
Speeds=8,9,10,11,12,13,14,14.5,15,16

[Results]
ResiCoef=0.0010461,0.0011127,0.0011822,0.001342,0.0017044,0.0019522,0.0022921,0.0026653,0.0033432,0.0057849
BareResist=3100.49,3964.62,4955.04,6230.89,8119.01,10081.7,12597.7,14613.9,17801.2,29164.9
ModCfType=ITTC57
ModSource=ModelTest
ModLengthWL=4.935
FroudeLen=0.187079,0.210464,0.233849,0.257234,0.280618,0.304003,0.327388,0.339081,0.350773,0.374158
FroudeVol=0.440153,0.495172,0.550192,0.605211,0.66023,0.715249,0.770268,0.797778,0.825287,0.880306
HullReyNum=1.70919e+08,1.92284e+08,2.13648e+08,2.35013e+08,2.56378e+08,2.77743e+08,2.99108e+08,3.0979e+08,3.20473e+08,3.41837e+08
ResiMerit=0.000599226,0.000806678,0.0010581,0.00145337,0.0021967,0.0029529,0.00402093,0.00501556,0.00673259,0.0132548
BareMerit=0.00193447,0.00247362,0.00309157,0.0038876,0.00506564,0.0062902,0.00785999,0.00911795,0.0111066,0.0181967
```
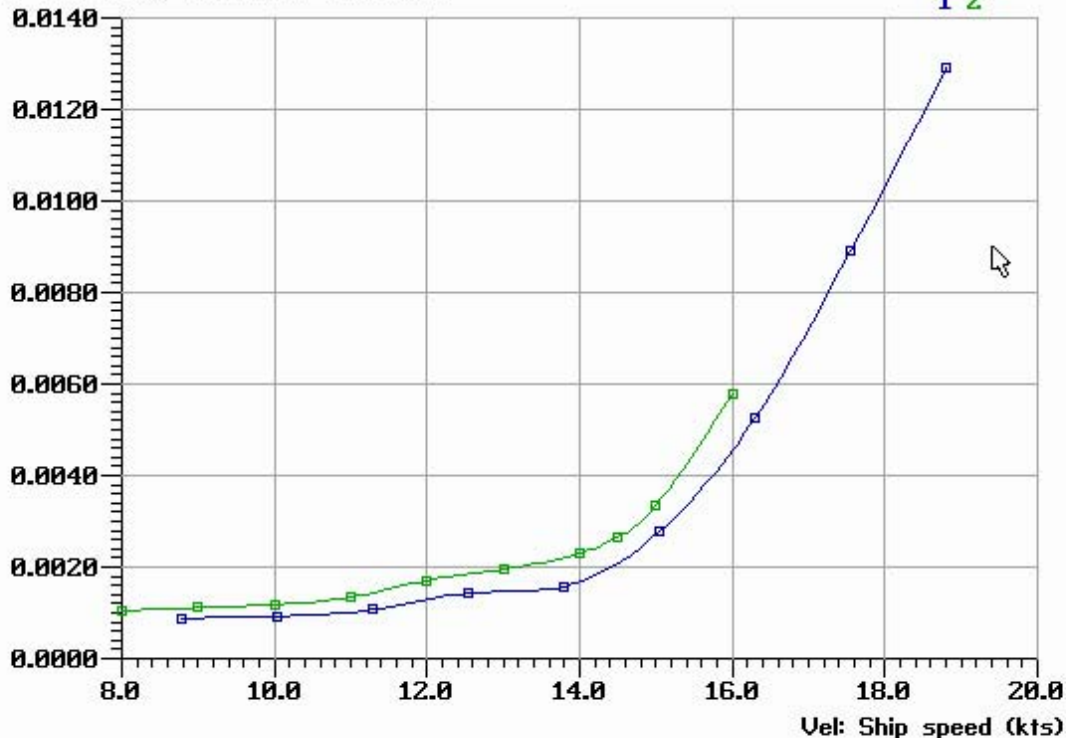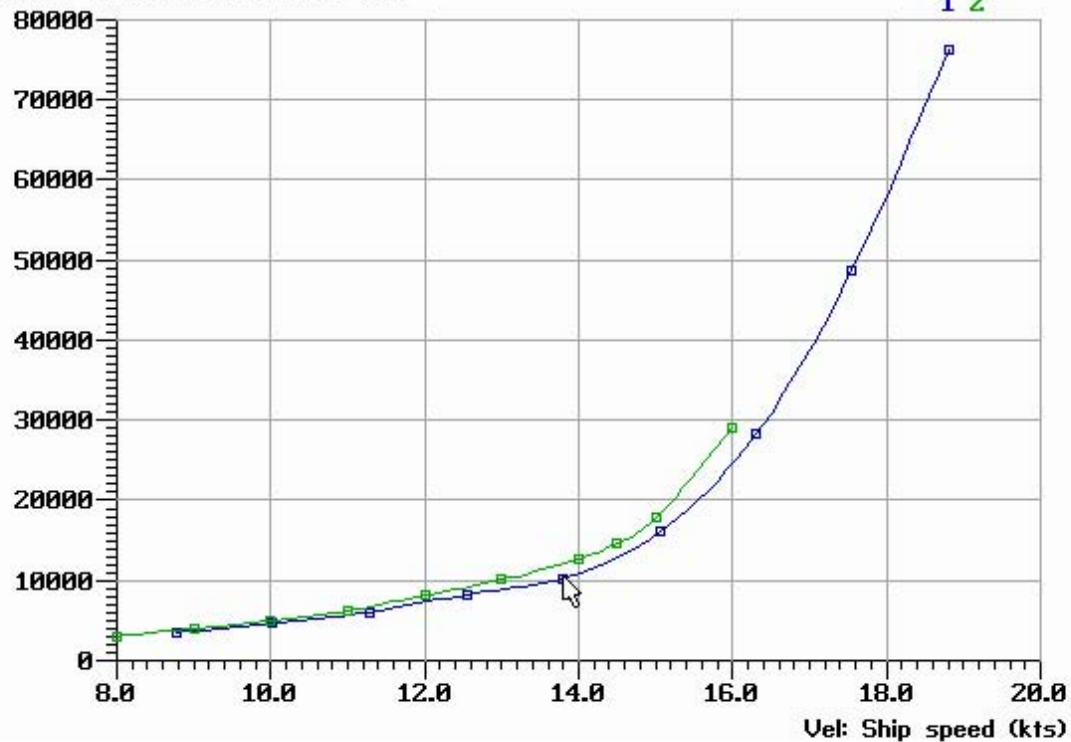
RIDGELEY-NEVITT TRAWLER SERIES RESISTANCE   NTNU-M173

Length BP   36.71 m
Beam Waterline   7.50 m   4.894   Allowable range   3.22 - 5.75
Draft-Midship   3.60 m   2.083   Allowable range   1.94 - 2.42
Displacement volume   526.3   513.5 Δ/(0.01Λ)3   296.80 Allowable range   200 - 500
Block coefficient   0.518   Allowable range   0.400 - 0.598
Prismatic coefficient   0.661   0.661   Allowable range   0.554 - 0.700
Midship coefficient   0.784   Allowable range   0.729 - 0.810
Wetted surface area   381.200   369.808 m3-Mumford   5.767 Allowable range   5.198 - 6.255
Water density   1.0259 t/m3   1.0250 at 19oC   →
Water viscosity   1.18831 x 10-6 m2/s 1.07854 x 10-6 at 19oC
Correlation allowance   0.0004

Displacement   526.76 t

V/L	V	10-6Rn	103CF	103CR	103CT	RT	PE
	kn		ITTC'57			kN	kW
0.7	7.68	122.08	2.024	1.221	3.645	10.80	42.7
0.8	8.78	139.52	1.986	1.504	3.891	15.06	68.0
0.9	9.88	156.96	1.954	1.890	4.244	20.78	105.6
1.0	10.97	174.40	1.925	3.750	6.075	36.73	207.4
1.1	12.07	191.84	1.900	5.519	7.819	57.20	355.2
1.2	13.17	209.28	1.877	6.196	8.474	73.77	499.8
1.3	14.27	226.72	1.857	7.811	10.068	102.87	755.0
1.4	15.36	244.16	1.838	11.719	13.957	165.40	1307.3
1.5	16.46	261.60	1.821	17.118	19.339	263.08	2227.9

```
;**********************************************
;* NavCad model file          HydroComp, Inc. *
;**********************************************

[NavCad]
Version=3.00
Release=ReleaseA
Date=03/31/2000
Time=12:54:15.65
Precision=6
Description=Norway-Trondheim Mdl=M173KVL L/B=5.22 B/T=2.08 Lpp/Vol=4.696 Lcb/Lwl=-0.13A

[Units]
Length=Meter
Area=SqMeter
Weight=MetricTon
Speed=Knot
Force=Newton
Power=Horsepower
Density=KgPerCuM
KinemVisc=SqMPerSec

[Condition]
rho=1026
nu=1.1883e-06

[Resistance]
ModShipCa=0.0004

[Hull]
HullType=Displ
Loading=LoadDraft
ChineType=RoundBilge
SternShape=Normal
BowShape=Normal
FlapBehind=No
LengthPP=36.708
LengthWL=39.12
BeamWL=7.5
Draft=3.6
Trim=1.3
LCBHull=19.611
WettedSurf=369.808
MaxSecArea=21.168
HullDispl=526.3
HalfEntAng=22
MidshiCoef=0.784
WaterpCoef=0.742

[Speeds]
Speeds=8,9,9.5,10,10.5,11,11.5,12,12.5,13

[Results]
ResiCoef=0.0012047,0.0017301,0.0020193,0.0021971,0.002572,0.0032894,0.0040983,0.0047744,0.005049,0.0051643
BareResist=11566.9,16641.1,19784.7,22745,27079.2,34002.8,42457.7,51037.8,57451.1,63032.1
ModCfType=ITTC57
ModSource=ModelTest
ModLengthWL=4.89
FroudeLen=0.210121,0.236386,0.249518,0.262651,0.275784,0.288916,0.302049,0.315181,0.328314,0.341446
FroudeVol=0.464502,0.522565,0.551596,0.580627,0.609659,0.63869,0.667721,0.696753,0.725784,0.754815
HullReyNum=1.35488e+08,1.52424e+08,1.60892e+08,1.6936e+08,1.77828e+08,1.86296e+08,1.94764e+08,2.03232e+08,2.117e+08,2.20168e+08
ResiMerit=0.000750025,0.00136324,0.00177282,0.0021373,0.00275846,0.00387185,0.00527249,0.00668803,0.00767436,0.00849014
BareMerit=0.00996895,0.0143421,0.0170515,0.0196028,0.0233382,0.0293054,0.0365922,0.043987,0.0495143,0.0543243
```
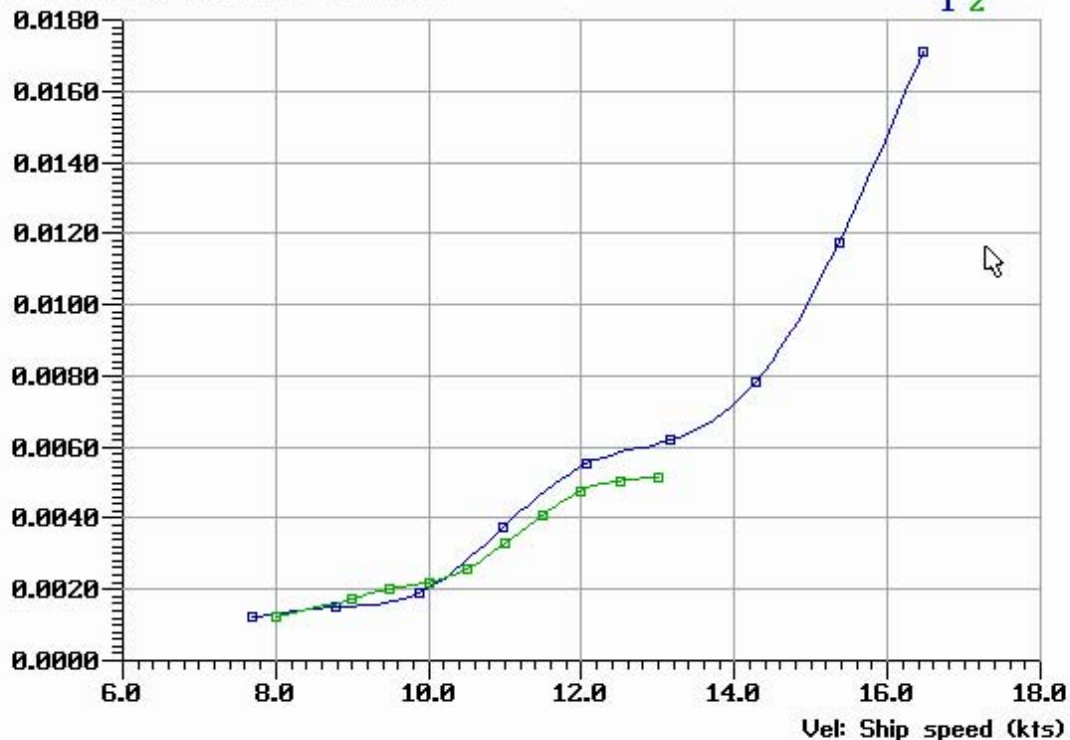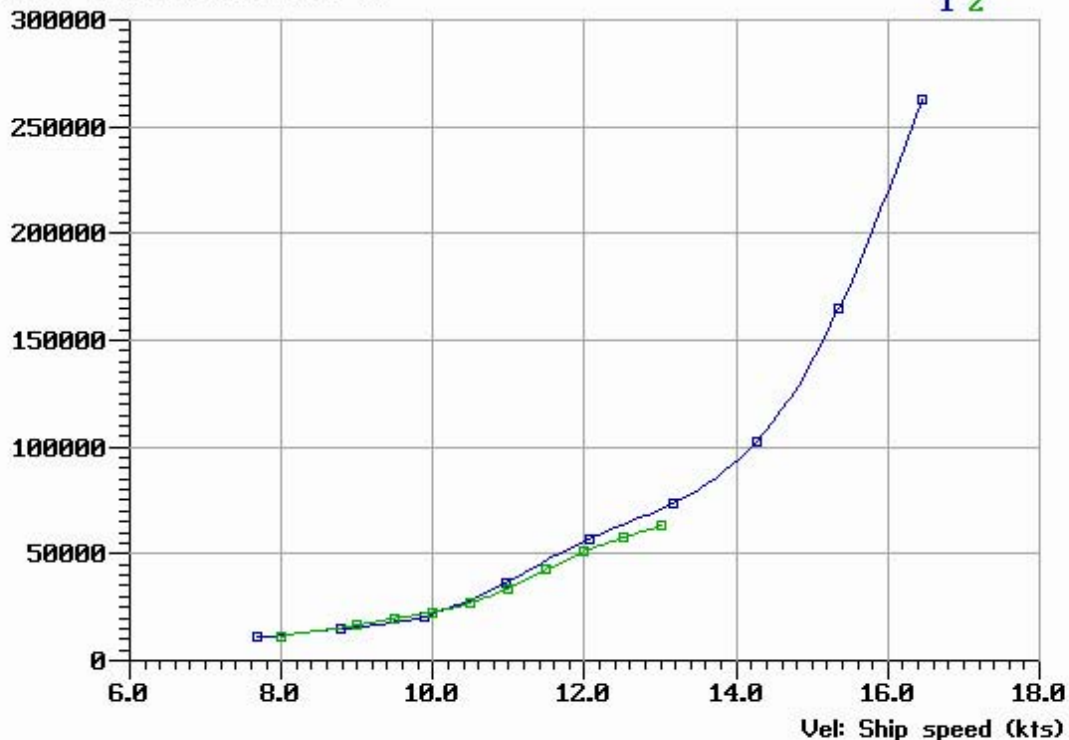
16-Mar-2012 11:22:17

Length BP		28.15 m			
Beam Waterline		8.36 m	3.367	Allowable range	3.22 - 5.75
Draft-Midship		3.72 m	2.247	Allowable range	1.94 - 2.42
Displacement volume	421	410.7 $\Delta/(0.01\Lambda)3$	526.45 Allowable range		200 - 500
Block coefficient		0.469		Allowable range	0.400 - 0.598
Prismatic coefficient		0.637	0.637	Allowable range	0.554 - 0.700
Midship coefficient		0.736		Allowable range	0.729 - 0.810
Wetted surface area	301.250	305.000 m3-Mumford	5.520 Allowable range		5.198 - 6.255
Water density		1.0259 t/m3	1.0250 at 19oC	$\rightarrow$	
Water viscosity		1.18831 x 10-6 m2/s	1.07854 x 10-6 at 19oC		
Correlation allowance		0.0004			

Displacement   421.37 t

*exceeds

V/L	V	10-6Rn	103CF	103CR	103CT	RT	PE
	kn		ITTC'57			kN	kW
0.7	6.73	81.98	2.145	1.733	4.278	8.02	27.7
0.8	7.69	93.69	2.103	1.833	4.336	10.61	42.0
0.9	8.65	105.41	2.068	2.291	4.758	14.74	65.6
1.0	9.61	117.12	2.036	3.292	5.728	21.90	108.3
1.1	10.57	128.83	2.009	4.423	6.832	31.61	171.9
1.2	11.53	140.54	1.984	6.056	8.441	46.48	275.7
1.3	12.49	152.25	1.962	9.273	11.636	75.20	483.3
1.4	13.45	163.96	1.942	15.895	18.237	136.69	946.1
1.5	14.42	175.68	1.923	23.800	26.123	224.76	1666.8

```
;*********************************************
;* NavCad model file        HydroComp, Inc. *
;*********************************************

[NavCad]
Version=3.00
Release=ReleaseA
Date=03/31/2000
Time=11:52:06.59
Precision=6
Description=Norwegian Trawler Mdl= M178 1951 Lpp/B=3.36 B/T=2.25 Lpp/Vol=3.881 Lcb=+0.034F

[Units]
Length=Meter
Area=SqMeter
Weight=MetricTon
Speed=Knot
Force=Pound
Power=Horsepower
Density=KgPerCuM
KinemVisc=SqMPerSec

[Condition]
rho=1026
nu=1.1883e-06

[Resistance]
ModShipCa=0.0004

[Hull]
HullType=Displ
Loading=LoadDraft
ChineType=RoundBilge
SternShape=Normal
BowShape=Normal
FlapBehind=No
LengthPP=28.15
LengthWL=30
BeamWL=8.36
Draft=3.72
Trim=1.16
LCBHull=14.99
WettedSurf=305
MaxSecArea=22.889
HullDispl=421
HalfEntAng=27.3
MidshiCoef=0.736
WaterpCoef=0.715

[Speeds]
Speeds=6,7,8,9,9.5,10,10.5,11,11.5,12

[Results]
ResiCoef=0.0012342,0.0013985,0.001783,0.0023857,0.0027515,0.0032036,0.0035762,0.0039801,0.0046592,0.0054432
BareResist=1271.88,1783.92,2534.96,3636.53,4345.97,5222.66,6126.19,7163.77,8650.66,10454.5
ModCfType=ITTC57
ModSource=ModelTest
ModLengthWL=3.75
FroudeLen=0.179957,0.20995,0.239943,0.269936,0.284932,0.299929,0.314925,0.329921,0.344918,0.359914
FroudeVol=0.361582,0.421846,0.48211,0.542374,0.572505,0.602637,0.632769,0.662901,0.693033,0.723165
HullReyNum=7.79265e+07,9.09142e+07,1.03902e+08,1.1689e+08,1.23384e+08,1.29877e+08,1.36371e+08,1.42865e+08,1.49359e+08,1.55853e+08
ResiMerit=0.000445635,0.000687306,0.00114452,0.00193817,0.00249062,0.00321314,0.0039545,0.00483026,0.00618014,0.00786155
BareMerit=0.00137034,0.00192203,0.00273121,0.00391806,0.00468242,0.00562698,0.00660046,0.00771836,0.00932037,0.0112638
```
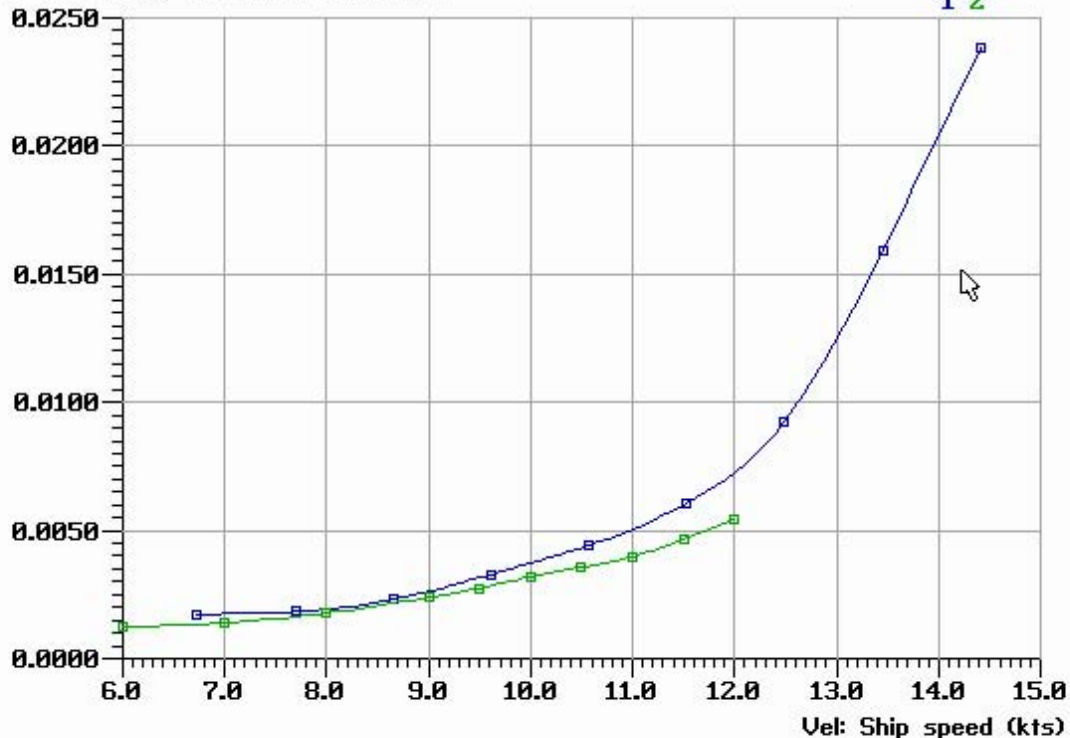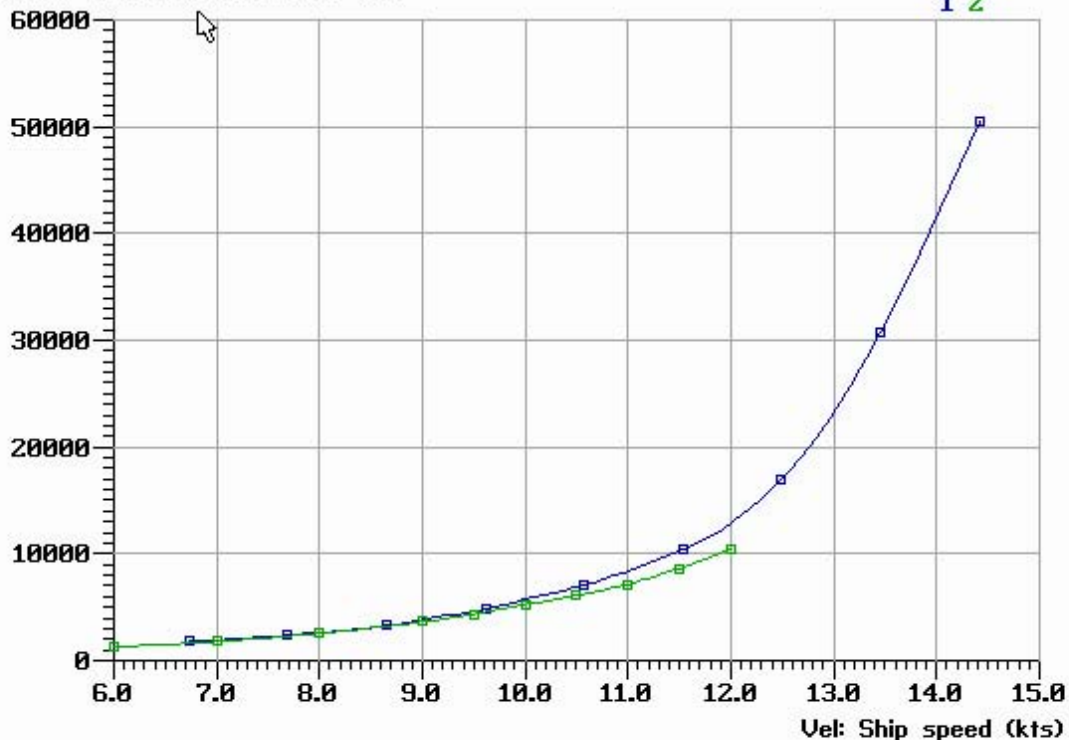
RIDGELEY-NEVITT TRAWLER SERIES RESISTANCE

NTNU-M179

16-Mar-2012 11:22:48

Length BP		28.15 m			
Beam Waterline		7.75 m	3.632	Allowable range	3.22 - 5.75
Draft-Midship		3.45 m	2.246	Allowable range	1.94 - 2.42
Displacement volume	362	353.2 $\Delta/(0.01\Lambda)3$	452.67	Allowable range	200 - 500
Block coefficient		0.469		Allowable range	0.400 - 0.598
Prismatic coefficient		0.638 0.638		Allowable range	0.554 - 0.700
Midship coefficient		0.736		Allowable range	0.729 - 0.810
Wetted surface area	279.350	283.870 m3-Mumford	5.682	Allowable range	5.198 - 6.255
Water density		1.0259 t/m3	1.0250 at 19oC	$\rightarrow$	
Water viscosity		1.18831 x 10-6 m2/s	1.07854 x 10-6 at 19oC		
Correlation allowance		0.0004			

Displacement   362.32 t

V/L	V	10-6Rn	103CF	103CR	103CT	RT	PE
	kn		ITTC'57			kN	kW
0.7	6.73	81.98	2.145	1.475	4.020	7.01	24.3
0.8	7.69	93.69	2.103	1.729	4.232	9.64	38.1
0.9	8.65	105.41	2.068	2.202	4.669	13.46	59.9
1.0	9.61	117.12	2.036	3.528	5.965	21.23	105.0
1.1	10.57	128.83	2.009	4.677	7.086	30.52	166.0
1.2	11.53	140.54	1.984	5.832	8.217	42.11	249.8
1.3	12.49	152.25	1.962	8.723	11.085	66.67	428.5
1.4	13.45	163.96	1.942	15.030	17.372	121.18	838.8
1.5	14.42	175.68	1.923	22.754	25.077	200.82	1489.2

```
;**********************************************
;* NavCad model file        HydroComp, Inc. *
;**********************************************
;

[NavCad]
Version=3.00
Release=ReleaseA
Date=03/31/2000
Time=11:50:44.97
Precision=6
Description=Norwegian Trawler Mdl= M179 1951 Lpp/B=3.63 B/T=2.25 Lpp/Vol=4.075 Lcb=+0.034F

[Units]
Length=Meter
Area=SqMeter
Weight=MetricTon
Speed=Knot
Force=Pound
Power=Horsepower
Density=KgPerCuM
KinemVisc=SqMPerSec

[Condition]
rho=1026
nu=1.1883e-06

[Resistance]
ModShipCa=0.0004

[Hull]
HullType=Displ
Loading=LoadDraft
ChineType=RoundBilge
SternShape=Normal
BowShape=Normal
FlapBehind=No
LengthPP=28.15
LengthWL=30
BeamWL=7.75
Draft=3.45
Trim=1.08
LCBHull=14.99
WettedSurf=283.87
MaxSecArea=19.6788
HullDispl=362
HalfEntAng=25.6
MidshiCoef=0.736
WaterpCoef=0.715

[Speeds]
Speeds=6,7,8,9,9.5,10,10.5,11,11.5,12

[Results]
ResiCoef=0.0013731,0.0015837,0.0018917,0.0024204,0.0028033,0.0032564,0.0037755,0.0043293,0.0048956,0.0057472
BareResist=1227.09,1738.96,2419.61,3408.95,4085.4,4906.59,5892.15,7033.56,8322.23,10109.5
ModCfType=ITTC57
ModSource=ModelTest
ModLengthWL=3.75
FroudeLen=0.179957,0.20995,0.239943,0.269936,0.284932,0.299929,0.314925,0.329921,0.344918,0.359914
FroudeVol=0.370797,0.432596,0.494396,0.556195,0.587095,0.617995,0.648895,0.679794,0.710694,0.741594
HullReyNum=7.79265e+07,9.09142e+07,1.03902e+08,1.1689e+08,1.23384e+08,1.29877e+08,1.36371e+08,1.42865e+08,1.49359e+08,1.55853e+08
ResiMerit=0.000536648,0.000842468,0.00131437,0.00212842,0.00274664,0.00353527,0.00451895,0.00568706,0.00702888,0.0089847
BareMerit=0.00153756,0.00217895,0.00303182,0.00427148,0.00511907,0.00614804,0.00738297,0.00881318,0.0104279,0.0126674
```
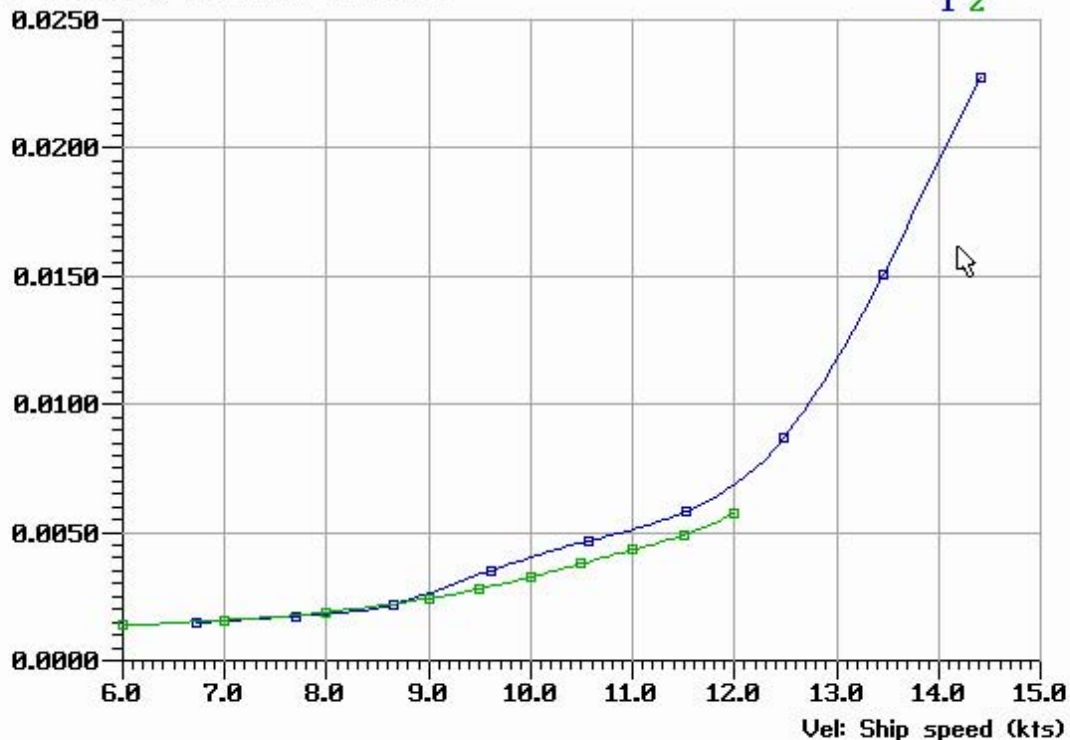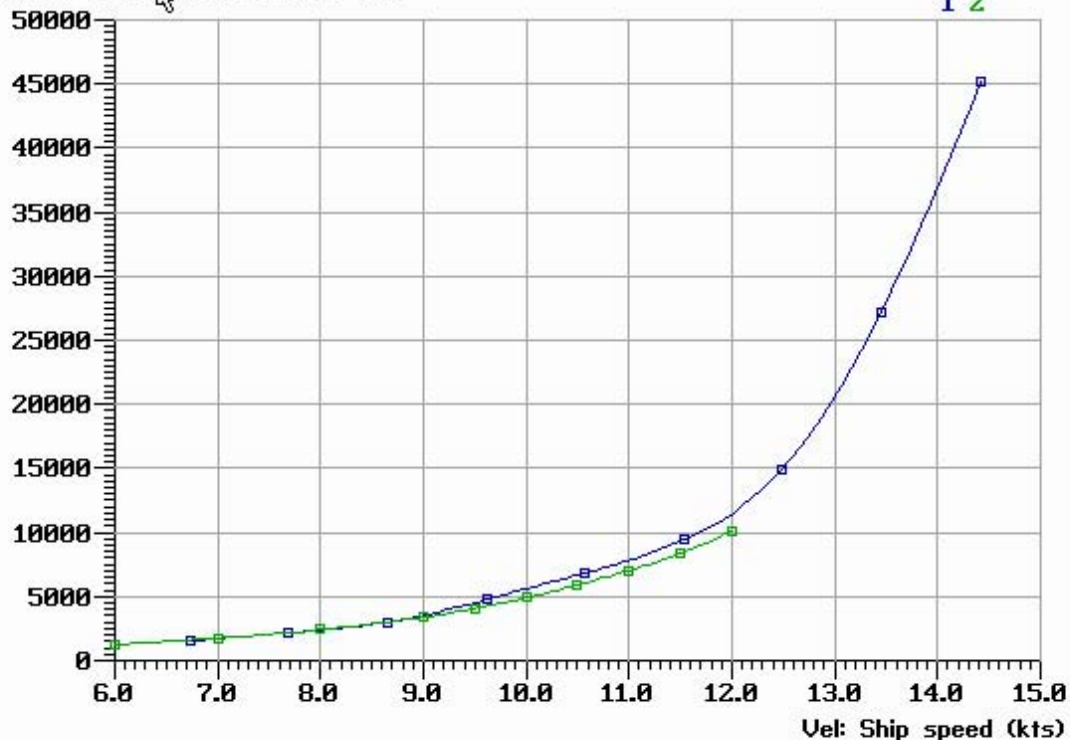
RIDGELEY-NEVITT TRAWLER SERIES RESISTANCE   NTNU-M180

16-Mar-2012 11:23:30

Length BP		28.15 m			
Beam Waterline		7.56 m	3.724	Allowable range	3.22 - 5.75
Draft-Midship		3.05 m	2.479	Allowable range	1.94 - 2.42
Displacement volume	313	305.4 Δ/(0.01Λ)3	391.40 Allowable range	200 - 500
Block coefficient		0.470		Allowable range	0.400 - 0.598
Prismatic coefficient		0.639 0.639		Allowable range	0.554 - 0.700
Midship coefficient		0.736		Allowable range	0.729 - 0.810
Wetted surface area	257.647	265.200 m3-Mumford	5.848 Allowable range	5.198 - 6.255
Water density		1.0259 t/m3	1.0250 at 19oC	→
Water viscosity		1.18831 x 10-6 m2/s	1.07854 x 10-6 at 19oC	
Correlation allowance		0.0004			

Displacement   313.27 t

V/L	V	10-6Rn	103CF	103CR	103CT	RT	PE
	kn		ITTC'57			kN	kW
0.7	6.73	81.98	2.145	1.372	3.917	6.38	22.1
0.8	7.69	93.69	2.103	1.637	4.140	8.81	34.8
0.9	8.65	105.41	2.068	2.076	4.544	12.24	54.5
1.0	9.61	117.12	2.036	3.498	5.934	19.73	97.6
1.1	10.57	128.83	2.009	4.758	7.167	28.84	156.8
1.2	11.53	140.54	1.984	5.657	8.041	38.50	228.4
1.3	12.49	152.25	1.962	8.111	10.473	58.85	378.2
1.4	13.45	163.96	1.942	13.790	16.132	105.13	727.7
1.5	14.42	175.68	1.923	20.942	23.265	174.05	1290.8

```
;*********************************************
;* NavCad model file        HydroComp, Inc. *
;*********************************************
```

[NavCad]
Version=3.00
Release=ReleaseA
Date=03/31/2000
Time=12:20:00.78
Precision=6
Description=Norwegian Trawler Mdl= M180 1951 Lpp/B=3.72 B/T=2.48 Lpp/Vol=4.288 Lcb=+0.034F

[Units]
Length=Meter
Area=SqMeter
Weight=MetricTon
Speed=Knot
Force=Pound
Power=Horsepower
Density=KgPerCuM
KinemVisc=SqMPerSec

[Condition]
rho=1026
nu=1.1883e-06

[Resistance]
ModShipCa=0.0004

[Hull]
HullType=Displ
Loading=LoadDraft
ChineType=RoundBilge
SternShape=Normal
BowShape=Normal
FlapBehind=No
LengthPP=28.15
LengthWL=30
BeamWL=7.56
Draft=3.05
Trim=0.95
LCBHull=14.99
WettedSurf=265.2
MaxSecArea=16.9707
HullDispl=313
HalfEntAng=25.1
MidshiCoef=0.736
WaterpCoef=0.715

[Speeds]
Speeds=6,7,8,9,9.5,10,10.5,11,11.5,12

[Results]
ResiCoef=0.0009668,0.001273,0.0016737,0.0023146,0.0027349,0.0032277,0.0036934,0.0041712,0.0047566,0.005428
BareResist=1027.99,1501.36,2147.54,3115.38,3766.73,4560.65,5431.36,6416.12,7626.09,9072.55
ModCfType=ITTC57
ModSource=ModelTest
ModLengthWL=3.75
FroudeLen=0.179957,0.20995,0.239943,0.269936,0.284932,0.299929,0.314925,0.329921,0.344918,0.359914
FroudeVol=0.379895,0.443211,0.506527,0.569842,0.6015,0.633158,0.664816,0.696474,0.728132,0.75979
HullReyNum=7.79265e+07,9.09142e+07,1.03902e+08,1.1689e+08,1.23384e+08,1.29877e+08,1.36371e+08,1.42865e+08,1.49359e+08,1.55853e+08
ResiMerit=0.000408265,0.00073169,0.00125649,0.0021992,0.00289529,0.00378613,0.00477648,0.00592038,0.00737896,0.00916865
BareMerit=0.00148974,0.00217574,0.00311217,0.00451474,0.00545866,0.00660919,0.007871,0.0092981,0.0110516,0.0131477
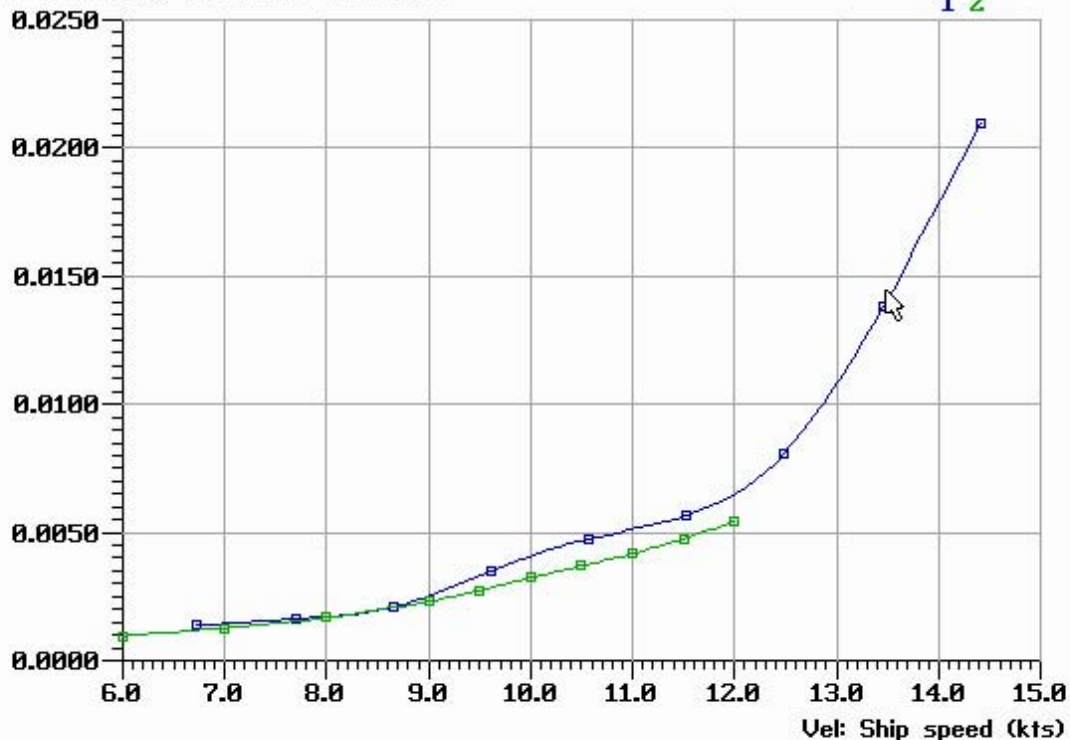```

16-Mar-2012 11:23:48

Length BP		28.15	m		
Beam Waterline		7.38	m	3.814	Allowable range	3.22 - 5.75
Draft-Midship		3.13	m	2.358	Allowable range	1.94 - 2.42
Displacement volume	313	305.4	Δ/(0.01Λ)3	391.40	Allowable range	200 - 500
Block coefficient		0.470			Allowable range	0.400 - 0.598
Prismatic coefficient		0.638	0.638		Allowable range	0.554 - 0.700
Midship coefficient		0.736			Allowable range	0.729 - 0.810
Wetted surface area	258.655	265.200	m3-Mumford	5.848	Allowable range	5.198 - 6.255
Water density		1.0259	t/m3	1.0250 at 19oC	→
Water viscosity		1.18831	x 10-6 m2/s	1.07854 x 10-6 at 19oC
Correlation allowance		0.0004		

Displacement   313.27 t

V/L	V	10-6Rn	103CF	103CR	103CT	RT	PE
	kn		ITTC'57			kN	kW
0.7	6.73	81.98	2.145	1.374	3.919	6.38	22.1
0.8	7.69	93.69	2.103	1.635	4.138	8.81	34.8
0.9	8.65	105.41	2.068	2.071	4.538	12.22	54.4
1.0	9.61	117.12	2.036	3.469	5.905	19.63	97.1
1.1	10.57	128.83	2.009	4.699	7.108	28.60	155.5
1.2	11.53	140.54	1.984	5.601	7.985	38.23	226.8
1.3	12.49	152.25	1.962	8.090	10.452	58.73	377.5
1.4	13.45	163.96	1.942	13.794	16.136	105.16	727.9
1.5	14.42	175.68	1.923	20.966	23.290	174.24	1292.1

```
;***********************************
;* NavCad model file        HydroComp, Inc. *
;***********************************
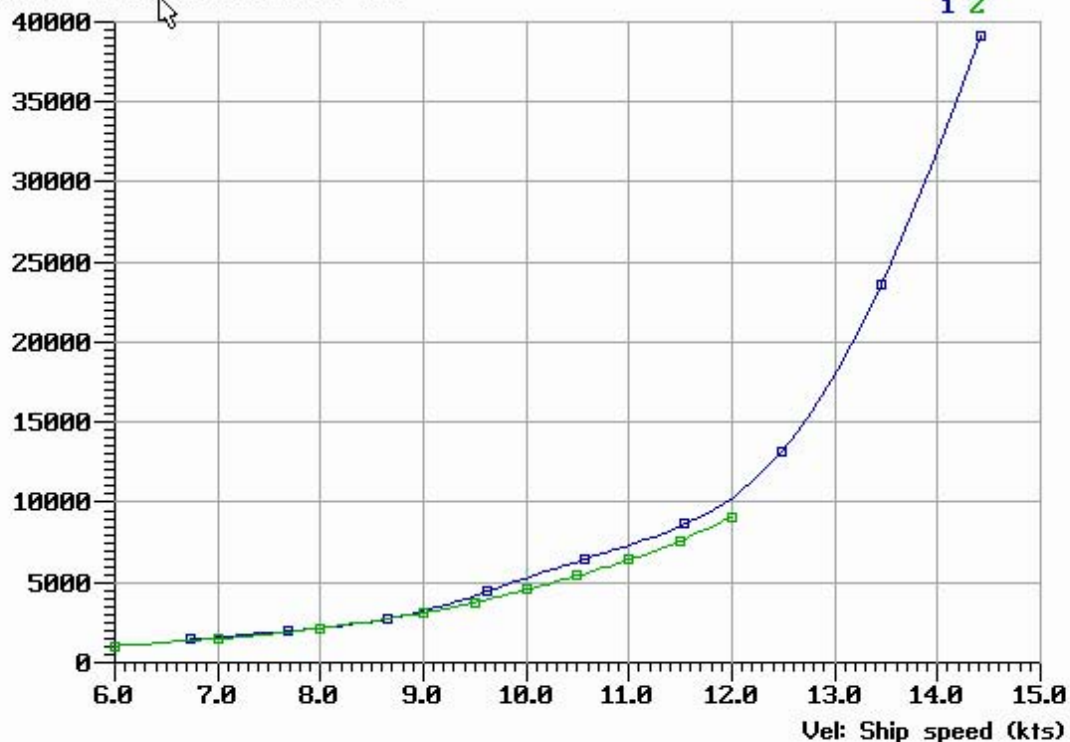
[NavCad]
Version=3.00
Release=ReleaseA
Date=03/31/2000
Time=11:58:19.97
Precision=6
Description=Norwegian Trawler Mdl= M181 1951 Lpp/B=3.81 B/T=2.36 Lpp/Vol=4.285 Lcb=+0.034F

[Units]
Length=Meter
Area=SqMeter
Weight=MetricTon
Speed=Knot
Force=Pound
Power=Horsepower
Density=KgPerCuM
KinemVisc=SqMPerSec

[Condition]
rho=1026
nu=1.1883e-06

[Resistance]
ModShipCa=0.0004

[Hull]
HullType=Displ
Loading=LoadDraft
ChineType=RoundBilge
SternShape=Normal
BowShape=Normal
FlapBehind=No
LengthPP=28.15
LengthWL=30
BeamWL=7.38
Draft=3.13
Trim=0.98
LCBHull=14.99
WettedSurf=265.2
MaxSecArea=17.0012
HullDispl=313
HalfEntAng=24.5
MidshiCoef=0.736
WaterpCoef=0.715

[Speeds]
Speeds=6,7,8,9,9.5,10,10.5,11,11.5,12

[Results]
ResiCoef=0.0008278,0.0012253,0.0017562,0.0024579,0.0028738,0.0032972,0.0036891,0.0041321,0.0046654,0.0053932
BareResist=987.484,1482.44,2190.28,3209.33,3868.2,4616.91,5427.52,6377.83,7528.46,9031.98
ModCfType=ITTC57
ModSource=ModelTest
ModLengthWL=3.75
FroudeLen=0.179957,0.20995,0.239943,0.269936,0.284932,0.299929,0.314925,0.329921,0.344918,0.359914
FroudeVol=0.379895,0.443211,0.506527,0.569842,0.6015,0.633158,0.664816,0.696474,0.728132,0.75979
HullReyNum=7.79265e+07,9.09142e+07,1.03902e+08,1.1689e+08,1.23384e+08,1.29877e+08,1.36371e+08,1.42865e+08,1.49359e+08,1.55853e+08
ResiMerit=0.000349567,0.000704274,0.00131843,0.00233535,0.00304233,0.00386766,0.00477092,0.00586488,0.00723748,0.00910986
BareMerit=0.00143104,0.00214832,0.00317411,0.00465089,0.00560571,0.00669072,0.00786544,0.0092426,0.0109101,0.0130889
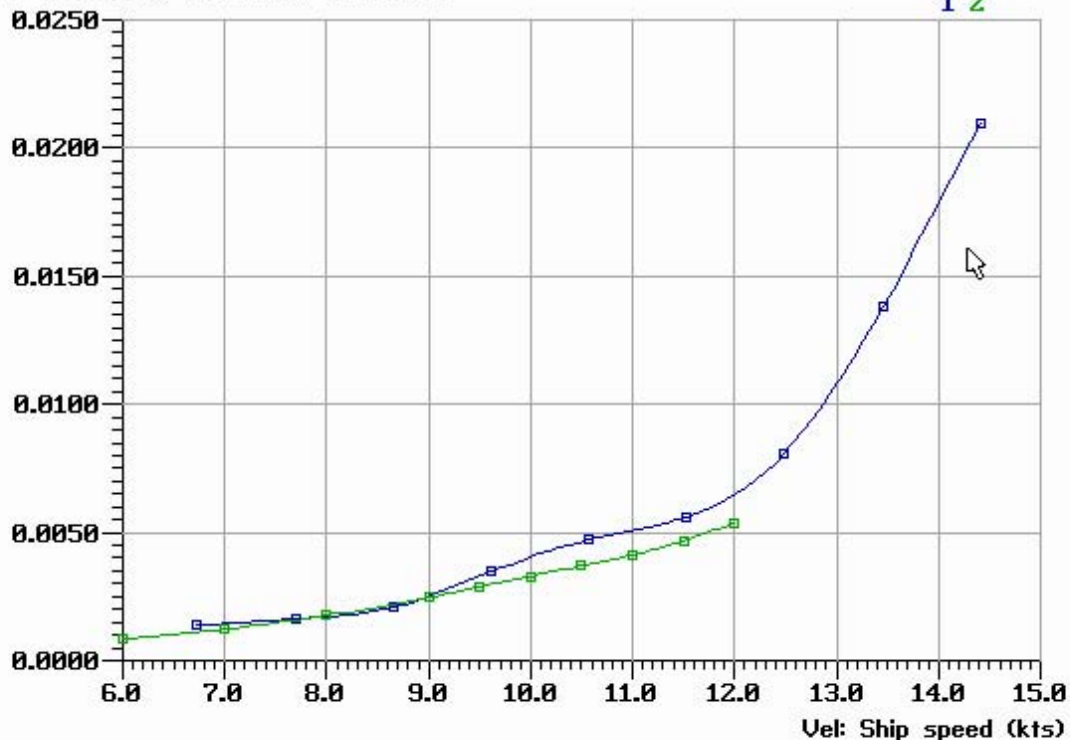```

**RIDGELEY-NEVITT TRAWLER SERIES RESISTANCE**

16-Mar-2012  11:24:39

| | | | | | |
|---|---|---|---|---|---|
| Length BP | | 28.15 m | | | |
| Beam Waterline | | 7.02 m | 4.010 | Allowable range | 3.22 - 5.75 |
| Draft-Midship | | 3.29 m | 2.134 | Allowable range | 1.94 - 2.42 |
| Displacement volume | 312.3 | 304.7 Δ/(0.01Λ)3 | 390.52 | Allowable range | 200 - 500 |
| Block coefficient | | 0.469 | | Allowable range | 0.400 - 0.598 |
| Prismatic coefficient | | 0.637 | 0.637 | Allowable range | 0.554 - 0.700 |
| Midship coefficient | | 0.736 | | Allowable range | 0.729 - 0.810 |
| Wetted surface area | 260.823 | 259.783 m3-Mumford | 5.737 | Allowable range | 5.198 - 6.255 |
| Water density | | 1.0259 t/m3 | 1.0250 at 19oC | → | |
| Water viscosity | | 1.18831 x 10-6 m2/s | 1.07854 x 10-6 at 19oC | | |
| Correlation allowance | | 0.0004 | | | |

Displacement                312.57 t

| V/L | V | 10-6Rn | 103CF | 103CR | 103CT | RT | PE |
|---|---|---|---|---|---|---|---|
| | kn | | ITTC'57 | | | kN | kW |
| 0.7 | 6.73 | 81.98 | 2.145 | 1.375 | 3.919 | 6.26 | 21.6 |
| 0.8 | 7.69 | 93.69 | 2.103 | 1.632 | 4.135 | 8.62 | 34.1 |
| 0.9 | 8.65 | 105.41 | 2.068 | 2.062 | 4.529 | 11.95 | 53.2 |
| 1.0 | 9.61 | 117.12 | 2.036 | 3.433 | 5.870 | 19.12 | 94.5 |
| 1.1 | 10.57 | 128.83 | 2.009 | 4.628 | 7.037 | 27.73 | 150.8 |
| 1.2 | 11.53 | 140.54 | 1.984 | 5.532 | 7.916 | 37.13 | 220.3 |
| 1.3 | 12.49 | 152.25 | 1.962 | 8.058 | 10.420 | 57.36 | 368.6 |
| 1.4 | 13.45 | 163.96 | 1.942 | 13.781 | 16.123 | 102.93 | 712.4 |
| 1.5 | 14.42 | 175.68 | 1.923 | 20.965 | 23.289 | 170.67 | 1265.6 |

```
;**
;* NavCad model file   HydroComp, Inc. *
;**
;
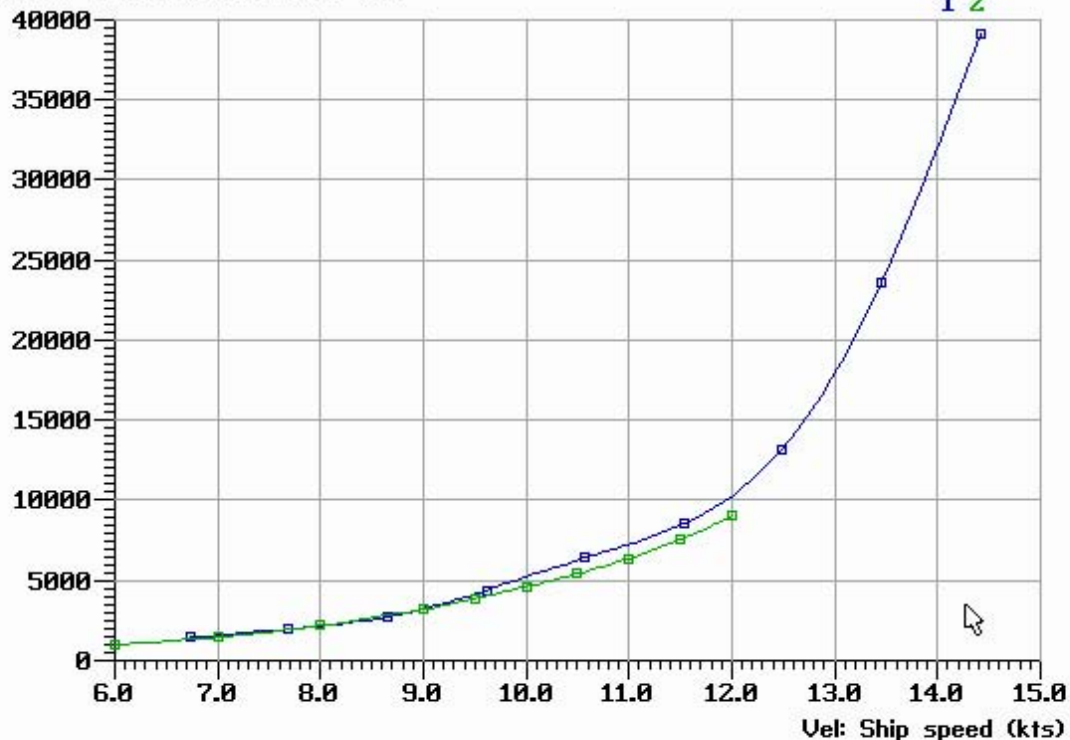
[NavCad]
Version=3.00
Release=ReleaseA
Date=03/31/2000
Time=10:07:00.92
Precision=6
Description=Norway-Trondheim 1951 Model= M 182 Cs Cp=0.593 L/B=4.274 B/T=2.134 Lcb=+0.11F

[Units]
Length=Meter
Area=SqMeter
Weight=MetricTon
Speed=Knot
Force=Pound
Power=Horsepower
Density=KgPerCuM
KinemVisc=SqMPerSec

[Condition]
rho=1026
nu=1.1883e-06

[Resistance]
ModShipCa=0.0004

[Hull]
HullType=Displ
Loading=LoadDraft
ChineType=RoundBilge
SternShape=Normal
BowShape=Normal
FlapBehind=No
LengthPP=28.48
LengthWL=30
BeamWL=7.02
Draft=3.29
Trim=1.03
LCBHull=14.967
WettedSurf=259.783
MaxSecArea=16.9985
HullDispl=312.3
HalfEntAng=23.6
MidshiCoef=0.736
WaterpCoef=0.715

[Speeds]
Speeds=6.5,7.5,8.5,9,9.5,10,10.5,11,11.5,12

[Results]
ResiCoef=0.001126,0.0014717,0.0020123,0.0023223,0.0027149,0.0031948,0.0036426,0.0040362,0.0045264,0.0053256
BareResist=1226.5,1767.51,2558.51,3056.69,3675.48,4441.41,5276.01,6155.55,7228.93,8770.31
ModCfType=ITTC57
ModSource=ModelTest
ModLengthWL=3.75
FroudeLen=0.194954,0.224946,0.254939,0.269936,0.284932,0.299929,0.314925,0.329921,0.344918,0.359914
FroudeVol=0.411706,0.475046,0.538385,0.570055,0.601725,0.633395,0.665064,0.696734,0.728404,0.760073
HullReyNum=8.44203e+07,9.74081e+07,1.10396e+08,1.1689e+08,1.23384e+08,1.29877e+08,1.36371e+08,1.42865e+08,1.49359e+08,1.55853e+08
ResiMerit=0.00054787,0.000953354,0.00167434,0.00216629,0.00282172,0.00367922,0.0046249,0.00562433,0.00689384,0.00883168
BareMerit=0.0017814,0.00256718,0.00371604,0.00443961,0.00533836,0.00645082,0.00766301,0.00894047,0.0104995,0.0127382
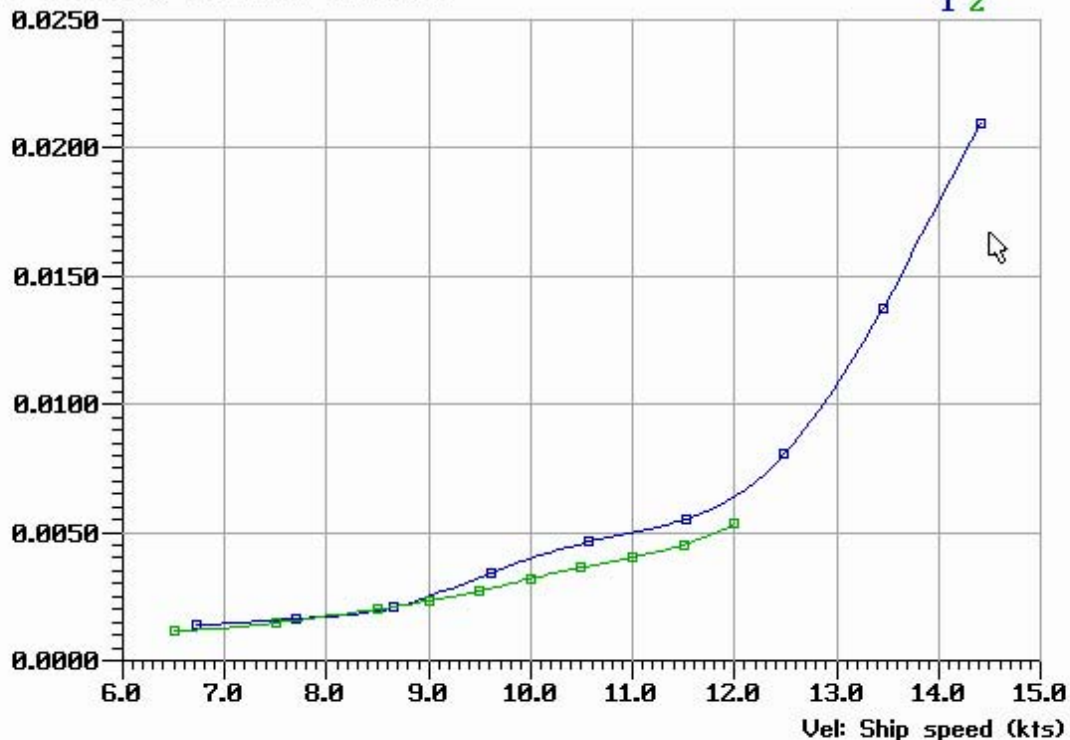```

RIDGELEY-NEVITT TRAWLER SERIES RESISTANCE　　　　　NTNU-M183

Length BP		28.15	m		
Beam Waterline		6.86	m	4.103	Allowable range	3.22 - 5.75
Draft-Midship		3.37	m	2.036	Allowable range	1.94 - 2.42
Displacement volume	313	305.4	$\Delta/(0.01\Lambda)3$	391.40 Allowable range	200 - 500
Block coefficient		0.469		Allowable range	0.400 - 0.598
Prismatic coefficient		0.638	0.638	Allowable range	0.554 - 0.700
Midship coefficient		0.736		Allowable range	0.729 - 0.810
Wetted surface area	262.401	265.200	m3-Mumford	5.848 Allowable range	5.198 - 6.255
Water density		1.0259	t/m3	1.0250 at 19oC	$\rightarrow$
Water viscosity		1.18831	x 10-6 m2/s	1.07854 x 10-6 at 19oC	
Correlation allowance		0.0004			

Displacement　　　　　313.27 t

V/L	V	10-6Rn	103CF	103CR	103CT	RT	PE
	kn		ITTC'57			kN	kW
0.7	6.73	81.98	2.145	1.375	3.919	6.39	22.1
0.8	7.69	93.69	2.103	1.634	4.138	8.80	34.8
0.9	8.65	105.41	2.068	2.068	4.536	12.22	54.4
1.0	9.61	117.12	2.036	3.456	5.892	19.59	96.9
1.1	10.57	128.83	2.009	4.672	7.081	28.49	154.9
1.2	11.53	140.54	1.984	5.576	7.960	38.11	226.1
1.3	12.49	152.25	1.962	8.081	10.443	58.68	377.2
1.4	13.45	163.96	1.942	13.797	16.138	105.17	728.0
1.5	14.42	175.68	1.923	20.978	23.301	174.32	1292.7

```
;**********************************************
;* NavCad model file        HydroComp, Inc. *
;**********************************************
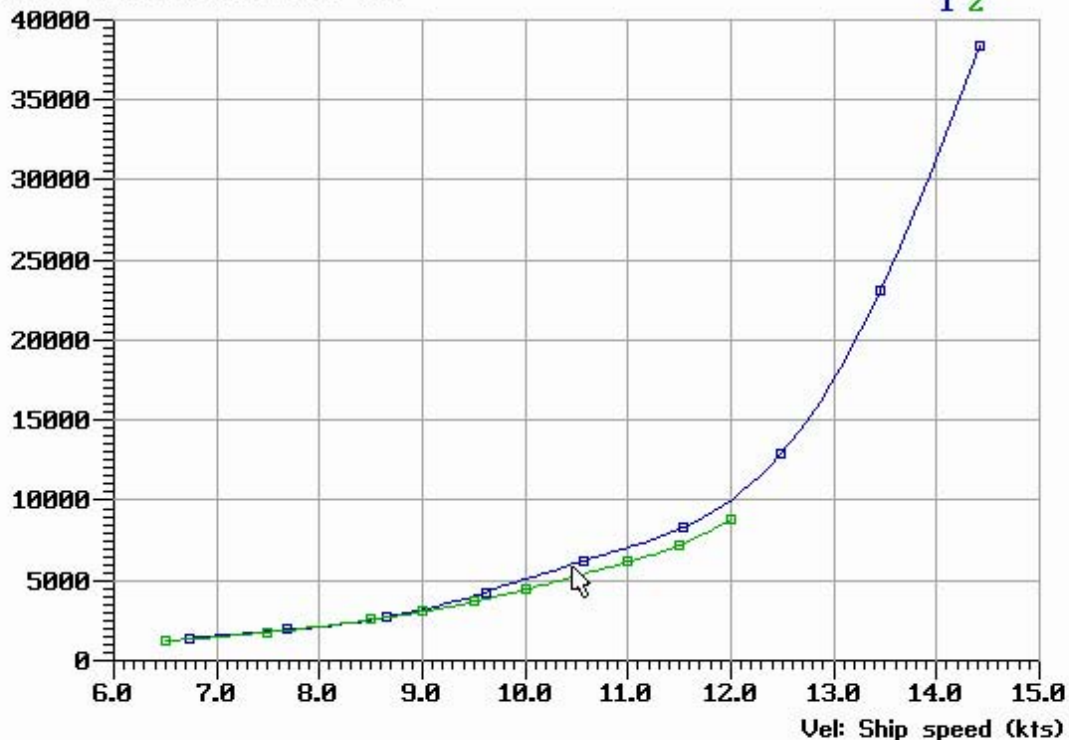
[NavCad]
Version=3.00
Release=ReleaseA
Date=03/31/2000
Time=11:55:28.00
Precision=6
Description=Norwegian Trawler Mdl= M183 1951 Lpp/B=4.10 B/T=2.04 Lpp/Vol=4.284 Lcb=+0.034F

[Units]
Length=Meter
Area=SqMeter
Weight=MetricTon
Speed=Knot
Force=Pound
Power=Horsepower
Density=KgPerCuM
KinemVisc=SqMPerSec

[Condition]
rho=1026
nu=1.1883e-06

[Resistance]
ModShipCa=0.0004

[Hull]
HullType=Displ
Loading=LoadDraft
ChineType=RoundBilge
SternShape=Normal
BowShape=Normal
FlapBehind=No
LengthPP=28.15
LengthWL=30
BeamWL=6.86
Draft=3.37
Trim=1.05
LCBHull=14.99
WettedSurf=265.2
MaxSecArea=17.015
HullDispl=313
HalfEntAng=23
MidshiCoef=0.736
WaterpCoef=0.715

[Speeds]
Speeds=6,7,8,9,9.5,10,10.5,11,11.5,12

[Results]
ResiCoef=0.0008539,0.0010646,0.0015825,0.00222777,0.0025177,0.0030019,0.0034025,0.0036718,0.0040835,0.0048591
BareResist=995.089,1418.7,2100.3,3058.45,3608.07,4377.88,5171.76,5927,6905.55,8409.45
ModCfType=ITTC57
ModSource=ModelTest
ModLengthWL=3.75
FroudeLen=0.179957,0.20995,0.239943,0.269936,0.284932,0.299929,0.314925,0.329921,0.344918,0.359914
FroudeVol=0.379895,0.443211,0.506527,0.569842,0.6015,0.633158,0.664816,0.696474,0.728132,0.75979
HullReyNum=7.79265e+07,9.09142e+07,1.03902e+08,1.1689e+08,1.23384e+08,1.29877e+08,1.36371e+08,1.42865e+08,1.49359e+08,1.55853e+08
ResiMerit=0.000360589,0.000611907,0.00118803,0.00211669,0.00266535,0.00352127,0.00440027,0.00521155,0.00633477,0.00820769
BareMerit=0.00144206,0.00205595,0.00304371,0.00443224,0.00522873,0.00634433,0.0074948,0.00858928,0.0100074,0.0121868
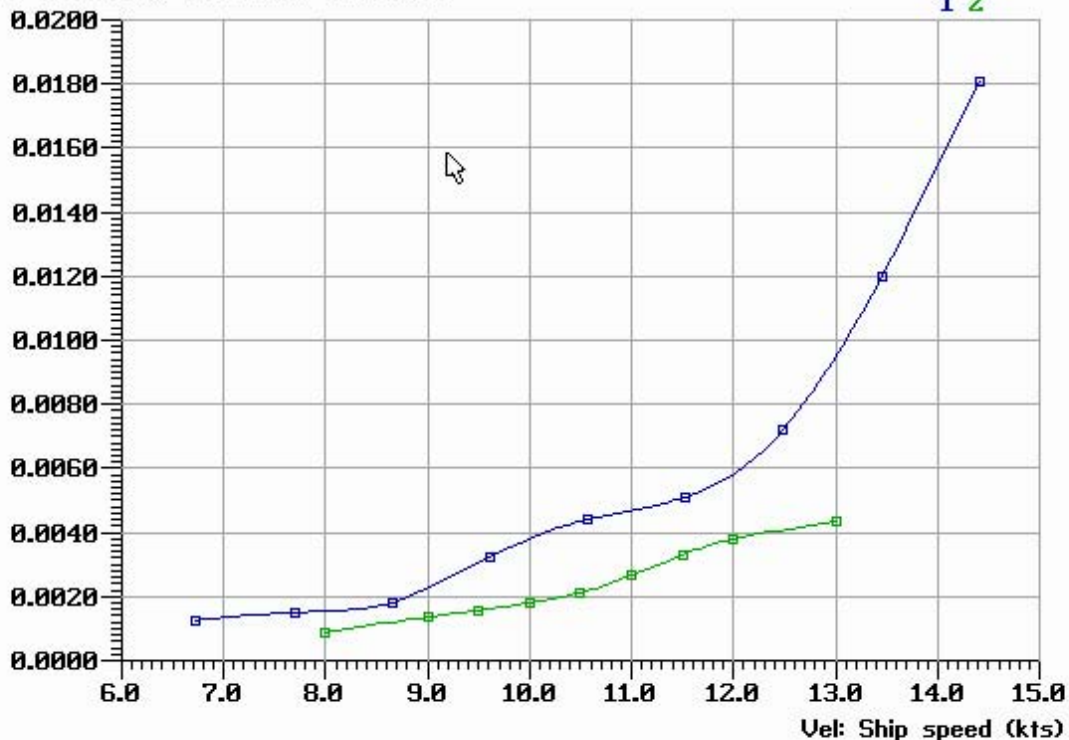```

16-Mar-2012  11:25:55

| | | | | |
|---|---|---|---|---|
| Length BP | | 28.15 m | | |
| Beam Waterline | | 6.46 m | 4.358 | Allowable range | 3.22 - 5.75 |
| Draft-Midship | | 2.88 m | 2.243 | Allowable range | 1.94 - 2.42 |
| Displacement volume | 252 | 245.9 Δ/(0.01Λ)3 | 315.12 Allowable range | 200 - 500 |
| Block coefficient | | 0.469 | | Allowable range | 0.400 - 0.598 |
| Prismatic coefficient | | 0.638 | 0.638 | Allowable range | 0.554 - 0.700 |
| Midship coefficient | | 0.736 | | Allowable range | 0.729 - 0.810 |
| Wetted surface area | 233.089 | 232.790 m3-Mumford | 5.932 Allowable range | 5.198 - 6.255 |
| Water density | | 1.0259 t/m3 | 1.0250 at 19oC | → |
| Water viscosity | | 1.18831 x 10-6 m2/s | 1.07854 x 10-6 at 19oC |
| Correlation allowance | | 0.0004 | |

Displacement          252.22 t

| V/L | V | 10-6Rn | 103CF | 103CR | 103CT | RT | PE |
|---|---|---|---|---|---|---|---|
| | kn | | ITTC'57 | | | kN | kW |
| 0.7 | 6.73 | 81.98 | 2.145 | 1.267 | 3.812 | 5.45 | 18.9 |
| 0.8 | 7.69 | 93.69 | 2.103 | 1.505 | 4.008 | 7.49 | 29.6 |
| 0.9 | 8.65 | 105.41 | 2.068 | 1.821 | 4.288 | 10.14 | 45.1 |
| 1.0 | 9.61 | 117.12 | 2.036 | 3.254 | 5.691 | 16.61 | 82.1 |
| 1.1 | 10.57 | 128.83 | 2.009 | 4.401 | 6.809 | 24.05 | 130.8 |
| 1.2 | 11.53 | 140.54 | 1.984 | 5.106 | 7.490 | 31.48 | 186.8 |
| 1.3 | 12.49 | 152.25 | 1.962 | 7.226 | 9.588 | 47.29 | 304.0 |
| 1.4 | 13.45 | 163.96 | 1.942 | 12.004 | 14.346 | 82.07 | 568.0 |
| 1.5 | 14.42 | 175.68 | 1.923 | 18.093 | 20.417 | 134.07 | 994.3 |

```
;***
;* NavCad model file   HydroComp, Inc. *
;***
;
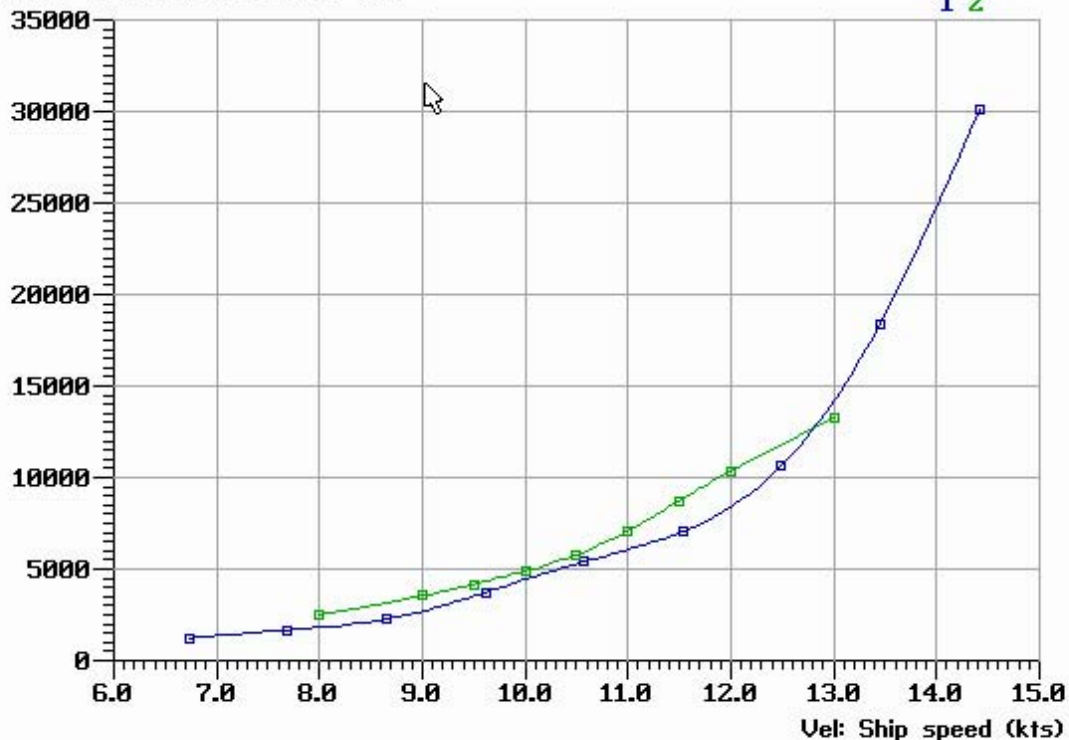
[NavCad]
Version=3.00
Release=ReleaseA
Date=03/31/2000
Time=11:49:30.38
Precision=6
Description=Norwegian Trawler Mdl= M184 1951 Lpp/B=4.36 B/T=2.24 Lpp/Vol=4.609 Lcb=+0.034F

[Units]
Length=Meter
Area=SqMeter
Weight=MetricTon
Speed=Knot
Force=Pound
Power=Horsepower
Density=KgPerCuM
KinemVisc=SqMPerSec

[Condition]
rho=1026
nu=1.1883e-06

[Resistance]
ModShipCa=0.0004

[Hull]
HullType=Displ
Loading=LoadDraft
ChineType=RoundBilge
SternShape=Normal
BowShape=Normal
FlapBehind=No
LengthPP=28.15
LengthWL=30
BeamWL=6.46
Draft=2.88
Trim=0.9
LCBHull=14.99
WettedSurf=232.79
MaxSecArea=13.6931
HullDispl=252
HalfEntAng=21.8
MidshiCoef=0.736
WaterpCoef=0.715

[Speeds]
Speeds=6,7,8,9,9.5,10,10.5,11,11.5,12

[Results]
ResiCoef=0.0007786,0.0011199,0.001657,0.0022253,0.0025929,0.0030962,0.0034529,0.0037657,0.004129,0.0047484
BareResist=854.219,1264.58,1877.5,2683.26,3215.35,3909.86,4579.2,5283.39,6104.38,7268.47
ModCfType=ITTC57
ModSource=ModelTest
ModLengthWL=3.75
FroudeLen=0.179957,0.20995,0.239943,0.269936,0.284932,0.299929,0.314925,0.329921,0.344918,0.359914
FroudeVol=0.393871,0.459516,0.525162,0.590807,0.623629,0.656452,0.689274,0.722097,0.75492,0.787742
HullReyNum=7.79265e+07,9.09142e+07,1.03902e+08,1.1689e+08,1.23384e+08,1.29877e+08,1.36371e+08,1.42865e+08,1.49359e+08,1.55853e+08
ResiMerit=0.000358471,0.000701799,0.00135625,0.00230521,0.00299275,0.00395974,0.00486855,0.00582732,0.00698358,0.00874475
BareMerit=0.00153757,0.0022762,0.00337944,0.00482978,0.00578753,0.00703764,0.00824243,0.00950995,0.0109877,0.013083
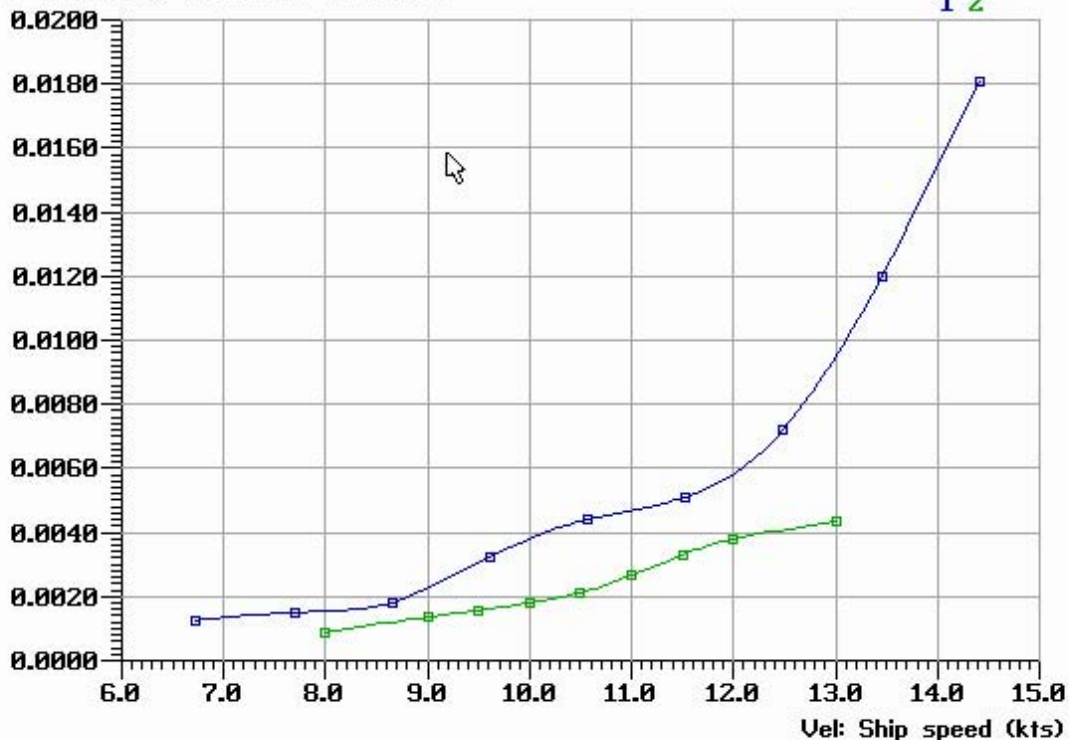```

RIDGELEY-NEVITT TRAWLER SERIES RESISTANCE   NTNU-M191

16-Mar-2012 11:26:34

Length BP	36.83 m			
Beam Waterline	7.76 m	4.746	Allowable range	3.22 - 5.75
Draft-Midship	3.89 m	1.995	Allowable range	1.94 - 2.42
Displacement volume	527.3 514.4 Δ/(0.01Λ)3	294.42	Allowable range	200 - 500
Block coefficient	0.463		Allowable range	0.400 - 0.598
Prismatic coefficient	0.619 0.619		Allowable range	0.554 - 0.700
Midship coefficient	0.748		Allowable range	0.729 - 0.810
Wetted surface area	391.517 387.212 m3-Mumford	6.031	Allowable range	5.198 - 6.255
Water density	1.0259 t/m3	1.0250 at 19oC	→	
Water viscosity	1.18831 x 10-6 m2/s	1.07854 x 10-6 at 19oC		
Correlation allowance	0.0004			

Displacement   527.76 t

V/L	V	10-6Rn	103CF	103CR	103CT	RT	PE
	kn		ITTC'57			kN	kW
0.7	7.69	122.69	2.023	1.250	3.673	11.43	45.2
0.8	8.79	140.21	1.985	1.450	3.835	15.59	70.5
0.9	9.89	157.74	1.952	1.655	4.007	20.62	104.9
1.0	10.99	175.27	1.924	2.672	4.996	31.73	179.4
1.1	12.09	192.80	1.899	3.333	5.632	43.29	269.3
1.2	13.19	210.32	1.876	4.127	6.403	58.57	397.4
1.3	14.29	227.85	1.856	6.635	8.890	95.43	701.6
1.4	15.39	245.38	1.837	11.550	13.787	171.63	1358.8
1.5	16.49	262.90	1.820	17.504	19.724	281.88	2391.1

```
;*********************************************
;* NavCad model file          HydroComp, Inc. *
;*********************************************
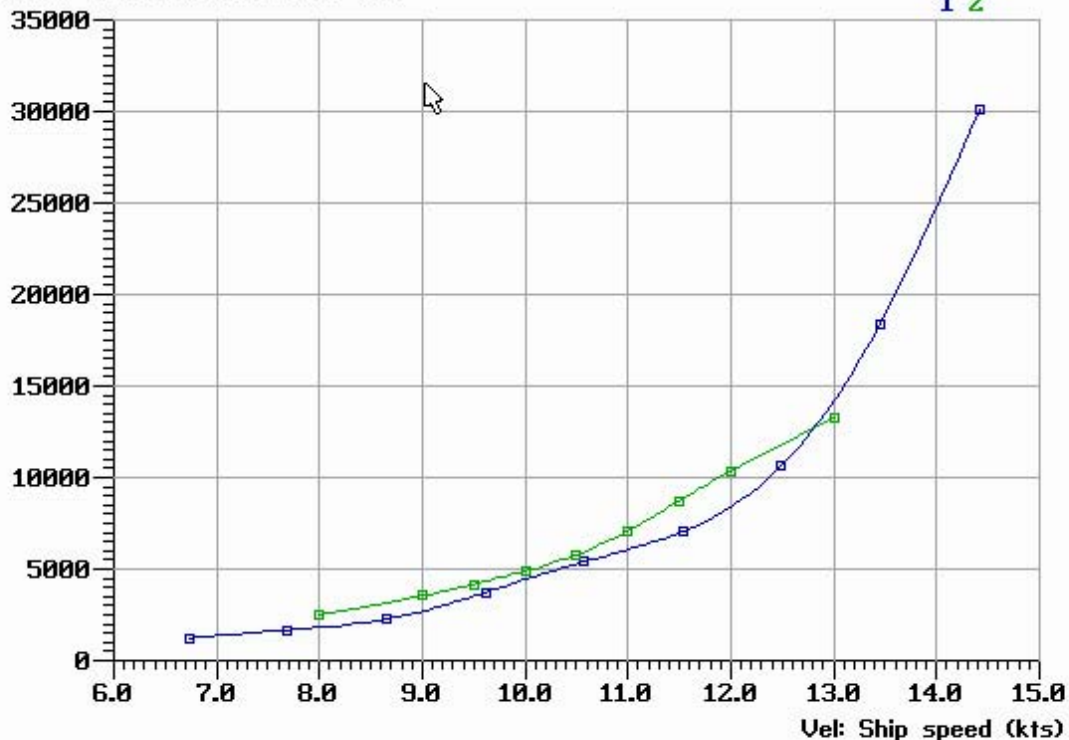
[NavCad]
Version=3.00
Release=ReleaseA
Date=03/31/2000
Time=10:03:02.16
Precision=6
Description=Norway-Trondheim 1951 Model= M 191 Cp=0.610 L/B=5.041 B/T=1.995 Lcb=-0.79A

[Units]
Length=Meter
Area=SqMeter
Weight=MetricTon
Speed=Knot
Force=Pound
Power=Horsepower
Density=KgPerCuM
KinemVisc=SqMPerSec

[Condition]
rho=1026
nu=1.1883e-06

[Resistance]
ModShipCa=0.0004

[Hull]
HullType=Displ
Loading=LoadDraft
ChineType=RoundBilge
SternShape=Normal
BowShape=Normal
FlapBehind=No
LengthPP=36.83
LengthWL=39.12
BeamWL=7.76
Draft=3.89
Trim=1.3
LCBHull=19.869
WettedSurf=387.212
MaxSecArea=22.5794
HullDispl=527.3
HalfEntAng=20
MidshiCoef=0.748
WaterpCoef=0.727

[Speeds]
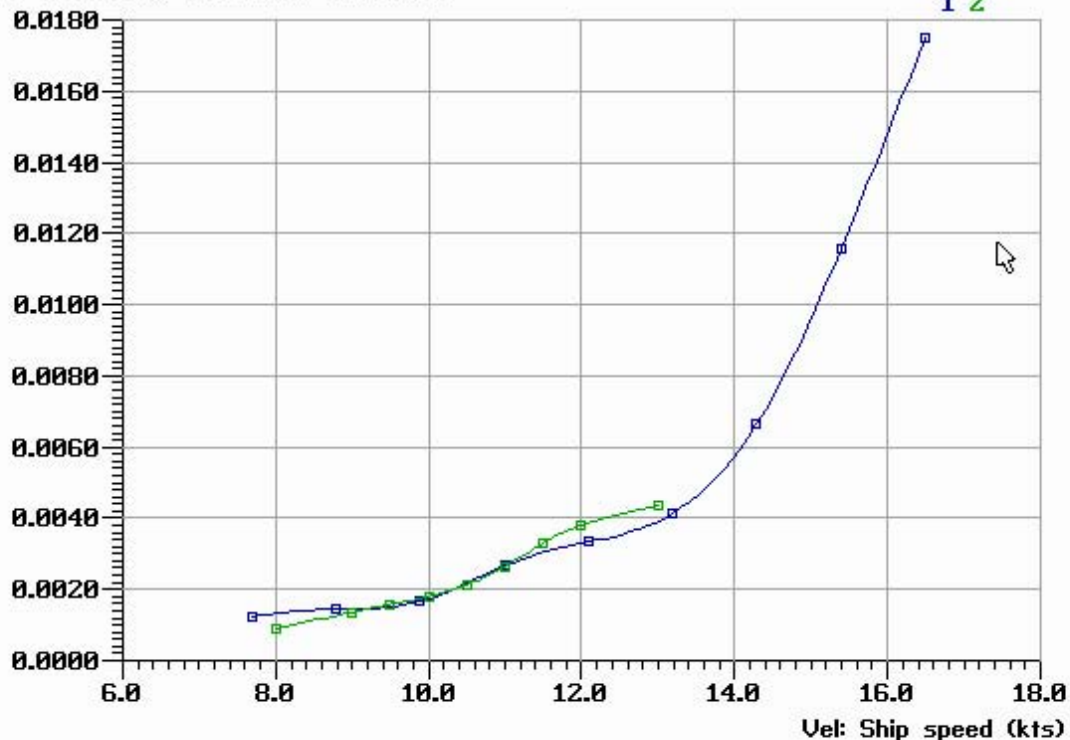Speeds=8,9,9.5,10,10.5,11,11.5,12,13

[Results]
ResiCoef=0.0008989,0.001357,0.0015754,0.0018053,0.0021309,0.0026492,0.0032972,0.0037969,0.0043521
BareResist=2491.42,3559.96,4183.64,4890.89,5799.4,7088.39,8741.97,10350.2,13214.9
ModCfType=ITTC57
ModSource=ModelTest
ModLengthWL=4.89
FroudeLen=0.210121,0.236386,0.249518,0.262651,0.275784,0.288916,0.302049,0.315181,0.341446
FroudeVol=0.464355,0.522399,0.551421,0.580444,0.609466,0.638488,0.66751,0.696532,0.754577
HullReyNum=1.35488e+08,1.52424e+08,1.60892e+08,1.6936e+08,1.77828e+08,1.86296e+08,1.94764e+08,2.03232e+08,2.20168e+08
ResiMerit=0.000584866,0.00111745,0.00144545,0.00183533,0.0023884,0.00325885,0.00443308,0.00555848,0.00747739
BareMerit=0.00214316,0.00306234,0.00359884,0.00420722,0.00498874,0.00609755,0.00751999,0.00890341,0.0113676
```

RIDGELEY-NEVITT TRAWLER SERIES RESISTANCE $\qquad$ NTNU-M193

Length BP		28.15	m		
Beam Waterline		6.30	m	4.468	Allowable range	3.22 - 5.75
Draft-Midship		2.81	m	2.242	Allowable range	1.94 - 2.42
Displacement volume	239	233.2	$\Delta/(0.01\Lambda)3$	298.86	Allowable range	200 - 500
Block coefficient		0.468			Allowable range	0.400 - 0.598
Prismatic coefficient		0.636	0.636		Allowable range	0.554 - 0.700
Midship coefficient		0.736			Allowable range	0.729 - 0.810
Wetted surface area	227.129	229.710	m3-Mumford	6.064	Allowable range	5.198 - 6.255
Water density		1.0259	t/m3	1.0250 at 19oC		$\rightarrow$
Water viscosity		1.18831	x 10-6 m2/s	1.07854 x 10-6 at 19oC	
Correlation allowance		0.0004			

Displacement $\qquad$ 239.21 t

V/L	V	10-6Rn	103CF	103CR	103CT	RT	PE
	kn		ITTC'57			kN	kW
0.7	6.73	81.98	2.145	1.249	3.793	5.35	18.5
0.8	7.69	93.69	2.103	1.477	3.980	7.34	29.0
0.9	8.65	105.41	2.068	1.756	4.223	9.85	43.8
1.0	9.61	117.12	2.036	3.139	5.576	16.06	79.4
1.1	10.57	128.83	2.009	4.192	6.601	23.00	125.1
1.2	11.53	140.54	1.984	4.878	7.263	30.12	178.7
1.3	12.49	152.25	1.962	6.968	9.330	45.41	291.9
1.4	13.45	163.96	1.942	11.573	13.915	78.55	543.7
1.5	14.42	175.68	1.923	17.438	19.761	128.05	949.6

```
;*******************************************
;* NavCad model file        HydroComp, Inc. *
;*******************************************
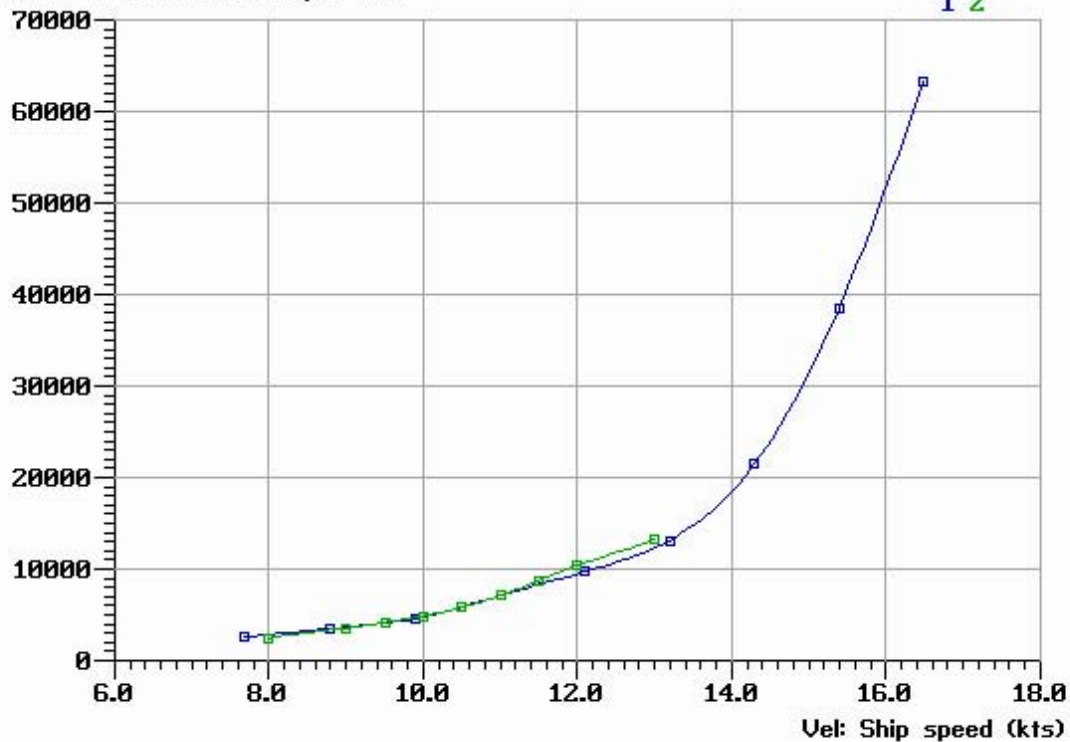
[NavCad]
Version=3.00
Release=ReleaseA
Date=03/31/2000
Time=11:48:13.82
Precision=6
Description=Norwegian Trawler Mdl= M193 1951 Lpp/B=4.47 B/T=2.24 Lpp/Vol=4.686 Lcb=+0.034F

[Units]
Length=Meter
Area=SqMeter
Weight=MetricTon
Speed=Knot
Force=Pound
Power=Horsepower
Density=KgPerCuM
KinemVisc=SqMPerSec

[Condition]
rho=1026
nu=1.1883e-06

[Resistance]
ModShipCa=0.0004

[Hull]
HullType=Displ
Loading=LoadDraft
ChineType=RoundBilge
SternShape=Normal
BowShape=Normal
FlapBehind=No
LengthPP=28.15
LengthWL=30
BeamWL=6.3
Draft=2.81
Trim=0.88
LCBHull=14.99
WettedSurf=229.71
MaxSecArea=13.0294
HullDispl=239
HalfEntAng=21.4
MidshiCoef=0.736
WaterpCoef=0.715
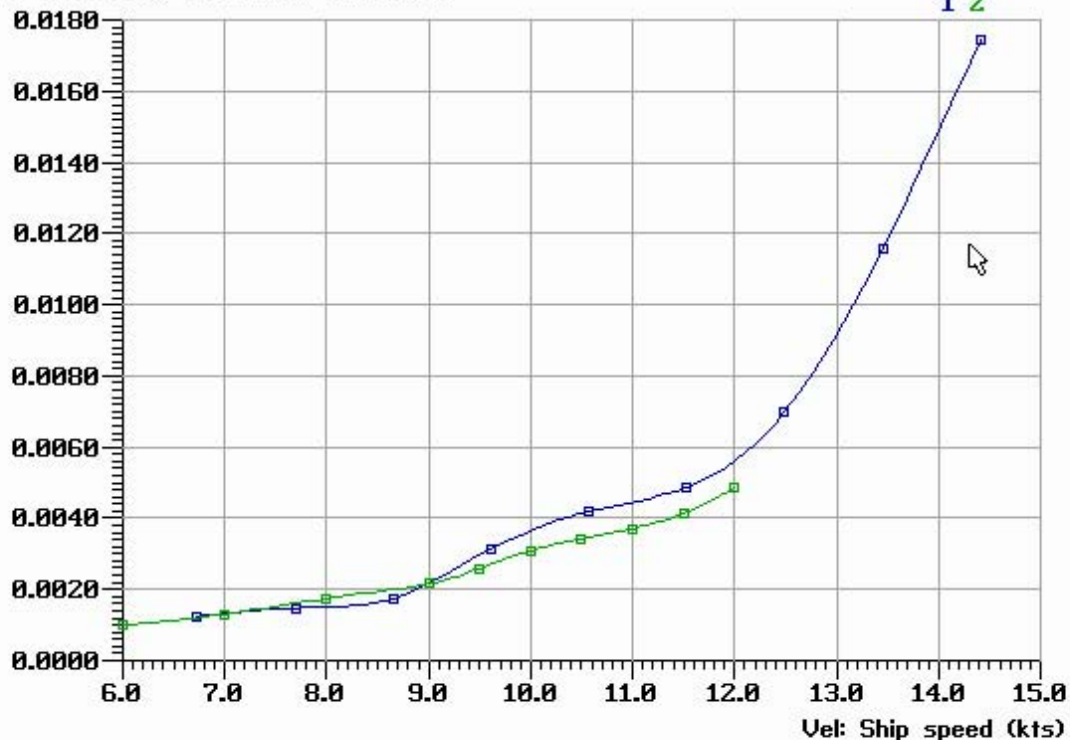
[Speeds]
Speeds=6,7,8,9,9.5,10,10.5,11,11.5,12

[Results]
ResiCoef=0.0009991,0.0013051,0.0017478,0.0021582,0.0025936,0.0030865,0.003419,0.0037087,0.0041314,0.0048591
BareResist=898.571,1311.47,1893.4,2609.65,3173.25,3851.33,4492.41,5165.13,6025.84,7284.06
ModCfType=ITTC57
ModSource=ModelTest
ModLengthWL=3.75
FroudeLen=0.179957,0.20995,0.239943,0.269936,0.284932,0.299929,0.314925,0.329921,0.344918,0.359914
FroudeVol=0.397363,0.463591,0.529818,0.596045,0.629159,0.662272,0.695386,0.7285,0.761613,0.794727
HullReyNum=7.79265e+07,9.09142e+07,1.03902e+08,1.1689e+08,1.23384e+08,1.29877e+08,1.36371e+08,1.42865e+08,1.49359e+08,1.55853e+08
ResiMerit=0.000478594,0.000850933,0.00148843,0.00232612,0.00311463,0.00410697,0.00501572,0.00597122,0.00727024,0.00931052
BareMerit=0.00170538,0.00248901,0.00359344,0.00495279,0.00602243,0.00730935,0.00852604,0.00980278,0.0114363,0.0138243
```

RIDGELEY-NEVITT TRAWLER SERIES RESISTANCE NTNU-M197

Length BP		47.92	m		
Beam Waterline		8.53	m	5.615	Allowable range	3.22 - 5.75
Draft-Midship		3.35	m	2.545	Allowable range	1.94 - 2.42
Displacement volume	727	709.3	$\Delta/(0.01\Lambda)3$	184.29 Allowable range	200 - 500
Block coefficient		0.517			Allowable range	0.400 - 0.598
Prismatic coefficient		0.609	0.609		Allowable range	0.554 - 0.700
Midship coefficient		0.849			Allowable range	0.729 - 0.810
Wetted surface area	505.382	469.000	m3-Mumford	5.897 Allowable range	5.198 - 6.255
Water density		1.0259	t/m3	1.0250 at 19oC	→
Water viscosity		1.18831	x 10-6 m2/s	1.07854 x 10-6 at 19oC
Correlation allowance		0.0004		

Displacement   727.64 t

*exceeds

V/L	V	10-6Rn	103CF	103CR	103CT	RT	PE
	kn		ITTC'57			kN	kW
0.7	8.78	182.09	1.914	1.100	3.414	16.74	75.6
0.8	10.03	208.10	1.879	1.145	3.424	21.93	113.2
0.9	11.28	234.11	1.849	1.356	3.604	29.22	169.7
1.0	12.54	260.12	1.822	2.032	4.254	42.58	274.7
1.1	13.79	286.13	1.799	2.383	4.582	55.50	393.8
1.2	15.05	312.15	1.778	2.939	5.117	73.75	570.9
1.3	16.30	338.16	1.759	4.792	6.951	117.59	986.1
1.4	17.55	364.17	1.742	8.205	10.347	203.00	1833.2
1.5	18.81	390.18	1.726	11.784	13.911	313.30	3031.4

```
;**********************************************
;* NavCad model file         HydroComp, Inc. *
;**********************************************
;

[NavCad]
Version=3.00
Release=ReleaseA
Date=03/31/2000
Time=16:35:18.62
Precision=6
Description=Norway-Trondheim 1951 Model= M 197 Cp=0.588 L/B=5.615 B/T=2.545 Lcb=-4.20A

[Units]
Length=Meter
Area=SqMeter
Weight=MetricTon
Speed=Knot
Force=Pound
Power=Horsepower
Density=KgPerCuM
KinemVisc=SqMPerSec

[Condition]
rho=1026
nu=1.1883e-06

[Resistance]
ModShipCa=0.0004

[Hull]
HullType=Displ
Loading=LoadDraft
ChineType=RoundBilge
SternShape=Normal
BowShape=Normal
FlapBehind=No
LengthPP=47.92
LengthWL=49.35
BeamWL=8.534
Draft=3.353
LCBHull=26.748
WettedSurf=469
MaxSecArea=24.2937
HullDispl=727
HalfEntAng=12
MidshiCoef=0.849

[Speeds]
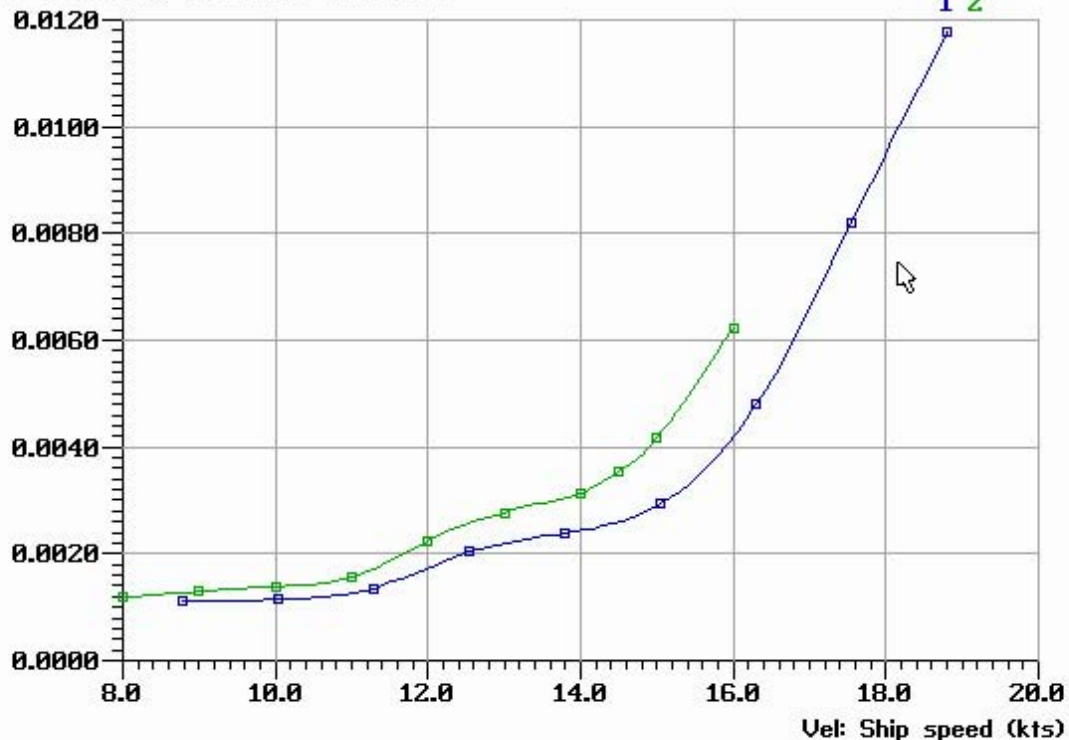Speeds=8,9,10,11,12,13,14,14.5,15,16

[Results]
ResiCoef=0.0011909,0.0012919,0.0013917,0.0015517,0.0022508,0.0027747,0.0031453,0.0035323,0.0041685,0.0062321
BareResist=3226.55,4163.97,5244.39,6580.85,9228.04,12050,14964.7,17192.2,20421.4,30741.6
ModCfType=ITTC57
ModSource=ModelTest
ModLengthWL=4.935
FroudeLen=0.187079,0.210464,0.233849,0.257234,0.280618,0.304003,0.327388,0.339081,0.350773,0.374158
FroudeVol=0.440153,0.495172,0.550192,0.605211,0.66023,0.715249,0.770268,0.797778,0.825287,0.880306
HullReyNum=1.70919e+08,1.92284e+08,2.13648e+08,2.35013e+08,2.56378e+08,2.77743e+08,2.99108e+08,3.0979e+08,3.20473e+08,3.41837e+08
ResiMerit=0.000680718,0.000934601,0.00124296,0.00167689,0.00289475,0.00418808,0.00550592,0.00663293,0.00837673,0.0142491
BareMerit=0.00201312,0.002598,0.0032721,0.00410595,0.00575759,0.00751828,0.00933682,0.0107266,0.0127414,0.0191804
```

RIDGELEY-NEVITT TRAWLER SERIES RESISTANCE   # NTNU-M198

16-Mar-2012 11:28:22

Length BP		47.92	m			
Beam Waterline		8.13	m	5.896	Allowable range	3.22 - 5.75
Draft-Midship		3.52	m	2.308	Allowable range	1.94 - 2.42
Displacement volume	727	709.3	Δ/(0.01Λ)3	184.29 Allowable range		200 - 500
Block coefficient		0.517			Allowable range	0.400 - 0.598
Prismatic coefficient		0.570	0.570		Allowable range	0.554 - 0.700
Midship coefficient		0.907			Allowable range	0.729 - 0.810
Wetted surface area	507.992	473.000	m3-Mumford	5.947	Allowable range	5.198 - 6.255
Water density		1.0259	t/m3	1.0250 at 19oC		→
Water viscosity		1.18831	x 10-6 m2/s	1.07854 x 10-6 at 19oC		
Correlation allowance		0.0004				

Displacement   727.64 t

*exceeds

V/L	V	10-6Rn	103CF	103CR	103CT	RT	PE
	kn		ITTC'57			kN	kW
0.7	8.78	182.09	1.914	0.877	3.191	15.78	71.3
0.8	10.03	208.10	1.879	0.926	3.205	20.71	106.9
0.9	11.28	234.11	1.849	1.070	3.319	27.14	157.6
1.0	12.54	260.12	1.822	1.428	3.650	36.85	237.7
1.1	13.79	286.13	1.799	1.583	3.782	46.20	327.8
1.2	15.05	312.15	1.778	2.771	4.949	71.94	556.9
1.3	16.30	338.16	1.759	5.261	7.420	126.59	1061.5
1.4	17.55	364.17	1.742	8.897	11.039	218.43	1972.5
1.5	18.81	390.18	1.726	12.917	15.043	341.70	3306.1

```
;**********************************************
;* NavCad model file        HydroComp, Inc. *
;**********************************************
;
[NavCad]
Version=3.00
Release=ReleaseA
Date=03/31/2000
Time=16:24:10.83
Precision=6
Description=Norway-Trondheim 1951 Model= M 198 Cp=0.550 L/B=5.896 B/T=2.308 Lcb=-1.90A
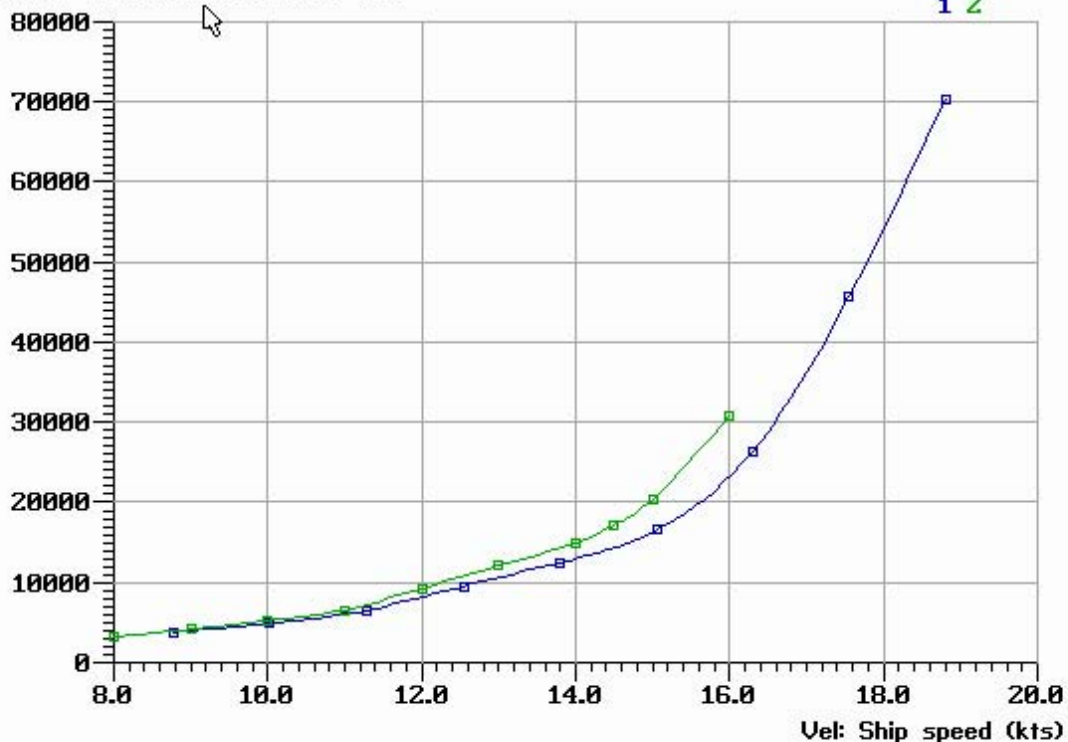
[Units]
Length=Meter
Area=SqMeter
Weight=MetricTon
Speed=Knot
Force=Pound
Power=Horsepower
Density=KgPerCuM
KinemVisc=SqMPerSec

[Condition]
rho=1026
nu=1.1883e-06

[Resistance]
ModShipCa=0.0004

[Hull]
HullType=Displ
Loading=LoadDraft
ChineType=RoundBilge
SternShape=Normal
BowShape=Normal
FlapBehind=No
LengthPP=47.92
LengthWL=49.35
BeamWL=8.128
Draft=3.521
LCBHull=25.613
WettedSurf=473
MaxSecArea=25.9572
HullDispl=727
HalfEntAng=11.6
MidshiCoef=0.907

[Speeds]
Speeds=8,9,10,11,12,13,14,14.5,15,16

[Results]
ResiCoef=0.0011792,0.0012414,0.0012978,0.0013629,0.0016336,0.0018629,0.0021666,0.0026401,0.0034845,0.0060561
BareResist=3243.25,4140.43,5153.56,6307.17,8023.65,9928.16,12323,14630.7,18373.8,30353.3
ModCfType=ITTC57
ModSource=ModelTest
ModLengthWL=4.935
FroudeLen=0.187079,0.210464,0.233849,0.257234,0.280618,0.304003,0.327388,0.339081,0.350773,0.374158
FroudeVol=0.440153,0.495172,0.550192,0.605211,0.66023,0.715249,0.770268,0.797778,0.825287,0.880306
HullReyNum=1.70919e+08,1.92284e+08,2.13648e+08,2.35013e+08,2.56378e+08,2.77743e+08,2.99108e+08,3.0979e+08,3.20473e+08,3.41837e+08
ResiMerit=0.000679779,0.000905727,0.00116898,0.00148542,0.00211889,0.00283581,0.00382503,0.00499985,0.00706193,0.0139648
BareMerit=0.00202354,0.00258331,0.00321543,0.00393519,0.00500614,0.00619441,0.0076886,0.00912842,0.0114638,0.0189382
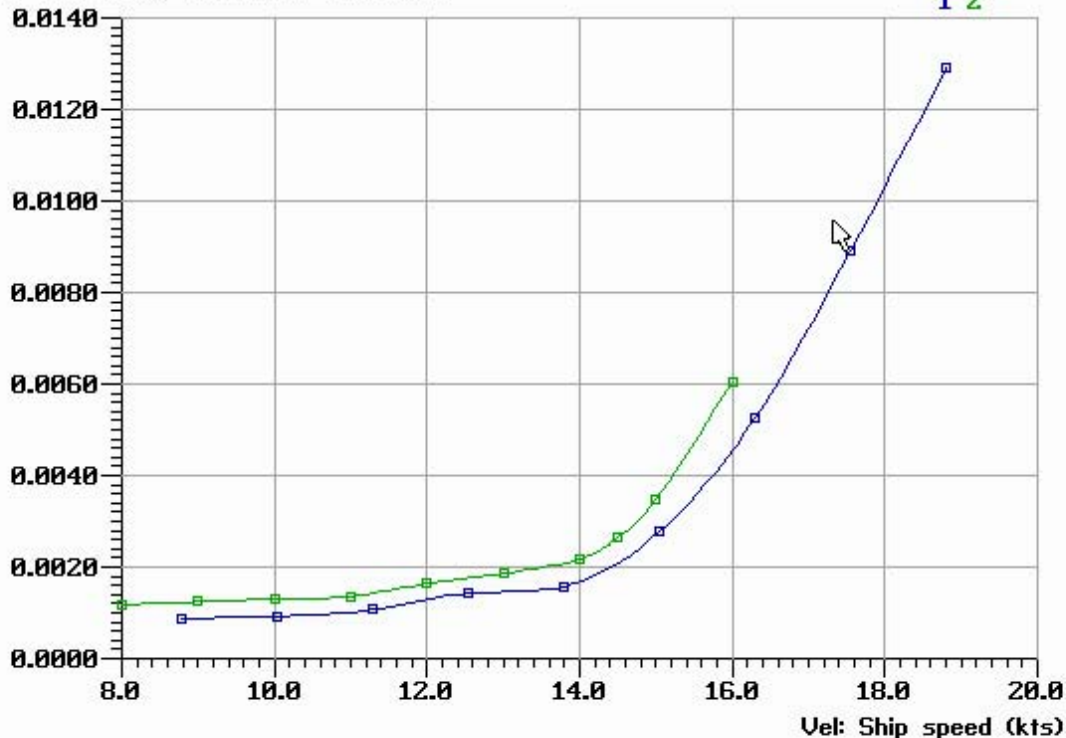```

Graph results

Graph    Parameters

Rbare: Bare-hull resistance (lbs)

1  2

80000

70000

60000

50000

40000

30000

20000

10000

0

8.0   10.0   12.0   14.0   16.0   18.0   20.0

Vel: Ship speed (kts)

# RIDGELEY-NEVITT TRAWLER SERIES RESISTANCE NTNU-M215

18-Mar-2012  15:07:59

| | | | | | |
|---|---|---|---|---|---|
| Length BP | | 29.89 | m | | |
| Beam Waterline | | 6.08 | m | 4.914 | Allowable range | 3.22 - 5.75 |
| Draft-Midship | | 2.20 | m | 2.765 | Allowable range | 1.94 - 2.42 |
| Displacement volume | 180.4 | 176.0 | Δ/(0.01Λ)3 | 188.44 Allowable range | 200 - 500 |
| Block coefficient | | 0.440 | | Allowable range | 0.400 - 0.598 |
| Prismatic coefficient | | 0.596 | 0.596 | Allowable range | 0.554 - 0.700 |
| Midship coefficient | | 0.738 | | Allowable range | 0.729 - 0.810 |
| Wetted surface area | 202.116 | 201.040 | m3-Mumford | 6.401 Allowable range | 5.198 - 6.255 |
| Water density | | 1.0259 | t/m3 | 1.0250 at 19oC | → |
| Water viscosity | | 1.18831 | x 10-6 m2/s | 1.07854 x 10-6 at 19oC | |
| Correlation allowance | | 0.0004 | | | |

Displacement          180.56 t

*exceeds

| V/L | V | 10-6Rn | 103CF | 103CR | 103CT | RT | PE |
|---|---|---|---|---|---|---|---|
| | kn | | ITTC'57 | | | kN | kW |
| 0.7 | 6.93 | 89.70 | 2.117 | 1.048 | 3.564 | 4.67 | 16.7 |
| 0.8 | 7.92 | 102.51 | 2.076 | 1.120 | 3.596 | 6.16 | 25.1 |
| 0.9 | 8.91 | 115.33 | 2.041 | 1.288 | 3.729 | 8.08 | 37.1 |
| 1.0 | 9.90 | 128.14 | 2.011 | 1.794 | 4.204 | 11.25 | 57.3 |
| 1.1 | 10.89 | 140.96 | 1.984 | 2.071 | 4.455 | 14.43 | 80.8 |
| 1.2 | 11.88 | 153.77 | 1.959 | 2.841 | 5.200 | 20.04 | 122.5 |
| 1.3 | 12.87 | 166.58 | 1.938 | 4.942 | 7.280 | 32.93 | 218.1 |
| 1.4 | 13.86 | 179.40 | 1.918 | 8.528 | 10.846 | 56.89 | 405.8 |
| 1.5 | 14.85 | 192.21 | 1.899 | 12.406 | 14.705 | 88.55 | 676.7 |

```
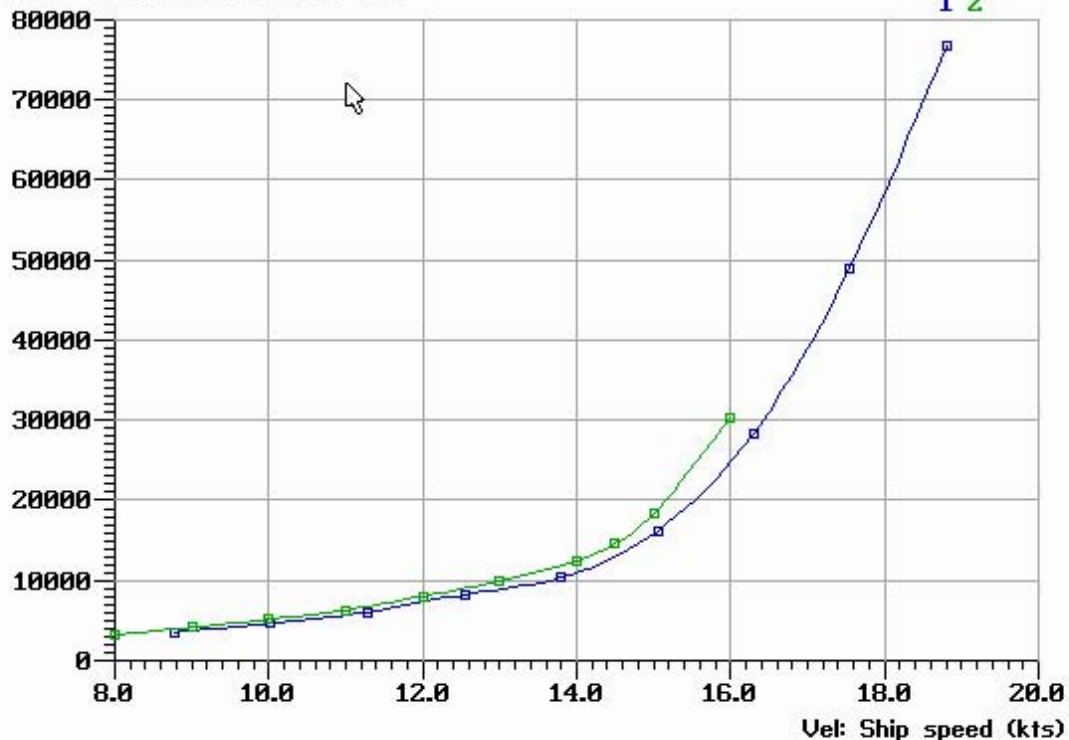;***********************************************
;* NavCad model file        HydroComp, Inc. *
;***********************************************
;
[NavCad]
Version=3.00
Release=ReleaseA
Date=03/31/2000
Time=17:38:49.51
Precision=6
Description=Norwegian Coaster Mdl= 215 Lpp/B= 4.914 B/T=2.762 Lpp/Vol=5.402 Lcb=-1.8A 1952

[Units]
Length=Meter
Area=SqMeter
Weight=MetricTon
Speed=Knot
Force=Pound
Power=Horsepower
Density=KgPerCuM
KinemVisc=SqMPerSec

[Condition]
rho=1025.86
nu=1.1883e-06

[Resistance]
ModShipCa=0.0004

[Hull]
HullType=Displ
Loading=LoadDraft
ChineType=RoundBilge
SternShape=Normal
BowShape=Normal
FlapBehind=No
LengthPP=29.885
LengthWL=31
BeamWL=6.082
Draft=2.202
LCBHull=15.48
WettedSurf=201.04
MaxSecArea=9.88371
HullDispl=180.4
HalfEntAng=12
MidshiCoef=0.738
WaterpCoef=0.698

[Speeds]
Speeds=8,9,10,11,11.5,12,12.5,13,13.5,14

[Results]
ResiCoef=0.0012071,0.0015267,0.0020946,0.0026183,0.002972,0.0035153,0.004411,0.0057344,0.007454,0.0098157
BareResist=1440.69,1965.07,2755.93,3703.62,4324.99,5178.95,6467.55,8356.54,10923.2,14575.7
ModCfType=ITTC57
ModSource=ModelTest
ModLengthWL=3.1
FroudeLen=0.236041,0.265546,0.295051,0.324557,0.339309,0.354062,0.368814,0.383567,0.398319,0.413072
FroudeVol=0.555235,0.62464,0.694044,0.763449,0.798151,0.832853,0.867555,0.902257,0.93696,0.971662
HullReyNum=1.07365e+08,1.20786e+08,1.34206e+08,1.47627e+08,1.54337e+08,1.61047e+08,1.67758e+08,1.74468e+08,1.81178e+08,1.87889e+08
ResiMerit=0.00119175,0.00190765,0.00323119,0.00488726,0.00606325,0.00780883,0.0106321,0.0149498,0.0209565,0.0296783
BareMerit=0.00362243,0.00494092,0.00692942,0.00931226,0.0108746,0.0130218,0.0162618,0.0210114,0.027465,0.0366487
```

Graph results

Graph | Parameters

Cr: Residuary resistance coefficient

1 2

0.0140
0.0120
0.0100
0.0080
0.0060
0.0040
0.0020
0.0000

6.0 7.0 8.0 9.0 10.0 11.0 12.0 13.0 14.0 15.0

Vel: Ship speed (kts)

Graph results

Graph Parameters

Rbare: Bare-hull resistance (lbs)
Vel: Ship speed (kts)

RIDGELEY-NEVITT TRAWLER SERIES RESISTANCE　　　　　NTNU-M226

Length BP		29.89	m			
Beam Waterline		6.08	m	4.914	Allowable range	3.22 - 5.75
Draft-Midship		2.20	m	2.765	Allowable range	1.94 - 2.42
Displacement volume	180.4	176.0	Δ/(0.01Λ)3	188.44 Allowable range		200 - 500
Block coefficient		0.440			Allowable range	0.400 - 0.598
Prismatic coefficient		0.609	0.609		Allowable range	0.554 - 0.700
Midship coefficient		0.722			Allowable range	0.729 - 0.810
Wetted surface area	202.116	200.620	m3-Mumford	6.388 Allowable range		5.198 - 6.255
Water density		1.0259	t/m3	1.0250 at 19oC	→	
Water viscosity		1.18831	x 10-6 m2/s	1.07854 x 10-6 at 19oC		
Correlation allowance		0.0004				

Displacement　　　　　　　180.56 t

*exceeds

V/L	V	10-6Rn	103CF	103CR	103CT	RT	PE
	kn		ITTC'57			kN	kW
0.7	6.93	89.70	2.117	1.106	3.623	4.74	16.9
0.8	7.92	102.51	2.076	1.166	3.641	6.22	25.4
0.9	8.91	115.33	2.041	1.363	3.804	8.23	37.7
1.0	9.90	128.14	2.011	2.043	4.453	11.89	60.6
1.1	10.89	140.96	1.984	2.405	4.788	15.47	86.7
1.2	11.88	153.77	1.959	2.990	5.349	20.57	125.8
1.3	12.87	166.58	1.938	4.868	7.205	32.52	215.4
1.4	13.86	179.40	1.918	8.340	10.657	55.79	397.9
1.5	14.85	192.21	1.899	12.085	14.384	86.44	660.5

```
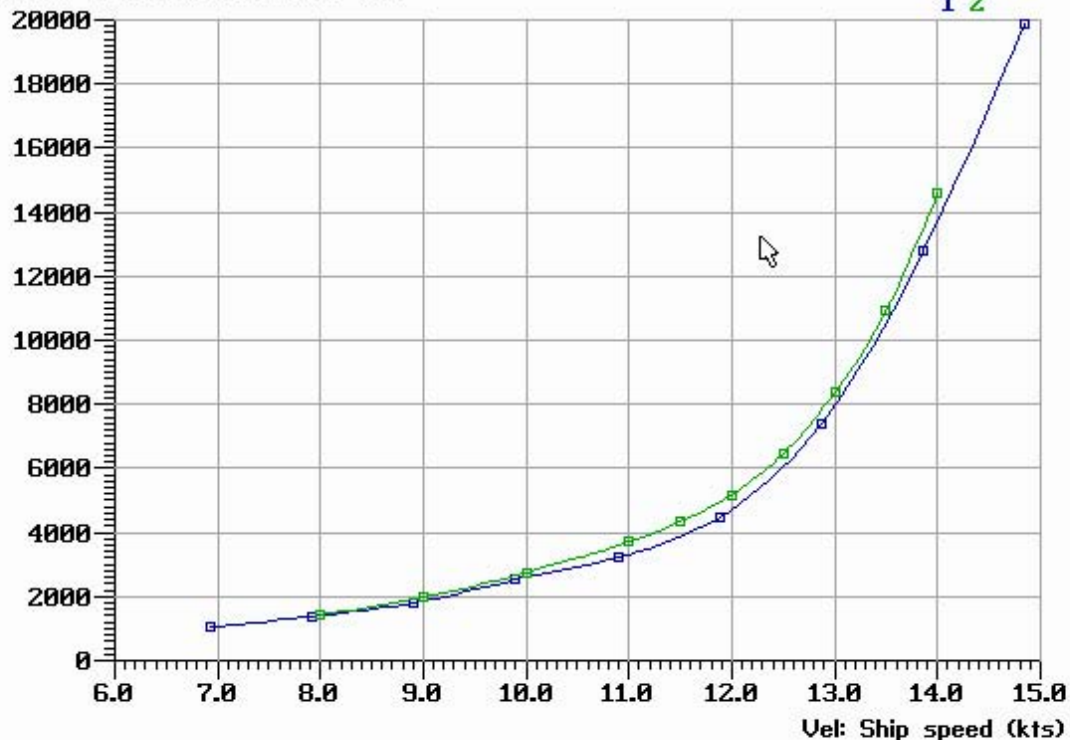;***********************************************
;* NavCad model file         HydroComp, Inc. *
;***********************************************
;
```

[NavCad]
Version=3.00
Release=ReleaseA
Date=03/31/2000
Time=17:37:13.50
Precision=6
Description=Norwegian Coaster Mdl=226 Lpp/B= 4.914 B/T=2.762 Lpp/Vol=5.402 Lcb=-3.1A 1952

[Units]
Length=Meter
Area=SqMeter
Weight=MetricTon
Speed=Knot
Force=Pound
Power=Horsepower
Density=KgPerCuM
KinemVisc=SqMPerSec

[Condition]
rho=1025.86
nu=1.1883e-06

[Resistance]
ModShipCa=0.0004

[Hull]
HullType=Displ
Loading=LoadDraft
ChineType=RoundBilge
SternShape=Normal
BowShape=Normal
FlapBehind=No
LengthPP=29.885
LengthWL=31
BeamWL=6.082
Draft=2.202
LCBHull=15.869
WettedSurf=200.62
MaxSecArea=9.66943
HullDispl=180.4
HalfEntAng=12
MidshiCoef=0.722
WaterpCoef=0.694

[Speeds]
Speeds=8,9,10,11,11.5,12,12.5,13,13.5,14

[Results]
ResiCoef=0.0012899,0.0015028,0.002032,0.0024335,0.0026647,0.003233,0.0041106,0.0054408,0.0072157,0.0091291
BareResist=1470.13,1949.11,2711.84,3558.98,4067.13,4919.25,6166.67,8035.3,10634.5,13721.3
ModCfType=ITTC57
ModSource=ModelTest
ModLengthWL=3.1
FroudeLen=0.236041,0.265546,0.295051,0.324557,0.339309,0.354062,0.368814,0.383567,0.398319,0.413072
FroudeVol=0.555235,0.62464,0.694044,0.763449,0.798151,0.832853,0.867555,0.902257,0.93696,0.971662
HullReyNum=1.07365e+08,1.20786e+08,1.34206e+08,1.47627e+08,1.54337e+08,1.61047e+08,1.67758e+08,1.74468e+08,1.81178e+08,1.87889e+08
ResiMerit=0.00127083,0.00187387,0.00312807,0.00453283,0.00542496,0.00716673,0.00988731,0.0141548,0.0202441,0.0275446
BareMerit=0.00369644,0.00490079,0.00681857,0.00894858,0.0102263,0.0123688,0.0155053,0.0202037,0.0267391,0.0345005
```
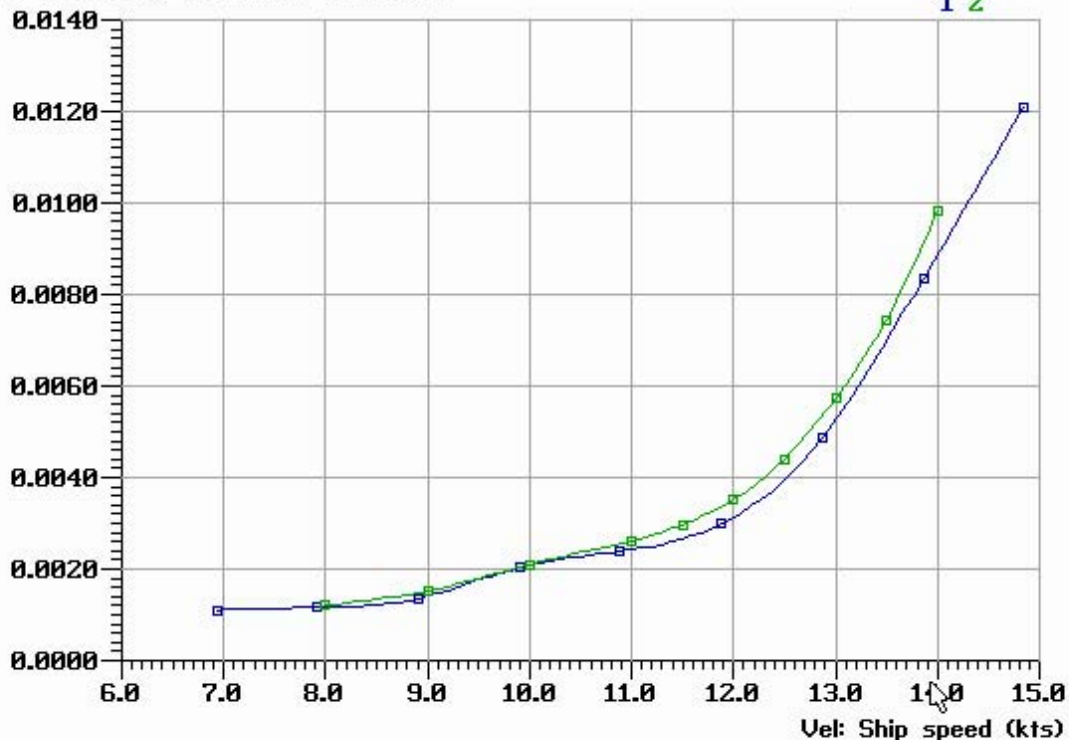
Graph results

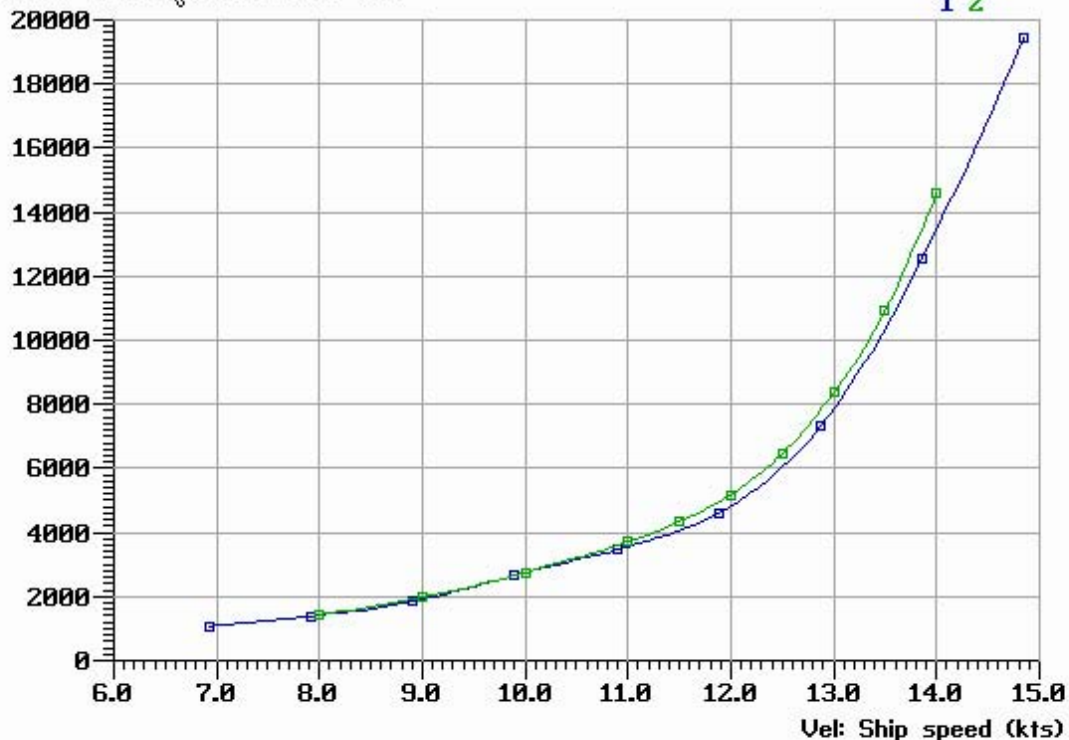Graph    Parameters

Rbare: Bare-Hull resistance (lbs)

1  2

Vel: Ship speed (kts)

# RIDGELEY-NEVITT TRAWLER SERIES RESISTANCE

## NTNU-M231

18-Mar-2012  15:37:08

| | | | | | |
|---|---|---|---|---|---|
| Length BP | | 29.89 m | | | |
| Beam Waterline | | 6.08 m | 4.916 | Allowable range | 3.22 - 5.75 |
| Draft-Midship | | 2.20 m | 2.764 | Allowable range | 1.94 - 2.42 |
| Displacement volume | 180.4 | 176.0 $\Delta/(0.01\Lambda)3$ | 188.44 | Allowable range | 200 - 500 |
| Block coefficient | | 0.440 | | Allowable range | 0.400 - 0.598 |
| Prismatic coefficient | | 0.595 | 0.595 | Allowable range | 0.554 - 0.700 |
| Midship coefficient | | 0.740 | | Allowable range | 0.729 - 0.810 |
| Wetted surface area | 202.108 | 198.850 m3-Mumford | 6.332 | Allowable range | 5.198 - 6.255 |
| Water density | | 1.0259 t/m3 | 1.0250 at 19oC | $\rightarrow$ | |
| Water viscosity | | 1.18831 x 10-6 m2/s | 1.07854 x 10-6 at 19oC | | |
| Correlation allowance | | 0.0004 | | | |

Displacement 180.56 t

*exceeds

| V/L | V | 10-6Rn | 103CF | 103CR | 103CT | RT | PE |
|---|---|---|---|---|---|---|---|
| | kn | | ITTC'57 | | | kN | kW |
| 0.7 | 6.93 | 89.70 | 2.117 | 1.041 | 3.557 | 4.61 | 16.5 |
| 0.8 | 7.92 | 102.51 | 2.076 | 1.114 | 3.590 | 6.08 | 24.8 |
| 0.9 | 8.91 | 115.33 | 2.041 | 1.279 | 3.720 | 7.98 | 36.6 |
| 1.0 | 9.90 | 128.14 | 2.011 | 1.771 | 4.181 | 11.07 | 56.4 |
| 1.1 | 10.89 | 140.96 | 1.984 | 2.042 | 4.426 | 14.18 | 79.4 |
| 1.2 | 11.88 | 153.77 | 1.959 | 2.831 | 5.190 | 19.78 | 120.9 |
| 1.3 | 12.87 | 166.58 | 1.938 | 4.953 | 7.291 | 32.62 | 216.0 |
| 1.4 | 13.86 | 179.40 | 1.918 | 8.549 | 10.867 | 56.38 | 402.1 |
| 1.5 | 14.85 | 192.21 | 1.899 | 12.442 | 14.741 | 87.80 | 671.0 |

```
;**
;* NavCad model file   HydroComp, Inc. *
;**
;

[NavCad]
Version=3.00
Release=ReleaseA
Date=03/31/2000
Time=17:35:46.23
Precision=6
Description=Norwegian Coaster Mdl=231 Lpp/B= 4.914 B/T=2.762 Lpp/Vol=5.402 Lcb=-4.2A 1952

[Units]
Length=Meter
Area=SqMeter
Weight=MetricTon
Speed=Knot
Force=Pound
Power=Horsepower
Density=KgPerCuM
KinemVisc=SqMPerSec

[Condition]
rho=1025.86
nu=1.1883e-06

[Resistance]
ModShipCa=0.0004

[Hull]
HullType=Displ
Loading=LoadDraft
ChineType=RoundBilge
SternShape=Normal
BowShape=Normal
FlapBehind=No
LengthPP=29.885
LengthWL=31
BeamWL=6.082
Draft=2.202
LCBHull=16.198
WettedSurf=198.85
MaxSecArea=9.9105
HullDispl=180.4
HalfEntAng=12
MidshiCoef=0.74
WaterpCoef=0.688

[Speeds]
Speeds=8,9,10,11,11.5,12,12.5,13,13.5,14

[Results]
ResiCoef=0.0012853,0.0015719,0.0021656,0.0026346,0.0029078,0.003469,0.0044746,0.0061174,0.007932,0.0098944
BareResist=1455.37,1965.88,2768.99,3675.24,4226.35,5082.08,6457.4,8658.3,11332.9,14510.5
ModCfType=ITTC57
ModSource=ModelTest
ModLengthWL=3.1
FroudeLen=0.236041,0.265546,0.295051,0.324557,0.339309,0.354062,0.368814,0.383567,0.398319,0.413072
FroudeVol=0.555235,0.62464,0.694044,0.763449,0.798151,0.832853,0.867555,0.902257,0.93696,0.971662
HullReyNum=1.07365e+08,1.20786e+08,1.34206e+08,1.47627e+08,1.54337e+08,1.61047e+08,1.67758e+08,1.74468e+08,1.81178e+08,1.87889e+08
ResiMerit=0.00125513,0.00194274,0.00330432,0.00486412,0.00586765,0.00762203,0.0106679,0.0157746,0.0220574,0.0295903
BareMerit=0.00365934,0.00494296,0.00696227,0.00924091,0.0106266,0.0127782,0.0162363,0.0217702,0.0284951,0.0364849
```
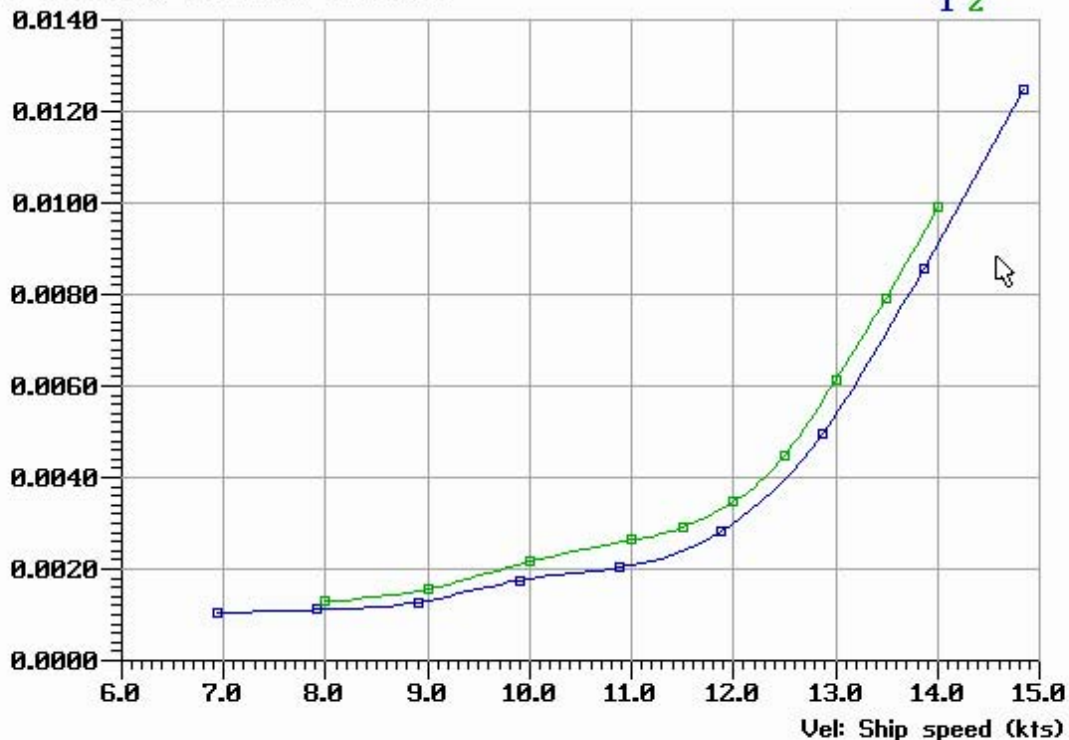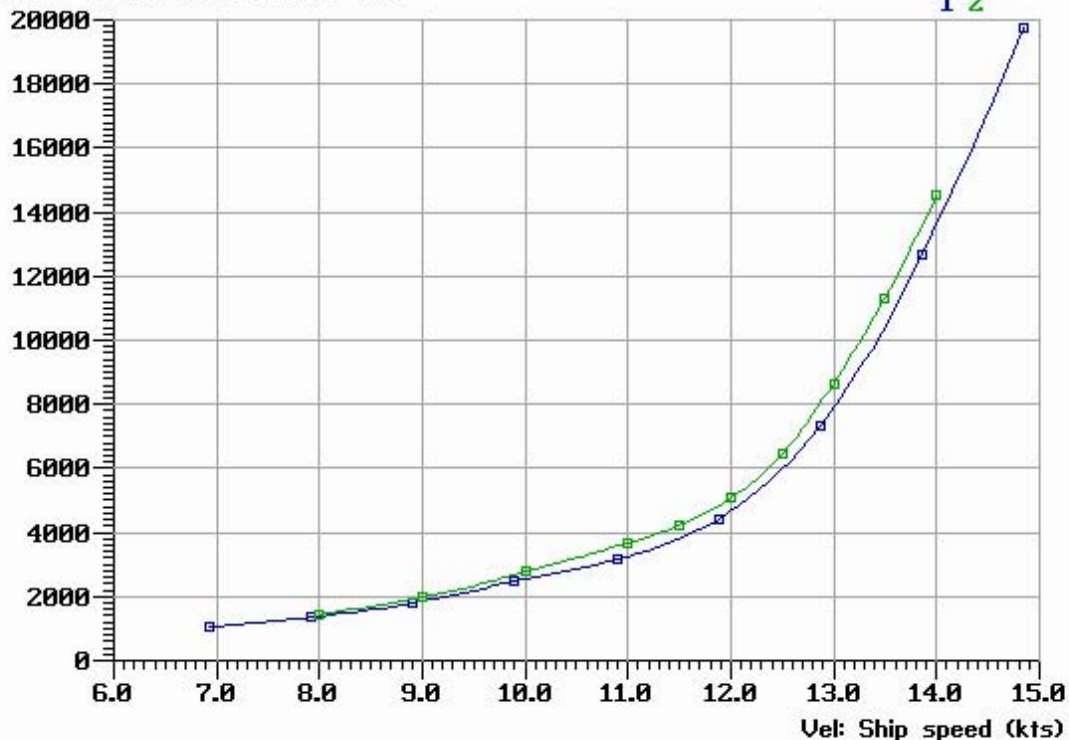
# RIDGELEY-NEVITT TRAWLER SERIES RESISTANCE

## NTNU-M261

18-Mar-2012  15:35:33

| | | | | | | |
|---|---|---|---|---|---|---|
| Length BP | | 29.89 | m | | | |
| Beam Waterline | | 5.99 | m | 4.990 | Allowable range | 3.22 - 5.75 |
| Draft-Midship | | 2.39 | m | 2.506 | Allowable range | 1.94 - 2.42 |
| Displacement volume | 180.4 | 176.0 | $\Delta/(0.01\Lambda)3$ | 188.44 | Allowable range | 200 - 500 |
| Block coefficient | | 0.411 | | | Allowable range | 0.400 - 0.598 |
| Prismatic coefficient | | 0.596 | 0.596 | | Allowable range | 0.554 - 0.700 |
| Midship coefficient | | 0.690 | | | Allowable range | 0.729 - 0.810 |
| Wetted surface area | 205.664 | 204.520 | m3-Mumford | 6.512 | Allowable range | 5.198 - 6.255 |
| Water density | | 1.0259 | t/m3 | 1.0250 at 19oC | $\rightarrow$ | |
| Water viscosity | | 1.18831 | x 10-6 m2/s  1.07854 x 10-6 at 19oC | | | |
| Correlation allowance | | 0.0004 | | | | |

Displacement             180.56 t

*exceeds

| V/L | V | 10-6Rn | 103CF | 103CR | 103CT | RT | PE |
|---|---|---|---|---|---|---|---|
| | kn | | ITTC'57 | | | kN | kW |
| 0.7 | 6.93 | 89.70 | 2.117 | 1.047 | 3.564 | 4.75 | 17.0 |
| 0.8 | 7.92 | 102.51 | 2.076 | 1.119 | 3.595 | 6.26 | 25.5 |
| 0.9 | 8.91 | 115.33 | 2.041 | 1.287 | 3.728 | 8.22 | 37.7 |
| 1.0 | 9.90 | 128.14 | 2.011 | 1.792 | 4.202 | 11.44 | 58.3 |
| 1.1 | 10.89 | 140.96 | 1.984 | 2.069 | 4.452 | 14.67 | 82.2 |
| 1.2 | 11.88 | 153.77 | 1.959 | 2.840 | 5.199 | 20.39 | 124.6 |
| 1.3 | 12.87 | 166.58 | 1.938 | 4.943 | 7.280 | 33.50 | 221.9 |
| 1.4 | 13.86 | 179.40 | 1.918 | 8.530 | 10.847 | 57.89 | 412.9 |
| 1.5 | 14.85 | 192.21 | 1.899 | 12.409 | 14.708 | 90.10 | 688.5 |

```
;**
;* NavCad model file   HydroComp, Inc. *
;**
;

[NavCad]
Version=3.00
Release=ReleaseA
Date=03/31/2000
Time=17:47:41.08
Precision=6
Description=Norwegian Coaster Mdl=261 Lpp/B= 4.99 B/T=2.505 Lpp/Vol=5.40 Lcb=-1.8A 1952

[Units]
Length=Meter
Area=SqMeter
Weight=MetricTon
Speed=Knot
Force=Pound
Power=Horsepower
Density=KgPerCuM
KinemVisc=SqMPerSec

[Condition]
rho=1025.86
nu=1.1883e-06

[Resistance]
ModShipCa=0.0004

[Hull]
HullType=Displ
Loading=LoadDraft
ChineType=RoundBilge
SternShape=Normal
BowShape=Normal
FlapBehind=No
LengthPP=29.885
LengthWL=31
BeamWL=5.989
Draft=2.391
LCBHull=15.48
WettedSurf=204.52
MaxSecArea=9.88059
HullDispl=180.4
HalfEntAng=11.8
MidshiCoef=0.69
WaterpCoef=0.698

[Speeds]
Speeds=8,9,10,11,11.5,12,12.5,13,13.5,14

[Results]
ResiCoef=0.0012692,0.0015256,0.0021898,0.0026195,0.0029246,0.003455,0.0043981,0.0056056,0.0071675,0.0091343
BareResist=1490.44,1998.53,2863.05,3768.63,4360.73,5214.4,6566.93,8365.33,10786.4,13994.4
ModCfType=ITTC57
ModSource=ModelTest
ModLengthWL=3.1
FroudeLen=0.236041,0.265546,0.295051,0.324557,0.339309,0.354062,0.368814,0.383567,0.398319,0.413072
FroudeVol=0.555235,0.62464,0.694044,0.763449,0.798151,0.832853,0.867555,0.902257,0.93696,0.971662
HullReyNum=1.07365e+08,1.20786e+08,1.34206e+08,1.47627e+08,1.54337e+08,1.61047e+08,1.67758e+08,1.74468e+08,1.81178e+08,1.87889e+08
ResiMerit=0.00127475,0.00193928,0.00343652,0.00497414,0.00606983,0.00780773,0.0107845,0.014867,0.0204998,0.0280961
BareMerit=0.00374751,0.00502504,0.00719877,0.00947573,0.0109645,0.0131109,0.0165117,0.0210335,0.027121,0.0351872
```
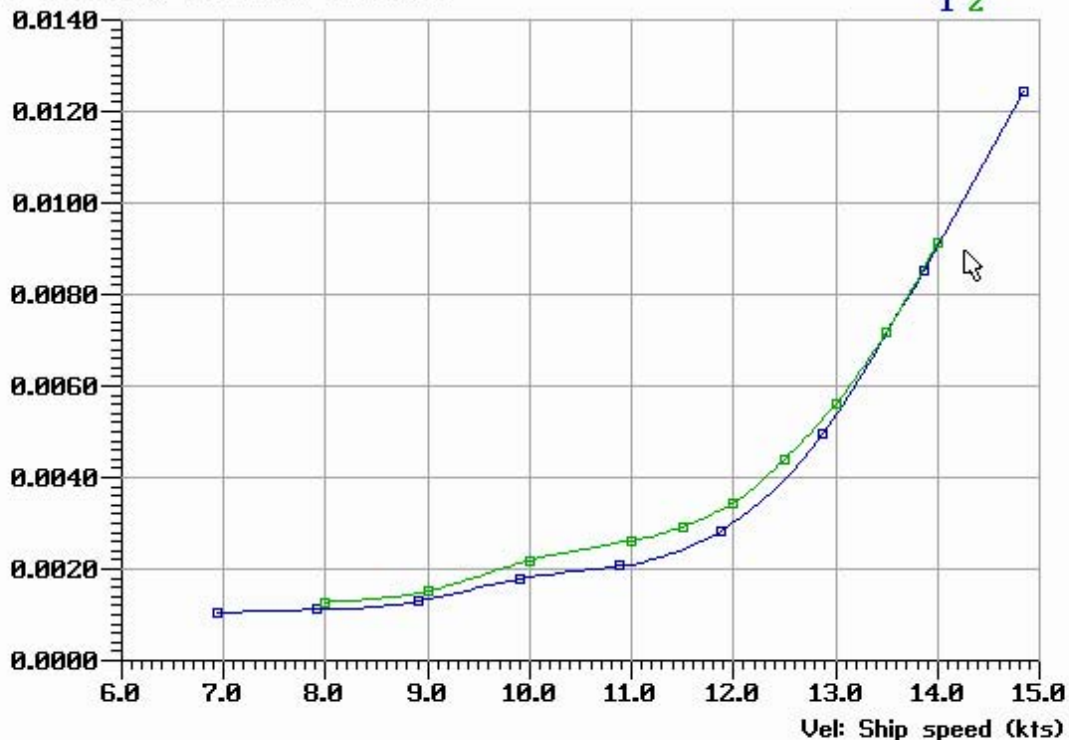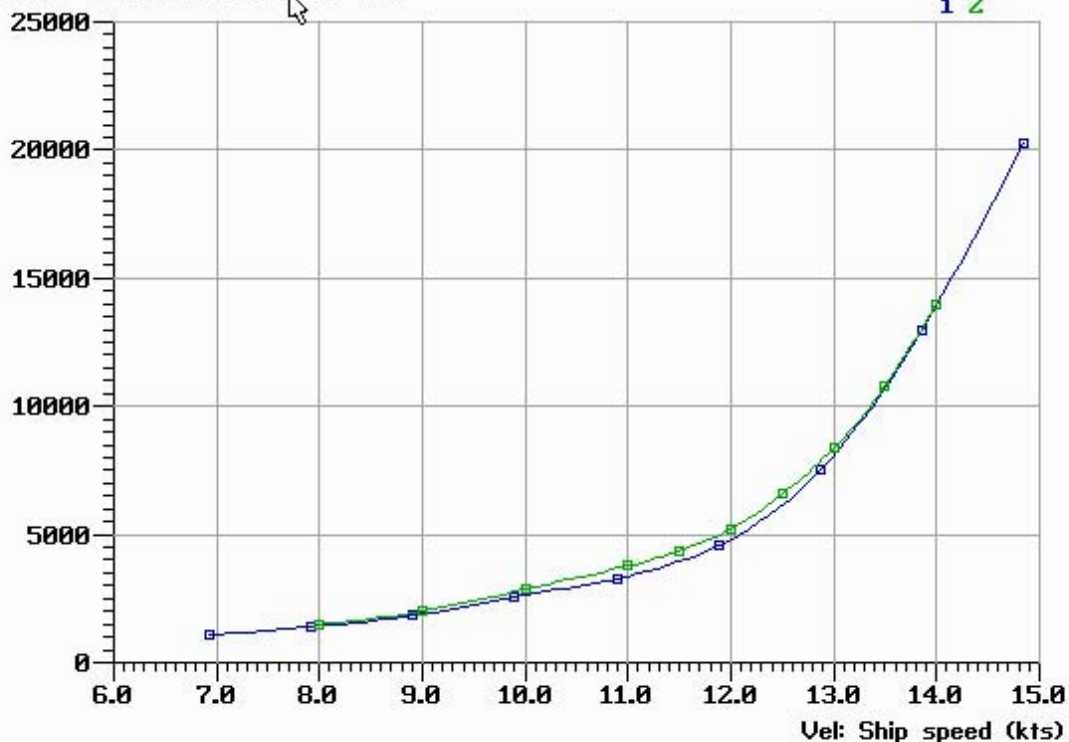
**RIDGELEY-NEVITT TRAWLER SERIES RESISTANCE**   NTNU-M262

18-Mar-2012  15:33:58

| | | | | | | |
|---|---|---|---|---|---|---|
| Length BP | | 29.89 | m | | | |
| Beam Waterline | | 5.58 | m | 5.357 | Allowable range | 3.22 - 5.75 |
| Draft-Midship | | 2.23 | m | 2.502 | Allowable range | 1.94 - 2.42 |
| Displacement volume | 180.4 | 176.0 | Δ/(0.01Λ)3 | 188.44 | Allowable range | 200 - 500 |
| Block coefficient | | 0.473 | | | Allowable range | 0.400 - 0.598 |
| Prismatic coefficient | | 0.595 | 0.595 | | Allowable range | 0.554 - 0.700 |
| Midship coefficient | | 0.795 | | | Allowable range | 0.729 - 0.810 |
| Wetted surface area | 201.267 | 195.860 | m3-Mumford | 6.236 | Allowable range | 5.198 - 6.255 |
| Water density | | 1.0259 | t/m3 | 1.0250 at 19oC | → | |
| Water viscosity | | 1.18831 | x 10-6 m2/s | 1.07854 x 10-6 at 19oC | | |
| Correlation allowance | | 0.0004 | | | | |

Displacement          180.56  t

*exceeds

| V/L | V | 10-6Rn | 103CF | 103CR | 103CT | RT | PE |
|---|---|---|---|---|---|---|---|
| | kn | | ITTC'57 | | | kN | kW |
| 0.7 | 6.93 | 89.70 | 2.117 | 1.043 | 3.559 | 4.55 | 16.2 |
| 0.8 | 7.92 | 102.51 | 2.076 | 1.115 | 3.591 | 5.99 | 24.4 |
| 0.9 | 8.91 | 115.33 | 2.041 | 1.281 | 3.722 | 7.86 | 36.0 |
| 1.0 | 9.90 | 128.14 | 2.011 | 1.777 | 4.187 | 10.92 | 55.6 |
| 1.1 | 10.89 | 140.96 | 1.984 | 2.050 | 4.433 | 13.99 | 78.4 |
| 1.2 | 11.88 | 153.77 | 1.959 | 2.833 | 5.193 | 19.50 | 119.2 |
| 1.3 | 12.87 | 166.58 | 1.938 | 4.950 | 7.288 | 32.11 | 212.7 |
| 1.4 | 13.86 | 179.40 | 1.918 | 8.543 | 10.861 | 55.51 | 395.9 |
| 1.5 | 14.85 | 192.21 | 1.899 | 12.432 | 14.732 | 86.43 | 660.4 |

```
;**
;* NavCad model file   HydroComp, Inc. *
;**
;
[NavCad]
Version=3.00
Release=ReleaseA
Date=03/31/2000
Time=17:46:10.95
Precision=6
Description=Norwegian Coaster Mdl=262 Lpp/B= 5.355 B/T=2.505 Lpp/Vol=5.401 Lcb=-1.8A 1952

[Units]
Length=Meter
Area=SqMeter
Weight=MetricTon
Speed=Knot
Force=Pound
Power=Horsepower
Density=KgPerCuM
KinemVisc=SqMPerSec

[Condition]
rho=1025.86
nu=1.1883e-06

[Resistance]
ModShipCa=0.0004

[Hull]
HullType=Displ
Loading=LoadDraft
ChineType=RoundBilge
SternShape=Normal
BowShape=Normal
FlapBehind=No
LengthPP=29.885
LengthWL=31
BeamWL=5.581
Draft=2.228
LCBHull=15.48
WettedSurf=195.86
MaxSecArea=9.8854
HullDispl=180.4
HalfEntAng=11
MidshiCoef=0.795
WaterpCoef=0.698

[Speeds]
Speeds=8,9,10,11,11.5,12,12.5,13,13.5,14

[Results]
ResiCoef=0.0011519,0.001377,0.0020403,0.0024792,0.002793,0.0034073,0.0044159,0.0058595,0.0076242,0.0095146
BareResist=1382.46,1841.96,2652.46,3507.59,4072.05,4952.55,6305.49,8267.6,10827.2,13847.4
ModCfType=ITTC57
ModSource=ModelTest
ModLengthWL=3.1
FroudeLen=0.236041,0.265546,0.295051,0.324557,0.339309,0.354062,0.368814,0.383567,0.398319,0.413072
FroudeVol=0.555235,0.62464,0.694044,0.763449,0.798151,0.832853,0.867555,0.902257,0.93696,0.971662
HullReyNum=1.07365e+08,1.20786e+08,1.34206e+08,1.47627e+08,1.54337e+08,1.61047e+08,1.67758e+08,1.74468e+08,1.81178e+08,1.87889e+08
ResiMerit=0.00110795,0.00167627,0.00306633,0.00450839,0.00555125,0.0073739,0.0103696,0.0148824,0.0208827,0.0280266
BareMerit=0.003476,0.00463137,0.00666927,0.00881937,0.0102386,0.0124526,0.0158543,0.0207878,0.0272235,0.0348175
```
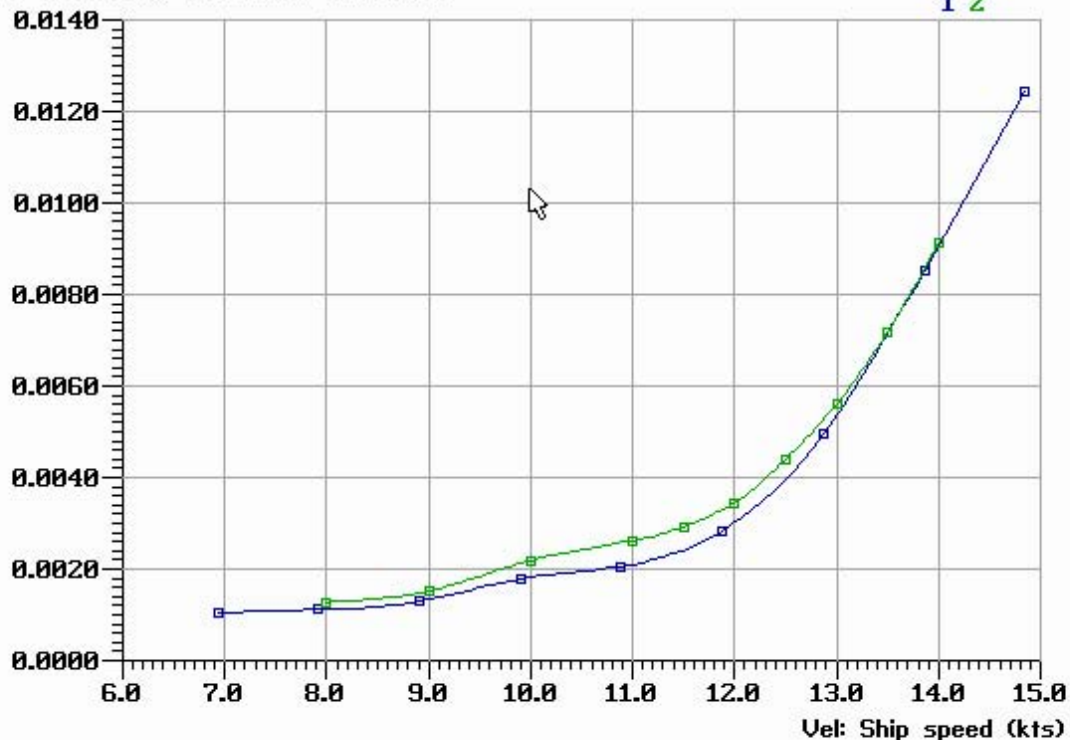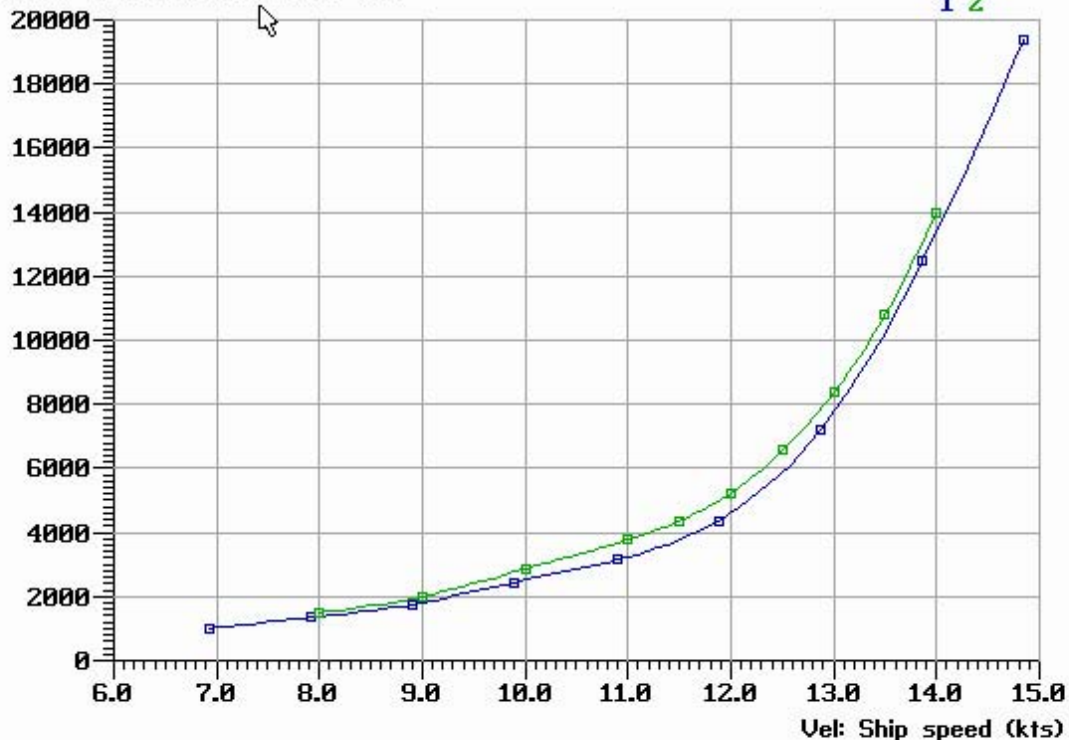
**RIDGELEY-NEVITT TRAWLER SERIES RESISTANCE**                    NTNU-M290

18-Mar-2012  15:31:29

| | | | | | | |
|---|---|---|---|---|---|---|
| Length BP | | 29.89 | m | | | |
| Beam Waterline | | 5.40 | m | 5.535 | Allowable range | 3.22 - 5.75 |
| Draft-Midship | | 2.16 | m | 2.505 | Allowable range | 1.94 - 2.42 |
| Displacement volume | 180.4 | 176.0 | Δ/(0.01Λ)3 | 188.44 | Allowable range | 200 - 500 |
| Block coefficient | | 0.506 | | | Allowable range | 0.400 - 0.598 |
| Prismatic coefficient | | 0.595 | 0.595 | | Allowable range | 0.554 - 0.700 |
| Midship coefficient | | 0.850 | | | Allowable range | 0.729 - 0.810 |
| Wetted surface area | 199.504 | 194.130 | m3-Mumford | 6.181 | Allowable range | 5.198 - 6.255 |
| Water density | | 1.0259 | t/m3 | 1.0250 at 19oC | | → |
| Water viscosity | | 1.18831 | x 10-6 m2/s | 1.07854 x 10-6 at 19oC | | |
| Correlation allowance | | 0.0004 | | | | |

Displacement                    180.56  t

*exceeds

| V/L | V | 10-6Rn | 103CF | 103CR | 103CT | RT | PE |
|---|---|---|---|---|---|---|---|
| | kn | | ITTC'57 | | | kN | kW |
| 0.7 | 6.93 | 89.70 | 2.117 | 1.041 | 3.558 | 4.51 | 16.1 |
| 0.8 | 7.92 | 102.51 | 2.076 | 1.114 | 3.590 | 5.94 | 24.2 |
| 0.9 | 8.91 | 115.33 | 2.041 | 1.280 | 3.721 | 7.79 | 35.7 |
| 1.0 | 9.90 | 128.14 | 2.011 | 1.773 | 4.184 | 10.81 | 55.1 |
| 1.1 | 10.89 | 140.96 | 1.984 | 2.045 | 4.429 | 13.85 | 77.6 |
| 1.2 | 11.88 | 153.77 | 1.959 | 2.832 | 5.191 | 19.32 | 118.1 |
| 1.3 | 12.87 | 166.58 | 1.938 | 4.952 | 7.290 | 31.84 | 210.9 |
| 1.4 | 13.86 | 179.40 | 1.918 | 8.547 | 10.864 | 55.03 | 392.5 |
| 1.5 | 14.85 | 192.21 | 1.899 | 12.438 | 14.738 | 85.70 | 654.9 |

```
;**
;* NavCad model file   HydroComp, Inc. *
;**
;
[NavCad]
Version=3.00
Release=ReleaseA
Date=03/31/2000
Time=17:52:57.34
Precision=6
Description=Norwegian Coaster Mdl=290 Lpp/B= 5.355 B/T=2.505 Lpp/Vol=5.402 Lcb=-1.8A 1952

[Units]
Length=Meter
Area=SqMeter
Weight=MetricTon
Speed=Knot
Force=Pound
Power=Horsepower
Density=KgPerCuM
KinemVisc=SqMPerSec

[Condition]
rho=1025.86
nu=1.1883e-06

[Resistance]
ModShipCa=0.0004

[Hull]
HullType=Displ
Loading=LoadDraft
ChineType=RoundBilge
SternShape=Normal
BowShape=Normal
FlapBehind=No
LengthPP=29.885
LengthWL=31
BeamWL=5.399
Draft=2.155
LCBHull=15.48
WettedSurf=194.13
MaxSecArea=9.88962
HullDispl=180.4
HalfEntAng=10.7
MidshiCoef=0.85
WaterpCoef=0.698

[Speeds]
Speeds=8,9,10,11,11.5,12,12.5,13,13.5,14

[Results]
ResiCoef=0.001207,0.001413,0.002127,0.002586,0.00282,0.003411,0.004429,0.0059178,0.007899,0.0102051
BareResist=1391.1,1842.97,2680.46,3553.16,4057.47,4912.05,6261.55,8252.94,11028.7,14526.9
ModCfType=ITTC57
ModSource=ModelTest
ModLengthWL=3.1
FroudeLen=0.236041,0.265546,0.295051,0.324557,0.339309,0.354062,0.368814,0.383567,0.398319,0.413072
FroudeVol=0.555235,0.62464,0.694044,0.763449,0.798151,0.832853,0.867555,0.902257,0.93696,0.971662
HullReyNum=1.07365e+08,1.20786e+08,1.34206e+08,1.47627e+08,1.54337e+08,1.61047e+08,1.67758e+08,1.74468e+08,1.81178e+08,1.87889e+08
ResiMerit=0.00115069,0.0017049,0.00316839,0.00466106,0.00555541,0.0073167,0.0103085,0.0148977,0.0214442,0.0297951
BareMerit=0.00349774,0.0046339,0.00673966,0.00893397,0.010202,0.0123507,0.0157438,0.0207509,0.0277302,0.036526
```
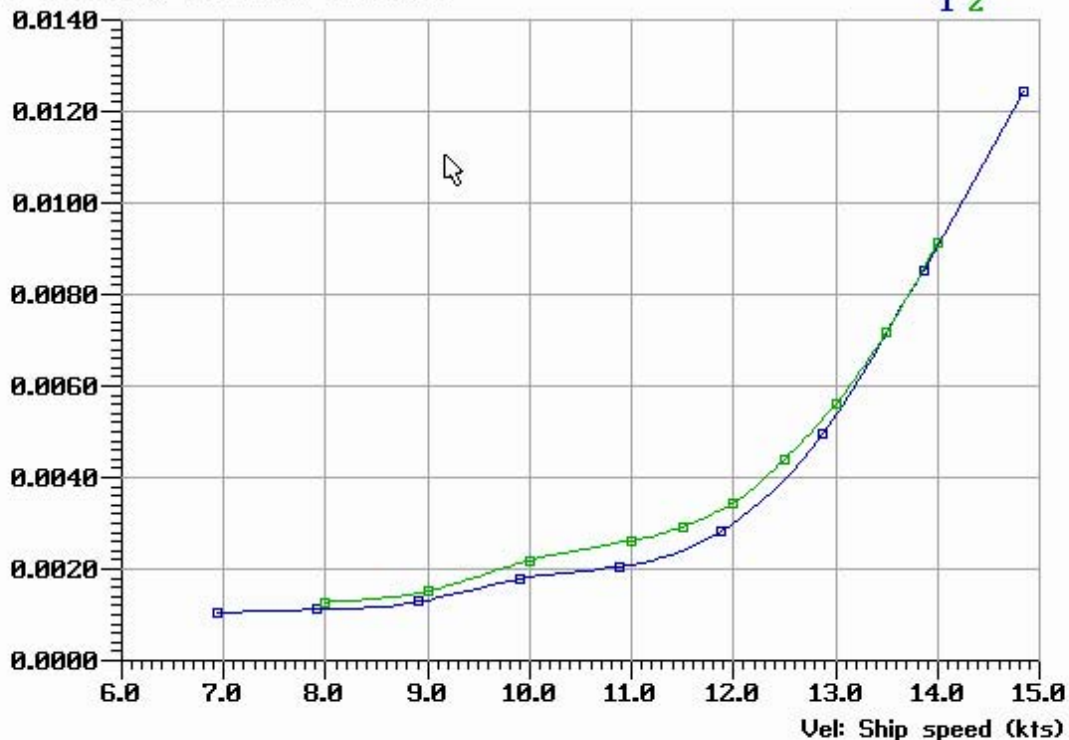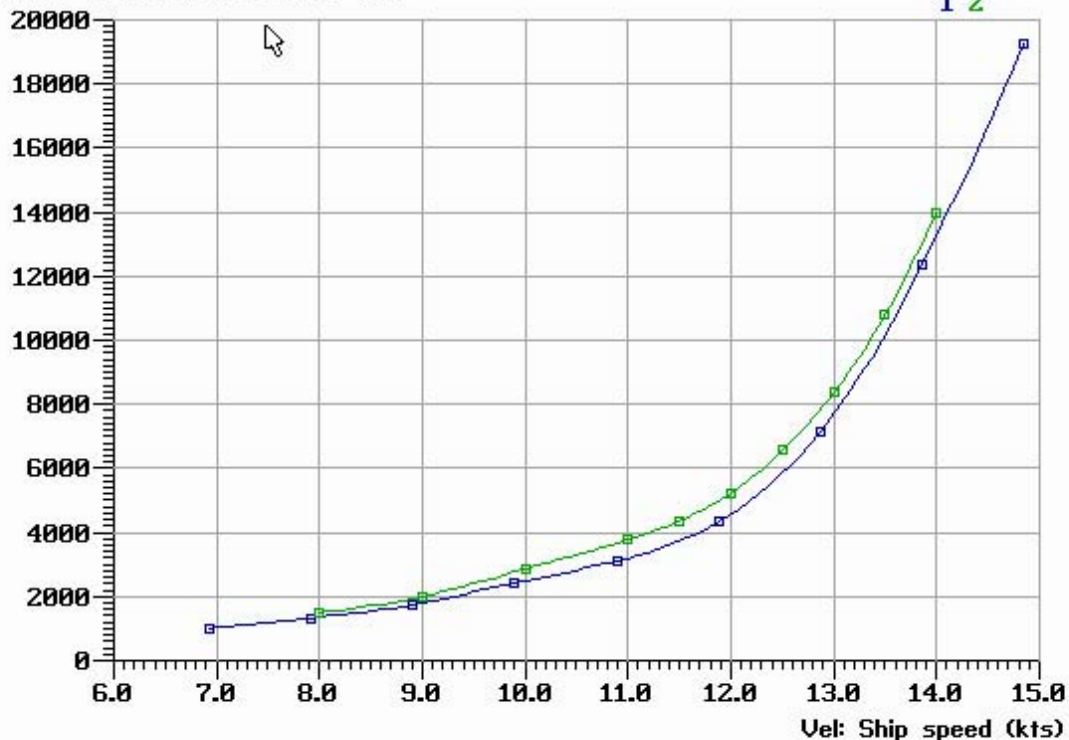
# RIDGELEY-NEVITT TRAWLER SERIES RESISTANCE  NTNU-M316

18-Mar-2012  15:25:01

| | | | | | |
|---|---|---|---|---|---|
| Length BP | | 32.00 m | | | |
| Beam Waterline | | 7.00 m | 4.571 | Allowable range | 3.22 - 5.75 |
| Draft-Midship | | 3.10 m | 2.258 | Allowable range | 1.94 - 2.42 |
| Displacement volume | 1993 | 435.9 Δ/(0.01Λ)3 | 380.34 | Allowable range | 200 - 500 |
| Block coefficient | | 0.628 | | Allowable range | 0.400 - 0.598 |
| Prismatic coefficient | | 0.701 | 0.701 | Allowable range | 0.554 - 0.700 |
| Midship coefficient | | 0.896 | | Allowable range | 0.729 - 0.810 |
| Wetted surface area | 318.612 | 304.100 m3-Mumford | 5.290 | Allowable range | 5.198 - 6.255 |
| Water density | | 1.0259 t/m3 | 1.0250 at 19oC | → | |
| Water viscosity | | 1.18831 x 10-6 m2/s | 1.07854 x 10-6 at 19oC | | |
| Correlation allowance | | 0.0004 | | | |

Displacement          447.19 t

| V/L | V | 10-6Rn | 103CF | 103CR | 103CT | RT | PE |
|---|---|---|---|---|---|---|---|
| | kn | | ITTC'57 | | | kN | kW |
| 0.7 | 7.17 | 99.36 | 2.085 | 1.522 | 4.007 | 8.51 | 31.4 |
| 0.8 | 8.20 | 113.56 | 2.046 | 2.090 | 4.536 | 12.58 | 53.1 |
| 0.9 | 9.22 | 127.75 | 2.011 | 2.748 | 5.159 | 18.11 | 85.9 |
| 1.0 | 10.25 | 141.95 | 1.982 | 4.872 | 7.253 | 31.44 | 165.7 |
| 1.1 | 11.27 | 156.14 | 1.955 | 8.013 | 10.368 | 54.37 | 315.3 |
| 1.2 | 12.30 | 170.34 | 1.932 | 9.518 | 11.849 | 73.95 | 467.8 |
| 1.3 | 13.32 | 184.53 | 1.910 | 10.581 | 12.891 | 94.42 | 647.0 |
| 1.4 | 14.34 | 198.73 | 1.891 | 14.215 | 16.506 | 140.22 | 1034.7 |
| 1.5 | 15.37 | 212.92 | 1.873 | 19.414 | 21.686 | 211.48 | 1672.1 |

```
;**********************************************
;* NavCad model file        HydroComp, Inc. *
;**********************************************
;

[NavCad]
Version=3.00
Release=ReleaseA
Date=04/01/2000
Time=08:30:30.46
Precision=6
Description=Norwegian Coastal Lpp/B= 4.57 B/T=2.26 Cp=0.650 Lcb=2.25F Model= M 316 1954

[Units]
Length=Meter
Area=SqMeter
Weight=MetricTon
Speed=Knot
Force=Newton
Power=Horsepower
Density=KgPerCuM
KinemVisc=SqMPerSec

[Condition]
rho=1026
nu=1.1883e-06

[Resistance]
ModShipCa=0.0004

[Hull]
HullType=Displ
Loading=LoadDraft
ChineType=RoundBilge
SternShape=Normal
BowShape=Normal
FlapBehind=No
LengthPP=32
LengthWL=34.21
BeamWL=7
Draft=3.1
LCBHull=16.335
WettedSurf=304.1
MaxSecArea=19.4432
HullDispl=446.8
HalfEntAng=27.5
MidshiCoef=0.896
WaterpCoef=0.778

[Speeds]
Speeds=6,7,8,8.5,9,9.5,10,10.5,11

[Results]
ResiCoef=0.0011943,0.0014538,0.001598,0.0018808,0.002503,0.0037864,0.0057792,0.0076171,0.0089116
BareResist=5519.16,7943.1,10651.6,12816,16394.4,22991.9,33644.4,45397.5,56227.5
ModCfType=ITTC57
ModSource=ModelTest
ModLengthWL=4.56
FroudeLen=0.168521,0.196607,0.224694,0.238738,0.252781,0.266824,0.280868,0.294911,0.308955
FroudeVol=0.358016,0.417685,0.477354,0.507189,0.537024,0.566858,0.596693,0.626527,0.656362
HullReyNum=8.88621e+07,1.03672e+08,1.18483e+08,1.25888e+08,1.33293e+08,1.40698e+08,1.48104e+08,1.55509e+08,1.62914e+08
ResiMerit=0.000405129,0.00067124,0.000963682,0.00128043,0.00191039,0.00321996,0.00544559,0.00791307,0.0101606
BareMerit=0.00560307,0.00806385,0.0108135,0.0130108,0.0166436,0.0233414,0.0341558,0.0460877,0.0570823
```
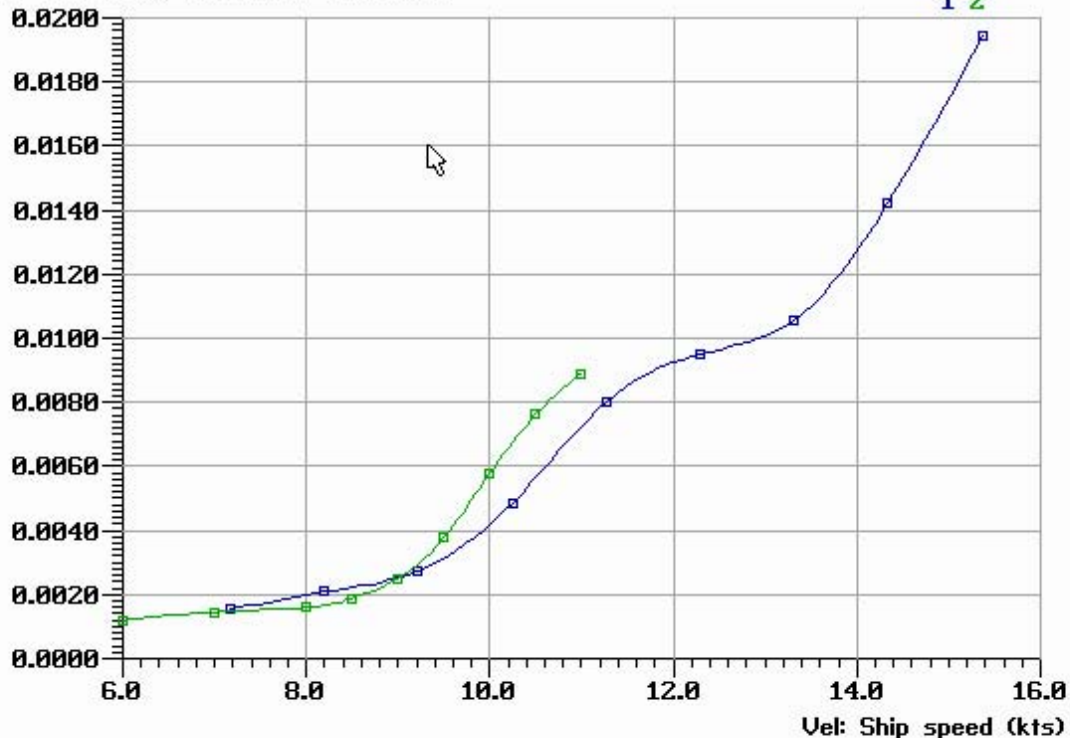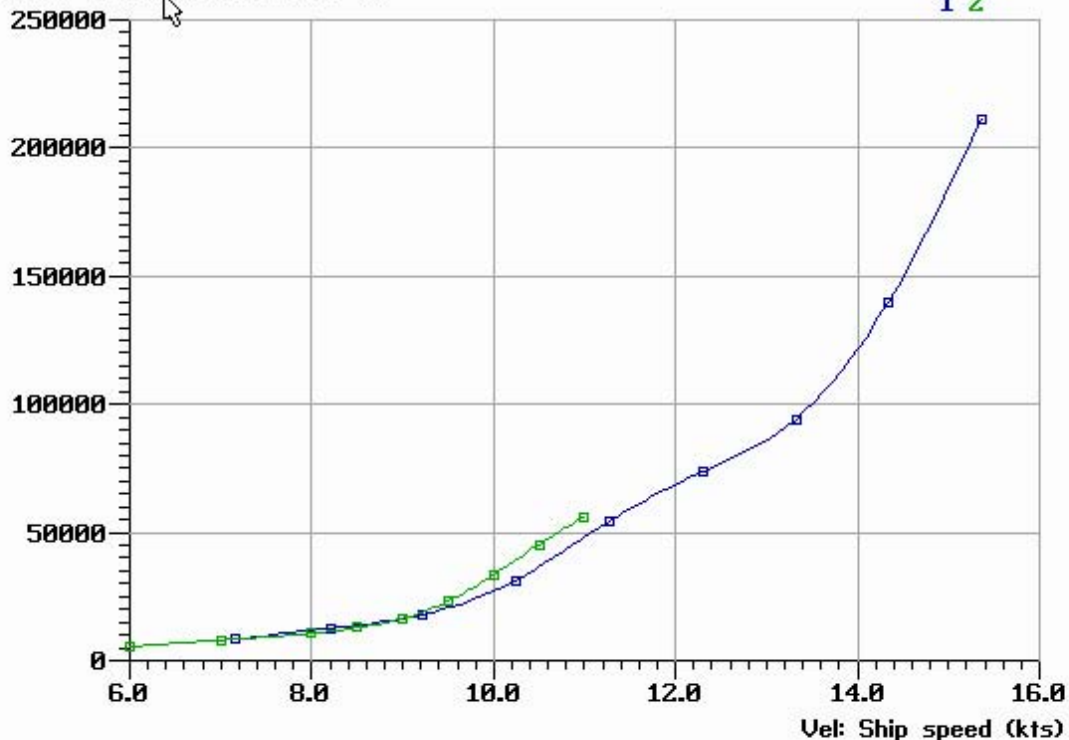
RIDGELEY-NEVITT TRAWLER SERIES RESISTANCE

18-Mar-2012 15:27:25

Length BP		32.00 m			
Beam Waterline		8.00 m	4.000	Allowable range	3.22 - 5.75
Draft-Midship		3.10 m	2.581	Allowable range	1.94 - 2.42
Displacement volume	480.7	469.0 Δ/(0.01Λ)3	409.20	Allowable range	200 - 500
Block coefficient		0.591		Allowable range	0.400 - 0.598
Prismatic coefficient		0.668	0.668	Allowable range	0.554 - 0.700
Midship coefficient		0.885		Allowable range	0.729 - 0.810
Wetted surface area	331.372	316.600 m3-Mumford	5.245	Allowable range	5.198 - 6.255
Water density		1.0259 t/m3	1.0250 at 19oC	→	
Water viscosity		1.18831 x 10-6 m2/s	1.07854 x 10-6 at 19oC		
Correlation allowance		0.0004			

Displacement   481.12 t

V/L	V	10-6Rn	103CF	103CR	103CT	RT	PE
	kn		ITTC'57			kN	kW
0.7	7.17	99.36	2.085	1.384	3.870	8.56	31.6
0.8	8.20	113.56	2.046	1.758	4.203	12.14	51.2
0.9	9.22	127.75	2.011	2.303	4.714	17.23	81.7
1.0	10.25	141.95	1.982	4.232	6.614	29.84	157.3
1.1	11.27	156.14	1.955	6.276	8.631	47.12	273.2
1.2	12.30	170.34	1.932	7.253	9.585	62.28	393.9
1.3	13.32	184.53	1.910	9.114	11.424	87.12	597.0
1.4	14.34	198.73	1.891	14.201	16.492	145.86	1076.4
1.5	15.37	212.92	1.873	20.864	23.137	234.90	1857.3

```
;*********************************************
;* NavCad model file        HydroComp, Inc. *
;*********************************************
;
[NavCad]
Version=3.00
Release=ReleaseA
Date=04/01/2000
Time=08:28:57.47
Precision=6
Description=Norwegian Coastal Lpp/B= 4.00 B/T=2.58 Cp=0.620 Lcb=0.87F Model= M 318 1954

[Units]
Length=Meter
Area=SqMeter
Weight=MetricTon
Speed=Knot
Force=Newton
Power=Horsepower
Density=KgPerCuM
KinemVisc=SqMPerSec

[Condition]
rho=1026
nu=1.1883e-06

[Resistance]
ModShipCa=0.0004

[Hull]
HullType=Displ
Loading=LoadDraft
ChineType=RoundBilge
SternShape=Normal
BowShape=Normal
FlapBehind=No
LengthPP=32
LengthWL=34.21
BeamWL=8
Draft=3.1
LCBHull=16.807
WettedSurf=316.6
MaxSecArea=21.948
HullDispl=480.7
HalfEntAng=23
MidshiCoef=0.885
WaterpCoef=0.736

[Speeds]
Speeds=6,7,8,8.5,9,9.5,10,10.5,11

[Results]
ResiCoef=0.0013068,0.0015389,0.0018388,0.0020706,0.0025963,0.0034885,0.0045054,0.0054873,0.0064391
BareResist=5920.11,8448.84,11751.9,13932.3,17393.1,22781.3,29552,37170.5,45679.2
ModCfType=ITTC57
ModSource=ModelTest
ModLengthWL=4.56
FroudeLen=0.168521,0.196607,0.224694,0.238738,0.252781,0.266824,0.280868,0.294911,0.308955
FroudeVol=0.353678,0.412625,0.471571,0.501044,0.530518,0.559991,0.589464,0.618937,0.64841
HullReyNum=8.88621e+07,1.03672e+08,1.18483e+08,1.25888e+08,1.33293e+08,1.40698e+08,1.48104e+08,1.55509e+08,1.62914e+08
ResiMerit=0.000428965,0.00068757,0.00107306,0.00136409,0.00191757,0.00287076,0.00410813,0.0055163,0.0071043
BareMerit=0.00558627,0.00797239,0.0110892,0.0131466,0.0164123,0.0214967,0.0278855,0.0350744,0.0431032
```
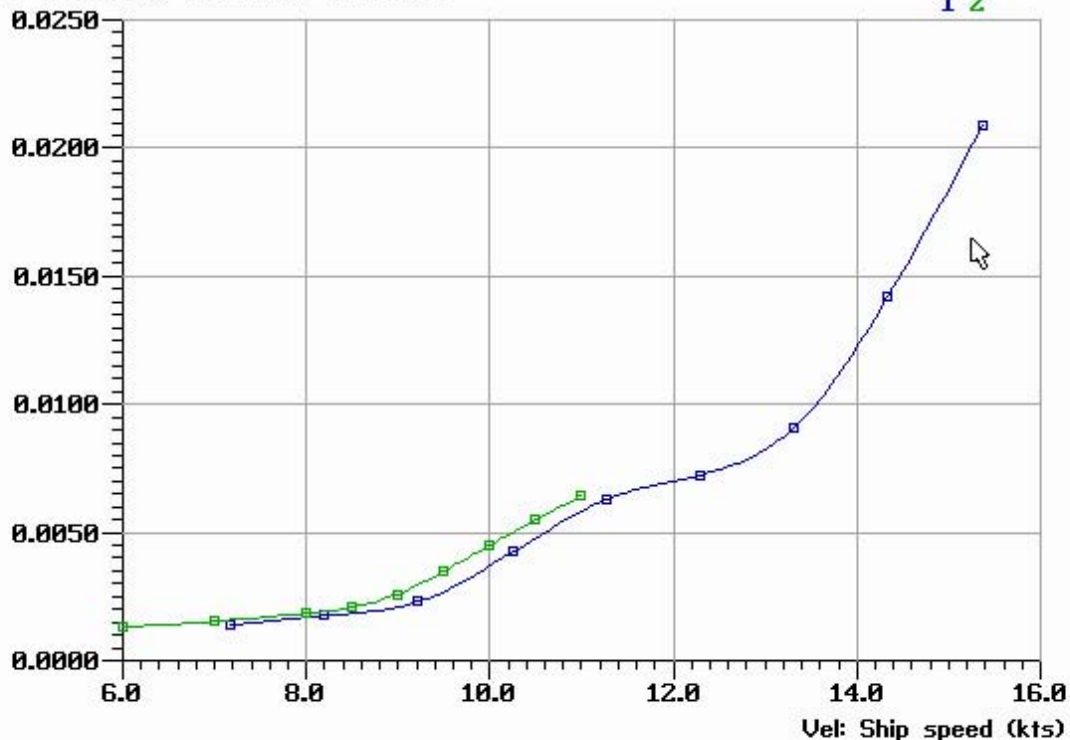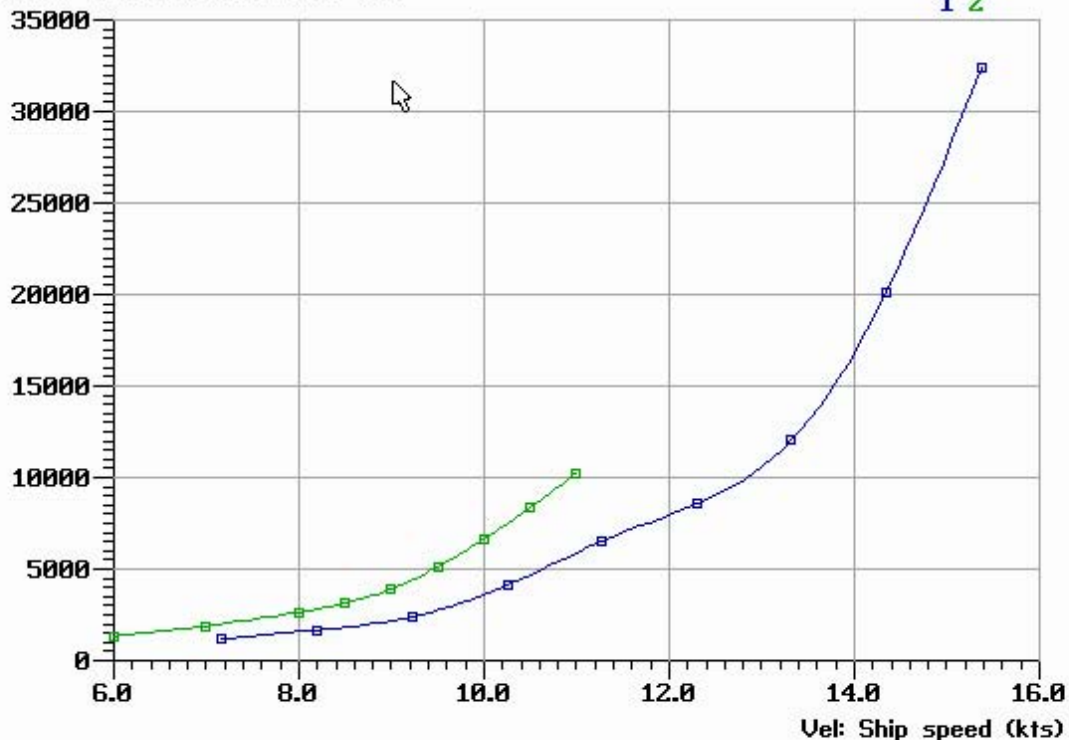
RIDGELEY-NEVITT TRAWLER SERIES RESISTANCE   NTNU-M352

18-Mar-2012 15:29:03

Length BP		70.00 m			
Beam Waterline		11.58 m	6.045	Allowable range	3.22 - 5.75
Draft-Midship		4.90 m	2.363	Allowable range	1.94 - 2.42
Displacement volume	2475	2414.6 $\Delta/(0.01\Lambda)3$	201.28	Allowable range	200 - 500
Block coefficient		0.608		Allowable range	0.400 - 0.598
Prismatic coefficient		0.619	0.619	Allowable range	0.554 - 0.700
Midship coefficient		0.982		Allowable range	0.729 - 0.810
Wetted surface area	1111.035	1051.410 m3-Mumford	5.842	Allowable range	5.198 - 6.255
Water density		1.0259 t/m3	1.0250 at 19oC	$\rightarrow$	
Water viscosity		1.18831 x 10-6 m2/s	1.07854 x 10-6 at 19oC		
Correlation allowance		0.0004			

Displacement   2,477.17 t

V/L	V	10-6Rn	103CF	103CR	103CT	RT	PE
	kn		ITTC'57			kN	kW
0.7	10.61	321.47	1.771	1.149	3.321	53.34	291.1
0.8	12.12	367.40	1.740	1.240	3.380	70.92	442.3
0.9	13.64	413.32	1.713	1.428	3.541	94.02	659.7
1.0	15.15	459.25	1.690	2.287	4.377	143.48	1118.6
1.1	16.67	505.17	1.669	2.774	4.843	192.09	1647.3
1.2	18.19	551.10	1.650	3.317	5.368	253.37	2370.4
1.3	19.70	597.02	1.633	5.113	7.146	395.89	4012.4
1.4	21.22	642.95	1.618	8.650	10.668	685.39	7480.7
1.5	22.73	688.87	1.604	12.760	14.764	1088.89	12733.8

```
;**********************************************
;* NavCad model file        HydroComp, Inc. *
;**********************************************
;
[NavCad]
Version=3.00
Release=ReleaseA
Date=04/01/2000
Time=09:00:14.00
Precision=6
Description=Norway-Trondheim 1956 Model= 352 Based Cs L/B=6.255 B/T=2.364 Lcb=+0.6F

[Units]
Length=Meter
Area=SqMeter
Weight=MetricTon
Speed=Knot
Force=Newton
Power=Horsepower
Density=KgPerCuM
KinemVisc=SqMPerSec

[Condition]
rho=1026
nu=1.1883e-06

[Resistance]
ModShipCa=0.0004

[Hull]
HullType=Displ
Loading=LoadDraft
ChineType=HardChine
SternShape=Normal
BowShape=VShape
FlapBehind=No
LengthPP=70
LengthWL=72.45
BeamWL=11.582
Draft=4.9
LCBHull=35.79
WettedSurf=1051.41
MaxSecArea=55.7303
HullDispl=2475
HalfEntAng=15
MidshiCoef=0.982
WaterpCoef=0.725

[Speeds]
Speeds=11,12,13,14,14.5,15,15.5,16,17,18

[Results]
ResiCoef=0.0012648,0.0013743,0.0014764,0.0019979,0.0024318,0.0028042,0.0030589,0.003161,0.0032422,0.0038047
BareResist=59068,72126.3,86672.3,114646,135770,157016,176148,191174,218629,270560
ModCfType=ITTC57
ModSource=ModelTest
ModLengthWL=5.175
FroudeLen=0.212301,0.231601,0.250901,0.270201,0.279851,0.289501,0.299151,0.308801,0.328102,0.347402
FroudeVol=0.493439,0.538297,0.583155,0.628013,0.650442,0.672871,0.6953,0.717729,0.762587,0.807445
HullReyNum=3.45019e+08,3.76385e+08,4.0775e+08,4.39116e+08,4.54798e+08,4.70481e+08,4.86164e+08,5.01846e+08,5.33212e+08,5.64577e+08
ResiMerit=0.000900073,0.0011639,0.00146744,0.00230303,0.00300701,0.00371075,0.00432214,0.00475921,0.00551072,0.00724997
BareMerit=0.0108254,0.0132186,0.0158844,0.0210111,0.0248826,0.0287763,0.0322825,0.0350365,0.0400681,0.0495854
```
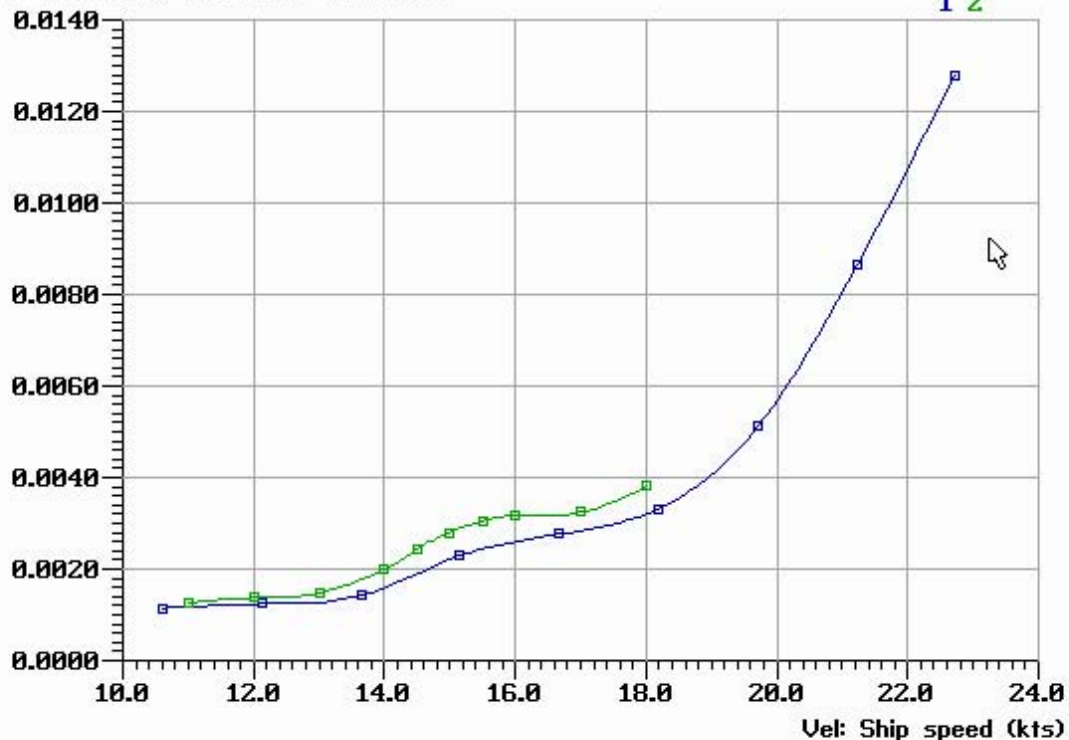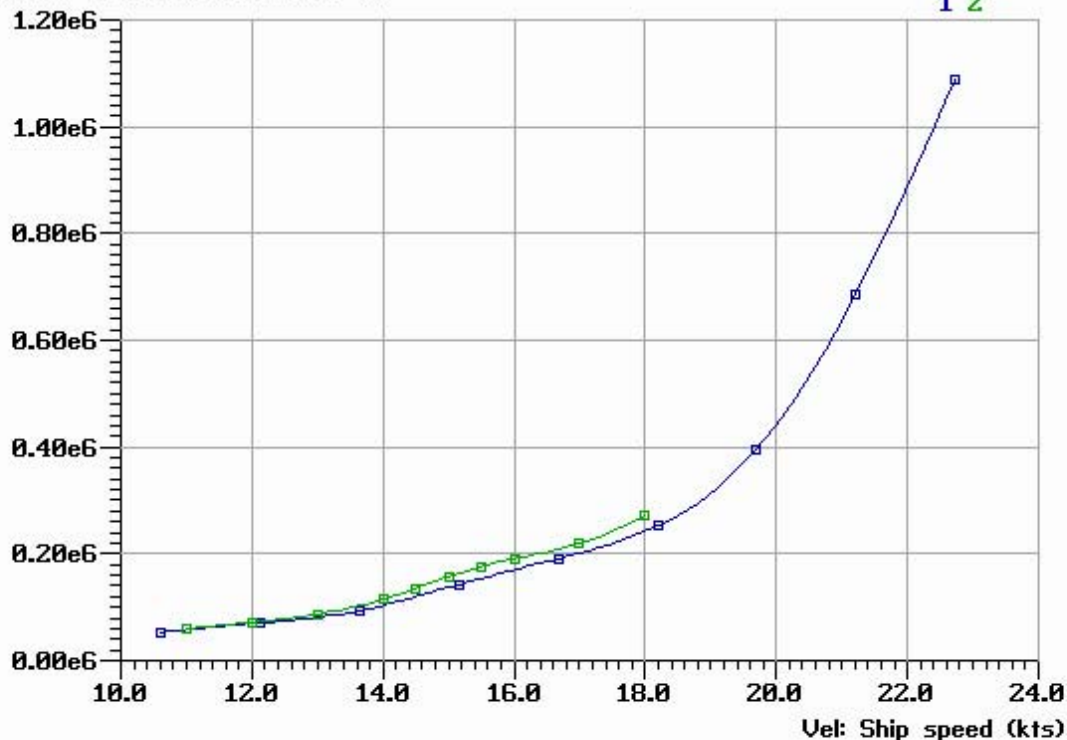
RIDGELEY-NEVITT TRAWLER SERIES RESISTANCE

NTNU-M407

18-Mar-2012 15:19:27

Length BP		70.00 m			
Beam Waterline		10.39 m	6.737	Allowable range	3.22 - 5.75
Draft-Midship		4.40 m	2.361	Allowable range	1.94 - 2.42
Displacement volume	1993	1944.4 Δ/(0.01Λ)3	162.08	Allowable range	200 - 500
Block coefficient		0.608		Allowable range	0.400 - 0.598
Prismatic coefficient		0.619	0.619	Allowable range	0.554 - 0.700
Midship coefficient		0.982		Allowable range	0.729 - 0.810
Wetted surface area	997.066	941.088 m3-Mumford	6.041	Allowable range	5.198 - 6.255
Water density		1.0259 t/m3	1.0250 at 19oC	→	
Water viscosity		1.18831 x 10-6 m2/s	1.07854 x 10-6 at 19oC		
Correlation allowance		0.0004			

Displacement   1,994.75 t

exceeds

V/L	V	$10^{-6}Rn$	10^3CF	10^3CR	10^3CT	RT	PE
	kn		ITTC'57			kN	kW
0.7	10.61	321.47	1.771	1.111	3.283	47.19	257.6
0.8	12.12	367.40	1.740	1.026	3.166	59.45	370.8
0.9	13.64	413.32	1.713	1.358	3.471	82.49	578.8
1.0	15.15	459.25	1.690	2.184	4.274	125.39	977.6
1.1	16.67	505.17	1.669	2.551	4.620	164.03	1406.7
1.2	18.19	551.10	1.650	2.703	4.753	200.82	1878.7
1.3	19.70	597.02	1.633	4.305	6.339	314.31	3185.6
1.4	21.22	642.95	1.618	7.384	9.402	540.66	5901.1
1.5	22.73	688.87	1.604	9.800	11.804	779.22	9112.3

```
;**********************************************
;* NavCad model file        HydroComp, Inc. *
;**********************************************
;

[NavCad]
Version=3.00
Release=ReleaseA
Date=04/03/2000
Time=11:30:18.60
Precision=6
Description=Norway-Trondheim 1956 Mdl= 407 L/B=6.970 B/T=2.364 Lcb/Lpp=+0.60F

[Units]
Length=Meter
Area=SqMeter
Weight=MetricTon
Speed=Knot
Force=Pound
Power=Horsepower
Density=KgPerCuM
KinemVisc=SqMPerSec

[Condition]
rho=1026
nu=1.1883e-06

[Resistance]
ModShipCa=0.0004

[Hull]
HullType=Displ
Loading=LoadDraft
ChineType=RoundBilge
SternShape=UShape
BowShape=UShape
FlapBehind=No
LengthPP=70
LengthWL=72.45
BeamWL=10.394
Draft=4.397
LCBHull=35.79
WettedSurf=941.088
MaxSecArea=44.8798
HullDispl=1993
HalfEntAng=14
MidshiCoef=0.982
WaterpCoef=0.73

[Speeds]
Speeds=11,12,13,14,15,15.5,16,16.5,17,18

[Results]
ResiCoef=0.0011087,0.0011735,0.0012817,0.0017784,0.0024538,0.0026962,0.0027965,0.0028309,0.0028788,0.0032509
BareResist=11343.2,13682.7,16495.1,21833.3,29330.3,32941.6,35787.9,38276.7,40976.1,49288.3
ModCfType=ITTC57
ModSource=ModelTest
ModLengthWL=5.175
FroudeLen=0.212301,0.231601,0.250901,0.270201,0.289501,0.299151,0.308801,0.318451,0.328102,0.347402
FroudeVol=0.511577,0.558084,0.604591,0.651098,0.697605,0.720859,0.744112,0.767366,0.790619,0.837126
HullReyNum=3.45019e+08,3.76385e+08,4.0775e+08,4.39116e+08,4.70481e+08,4.86164e+08,5.01846e+08,5.17529e+08,5.33212e+08,5.64577e+08
ResiMerit=0.000876993,0.00110469,0.00141602,0.00227867,0.00360926,0.0042346,0.00468006,0.00503836,0.00543884,0.00688565
BareMerit=0.00258162,0.00311409,0.00375417,0.00496911,0.00667537,0.00749726,0.00814507,0.00871149,0.00932585,0.0112177
```
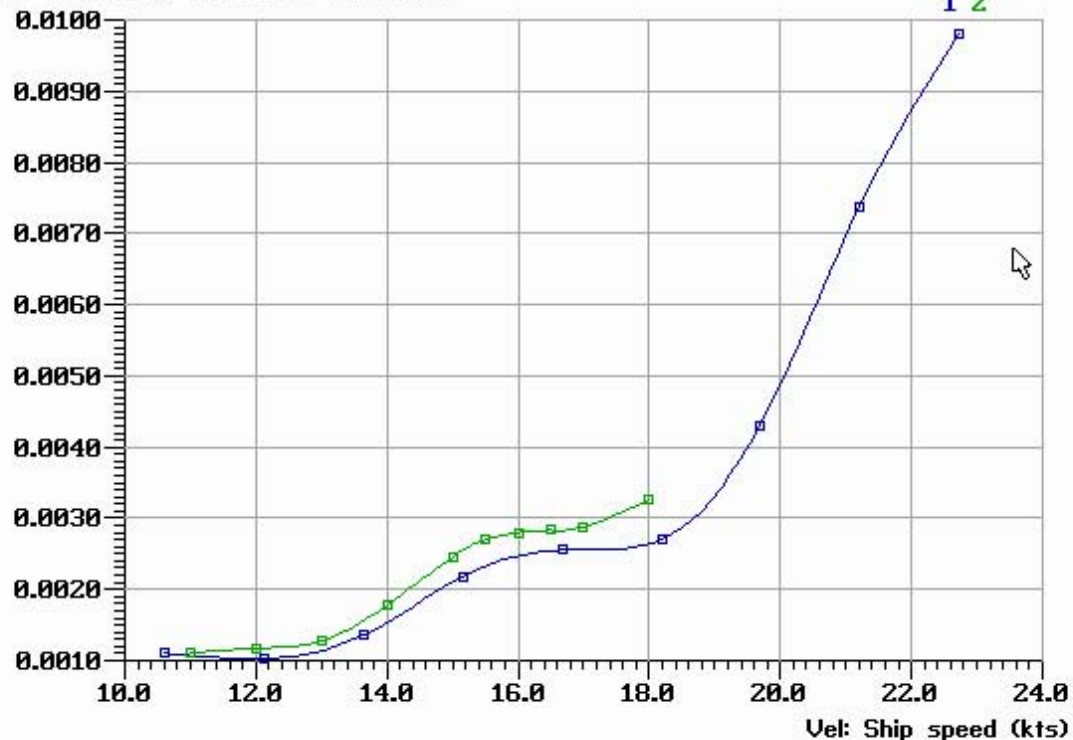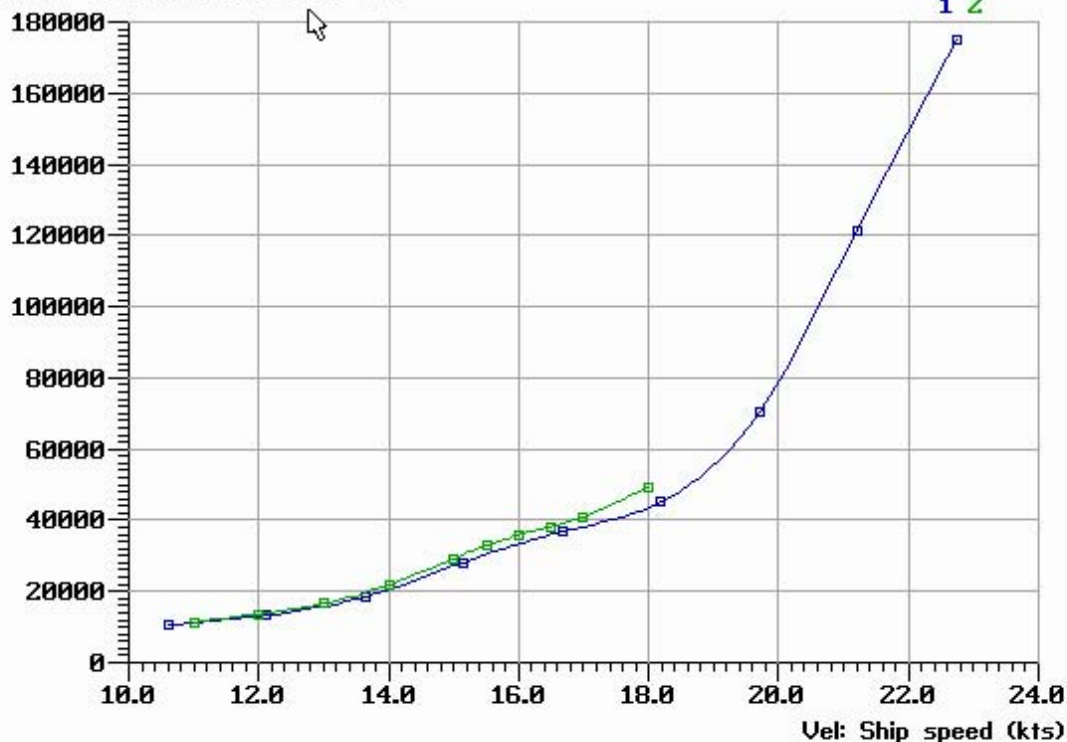
RIDGELEY-NEVITT TRAWLER SERIES RESISTANCE   NTNU-M408

Length BP		70.00 m			
Beam Waterline		12.47 m	5.613	Allowable range	3.22 - 5.75
Draft-Midship		5.28 m	2.362	Allowable range	1.94 - 2.42
Displacement volume	2869	2799.0 Δ/(0.01Λ)3	233.32	Allowable range	200 - 500
Block coefficient		0.607		Allowable range	0.400 - 0.598
Prismatic coefficient		0.618 0.618		Allowable range	0.554 - 0.700
Midship coefficient		0.982		Allowable range	0.729 - 0.810
Wetted surface area	1196.336	1128.990 m3-Mumford	5.684	Allowable range	5.198 - 6.255
Water density		1.0259 t/m3	1.0250 at 19oC	→	
Water viscosity		1.18831 x 10-6 m2/s	1.07854 x 10-6 at 19oC		
Correlation allowance		0.0004			

Displacement   2,871.52 t

V/L	V	10-6Rn	103CF	103CR	103CT	RT	PE
	kn		ITTC'57			kN	kW
0.7	10.61	321.47	1.771	1.177	3.348	57.75	315.1
0.8	12.12	367.40	1.740	1.337	3.477	78.33	488.6
0.9	13.64	413.32	1.713	1.489	3.602	102.70	720.6
1.0	15.15	459.25	1.690	2.406	4.496	158.25	1233.8
1.1	16.67	505.17	1.669	2.952	5.021	213.86	1834.0
1.2	18.19	551.10	1.650	3.641	5.691	288.48	2698.8
1.3	19.70	597.02	1.633	5.690	7.724	459.44	4656.5
1.4	21.22	642.95	1.618	9.710	11.729	809.14	8831.5
1.5	22.73	688.87	1.604	14.631	16.634	1317.39	15405.9

```
;*********************************************
;* NavCad model file        HydroComp, Inc. *
;*********************************************
;
[NavCad]
Version=3.00
Release=ReleaseA
Date=04/03/2000
Time=11:28:59.12
Precision=6
Description=Norway-Trondheim 1956 Mdl= 408 L/B=5.809 B/T=2.364 Lcb/Lpp=+0.60F

[Units]
Length=Meter
Area=SqMeter
Weight=MetricTon
Speed=Knot
Force=Pound
Power=Horsepower
Density=KgPerCuM
KinemVisc=SqMPerSec

[Condition]
rho=1026
nu=1.1883e-06

[Resistance]
ModShipCa=0.0004

[Hull]
HullType=Displ
Loading=LoadDraft
ChineType=RoundBilge
SternShape=UShape
BowShape=UShape
FlapBehind=No
LengthPP=70
LengthWL=72.45
BeamWL=12.473
Draft=5.277
LCBHull=35.79
WettedSurf=1128.99
MaxSecArea=64.6353
HullDispl=2869
HalfEntAng=16.5
MidshiCoef=0.982
WaterpCoef=0.73

[Speeds]
Speeds=11,12,13,14,15,15.5,16,16.5,17,18

[Results]
ResiCoef=0.0014954,0.0016115,0.0017872,0.0023046,0.0031415,0.0034252,0.0035298,0.0035938,0.0036753,0.0042394
BareResist=15220.3,18588,22732.4,29746.6,40518.4,45554,49402.2,53076.2,57089.5,70165.6
ModCfType=ITTC57
ModSource=ModelTest
ModLengthWL=5.175
FroudeLen=0.212301,0.231601,0.250901,0.270201,0.289501,0.299151,0.308801,0.318451,0.328102,0.347402
FroudeVol=0.481438,0.525205,0.568972,0.61274,0.656507,0.67839,0.700274,0.722157,0.744041,0.787808
HullReyNum=3.45019e+08,3.76385e+08,4.0775e+08,4.39116e+08,4.70481e+08,4.86164e+08,5.01846e+08,5.17529e+08,5.33212e+08,5.64577e+08
ResiMerit=0.000985771,0.00126423,0.00164548,0.00246085,0.00385082,0.00448314,0.00492293,0.00533034,0.00578661,0.00748312
BareMerit=0.00240635,0.00293879,0.00359402,0.00470297,0.00640601,0.00720214,0.00781055,0.00839141,0.00902592,0.0110933
```
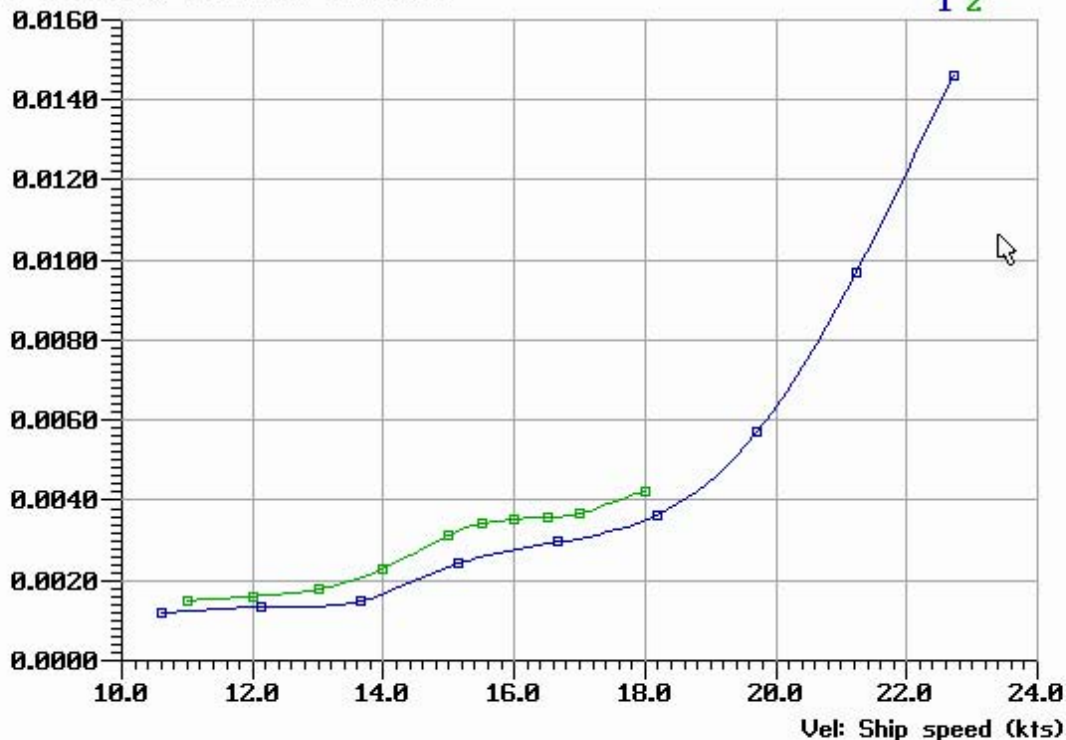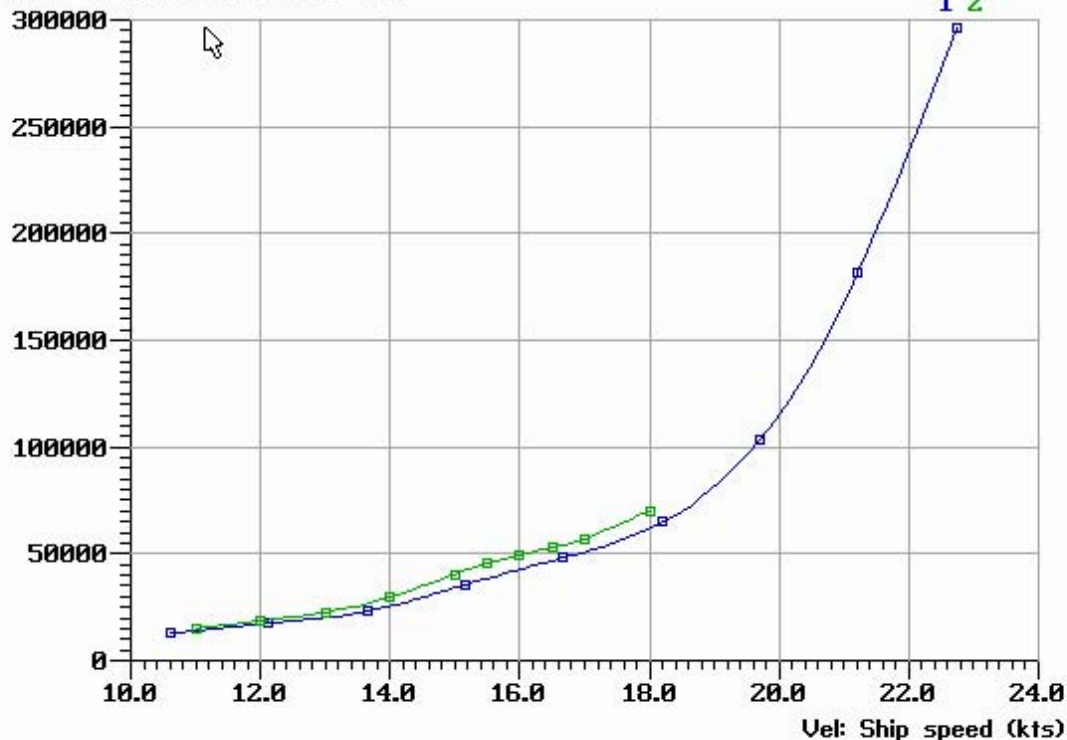
RIDGELEY-NEVITT TRAWLER SERIES RESISTANCE

18-Mar-2012 15:16:09

Length BP		70.00	m		
Beam Waterline		13.44	m	5.208	Allowable range	3.22 - 5.75
Draft-Midship		5.69	m	2.362	Allowable range	1.94 - 2.42
Displacement volume	3333	3251.7	Δ/(0.01Λ)3	271.05 Allowable range	200 - 500
Block coefficient		0.607		Allowable range	0.400 - 0.598
Prismatic coefficient		0.619	0.619	Allowable range	0.554 - 0.700
Midship coefficient		0.982		Allowable range	0.729 - 0.810
Wetted surface area	1289.423	1217.050	m3-Mumford	5.545 Allowable range	5.198 - 6.255
Water density		1.0259	t/m3	1.0250 at 19oC	→
Water viscosity		1.18831	x 10-6 m2/s	1.07854 x 10-6 at 19oC	
Correlation allowance		0.0004			

Displacement   3,335.93 t

V/L	V	10-6Rn	103CF	103CR	103CT	RT	PE
	kn		ITTC'57			kN	kW
0.7	10.61	321.47	1.771	1.219	3.390	63.03	344.0
0.8	12.12	367.40	1.740	1.412	3.552	86.26	538.0
0.9	13.64	413.32	1.713	1.585	3.698	113.66	797.5
1.0	15.15	459.25	1.690	2.576	4.666	177.03	1380.1
1.1	16.67	505.17	1.669	3.194	5.264	241.66	2072.4
1.2	18.19	551.10	1.650	3.956	6.006	328.18	3070.3
1.3	19.70	597.02	1.633	6.295	8.328	534.04	5412.5
1.4	21.22	642.95	1.618	10.879	12.897	959.18	10469.0
1.5	22.73	688.87	1.604	16.467	18.471	1576.92	18440.8

```
;************************************************
;* NavCad model file        HydroComp, Inc. *
;************************************************
;

[NavCad]
Version=3.00
Release=ReleaseA
Date=04/03/2000
Time=11:17:30.24
Precision=6
Description=Norway-Trondheim 1956 Mdl= 409 L/B=5.389 B/T=2.364 Lcb/Lpp=+0.60F

[Units]
Length=Meter
Area=SqMeter
Weight=MetricTon
Speed=Knot
Force=Pound
Power=Horsepower
Density=KgPerCuM
KinemVisc=SqMPerSec

[Condition]
rho=1026
nu=1.1883e-06

[Resistance]
ModShipCa=0.0004

[Hull]
HullType=Displ
Loading=LoadDraft
ChineType=RoundBilge
SternShape=UShape
BowShape=UShape
FlapBehind=No
LengthPP=70
LengthWL=72.45
BeamWL=13.443
Draft=5.688
LCBHull=35.79
WettedSurf=1217.05
MaxSecArea=75.0874
HullDispl=3333
HalfEntAng=18
MidshiCoef=0.982
WaterpCoef=0.73

[Speeds]
Speeds=11,12,13,14,15,15.5,16,16.5,17,18

[Results]
ResiCoef=0.0016766,0.0017765,0.0019009,0.0024581,0.0032971,0.0035419,0.0036901,0.0038333,0.0039945,0.0046135
BareResist=17221.9,20920.5,25219.3,33184.4,44979.3,50148.6,54779.9,59638.2,64969.1,80140.9
ModCfType=ITTC57
ModSource=ModelTest
ModLengthWL=5.175
FroudeLen=0.212301,0.231601,0.250901,0.270201,0.289501,0.299151,0.308801,0.318451,0.328102,0.347402
FroudeVol=0.469559,0.512246,0.554933,0.59762,0.640307,0.661651,0.682994,0.704338,0.725681,0.768369
HullReyNum=3.45019e+08,3.76385e+08,4.0775e+08,4.39116e+08,4.70481e+08,4.86164e+08,5.01846e+08,5.17529e+08,5.33212e+08,5.64577e+08
ResiMerit=0.00102556,0.00129323,0.00162403,0.00243558,0.00375026,0.00430176,0.00477557,0.00527579,0.00583589,0.00755653
BareMerit=0.00234376,0.0028471,0.00343212,0.0045161,0.00612129,0.00682479,0.00745507,0.00811624,0.00884173,0.0109065
```
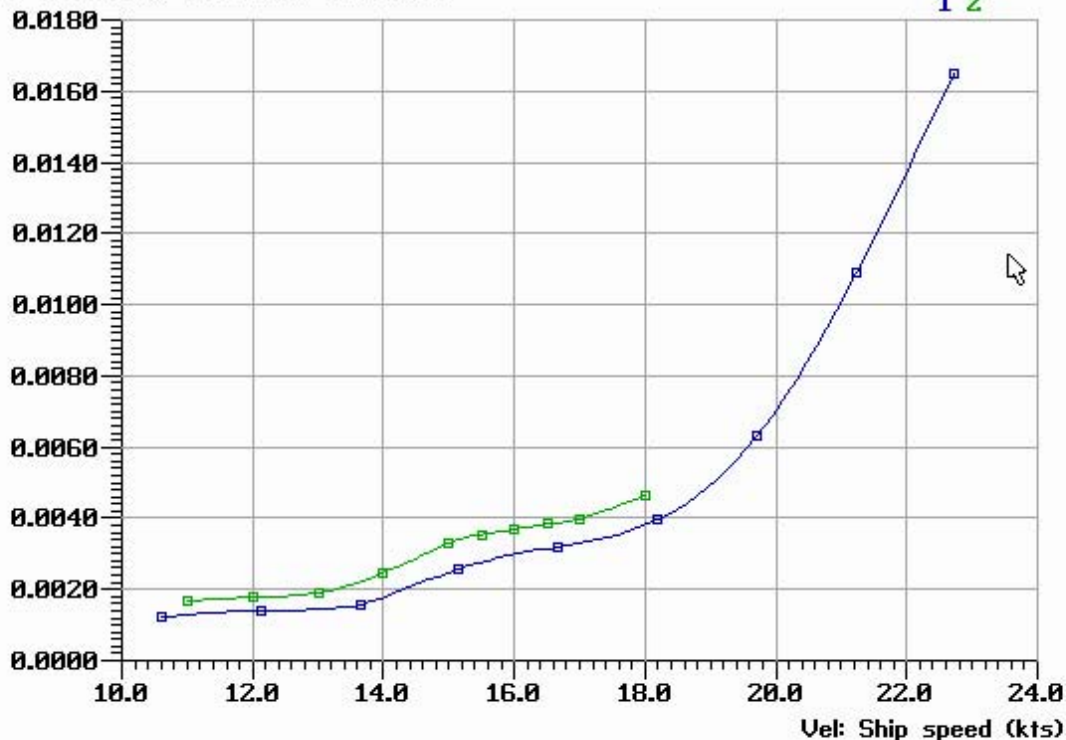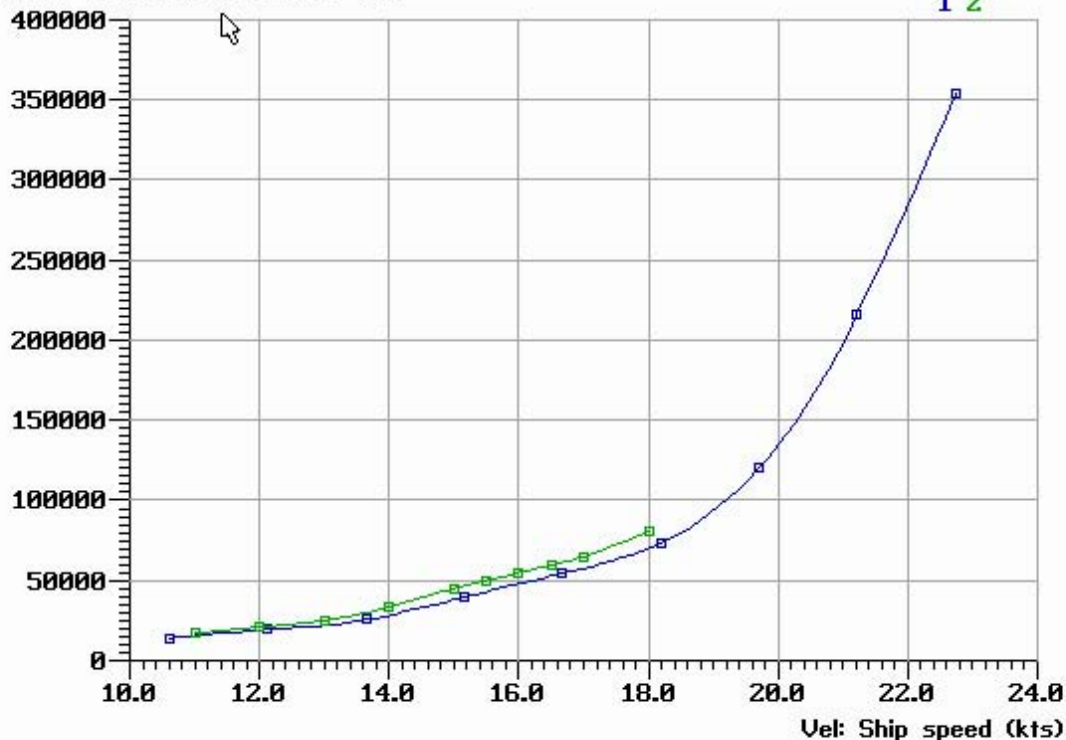
RIDGELEY-NEVITT TRAWLER SERIES RESISTANCE

NTNU-S352M

18-Mar-2012 15:13:16

Length BP		66.95 m			
Beam Waterline		11.58 m	5.782	Allowable range	3.22 - 5.75
Draft-Midship		3.49 m	3.318	Allowable range	1.94 - 2.42
Displacement volume	1650	1609.8 Δ/(0.01Λ)3	153.37 Allowable range		200 - 500
Block coefficient		0.595		Allowable range	0.400 - 0.598
Prismatic coefficient		0.611	0.611	Allowable range	0.554 - 0.700
Midship coefficient		0.974		Allowable range	0.729 - 0.810
Wetted surface area	892.889	826.757 m3-Mumford	6.019 Allowable range		5.198 - 6.255
Water density		1.0259 t/m3	1.0250 at 19oC		→
Water viscosity		1.18831 x 10-6 m2/s	1.07854 x 10-6 at 19oC		
Correlation allowance		0.0004			

Displacement   1,651.45 t

*exceeds

V/L	V	10-6Rn	103CF	103CR	103CT	RT	PE
	kn		ITTC'57			kN	kW
0.7	10.37	300.69	1.787	1.061	3.248	39.24	209.4
0.8	11.86	343.65	1.756	0.944	3.100	48.91	298.3
0.9	13.34	386.61	1.728	1.313	3.442	68.73	471.6
1.0	14.82	429.56	1.705	2.055	4.159	102.54	781.8
1.1	16.30	472.52	1.684	2.319	4.402	131.32	1101.3
1.2	17.78	515.48	1.665	2.489	4.553	161.65	1479.0
1.3	19.27	558.43	1.648	4.191	6.239	259.94	2576.4
1.4	20.75	601.39	1.632	7.220	9.252	447.07	4772.1
1.5	22.23	644.34	1.618	9.105	11.123	616.98	7056.1

```
;*********************************************
;* NavCad model file         HydroComp, Inc. *
;*********************************************
;

[NavCad]
Version=3.00
Release=ReleaseA
Date=04/03/2000
Time=11:26:59.05
Precision=6
Description=Norway-Trondheim 1956 Model= 352 L/B=5.983 B/T=3.322 Lcb=-1.5A Variation

[Units]
Length=Meter
Area=SqMeter
Weight=MetricTon
Speed=Knot
Force=Pound
Power=Horsepower
Density=KgPerCuM
KinemVisc=SqMPerSec

[Condition]
rho=1026
nu=1.1883e-06

[Resistance]
ModShipCa=0.0004

[Hull]
HullType=Displ
Loading=LoadDraft
ChineType=HardChine
SternShape=Normal
BowShape=VShape
FlapBehind=No
LengthPP=66.947
LengthWL=69.29
BeamWL=11.582
Draft=3.486
LCBHull=35.684
WettedSurf=826.757
MaxSecArea=39.3251
HullDispl=1650
MidshiCoef=0.974
WaterpCoef=0.684

[Speeds]
Speeds=11,12,13,14,15,15.5,16,17,17.5,18

[Results]
ResiCoef=0.0012319,0.0012463,0.0013759,0.0017857,0.0022314,0.0023355,0.0023969,0.0025861,0.0030388,0.0038414
BareResist=10371.8,12322.3,14935.9,19266.2,24560.1,26812,28921.4,33933.3,39408.9,48205.6
ModCfType=ITTC57
ModSource=ModelTest
ModLengthWL=4.949
FroudeLen=0.217088,0.236823,0.256559,0.276294,0.296029,0.305897,0.315764,0.3355,0.345367,0.355235
FroudeVol=0.527936,0.575931,0.623925,0.671919,0.719913,0.743911,0.767908,0.815902,0.839899,0.863896
HullReyNum=3.29971e+08,3.59968e+08,3.89966e+08,4.19963e+08,4.4996e+08,4.64959e+08,4.79958e+08,5.09955e+08,5.24954e+08,5.39952e+08
ResiMerit=0.00103402,0.00124495,0.00161303,0.00242791,0.00348279,0.00389234,0.00425655,0.00518455,0.00645574,0.0086338
BareMerit=0.00285125,0.00338744,0.00410596,0.00529636,0.00675168,0.00737073,0.00795062,0.00932842,0.0108337,0.0132519
```
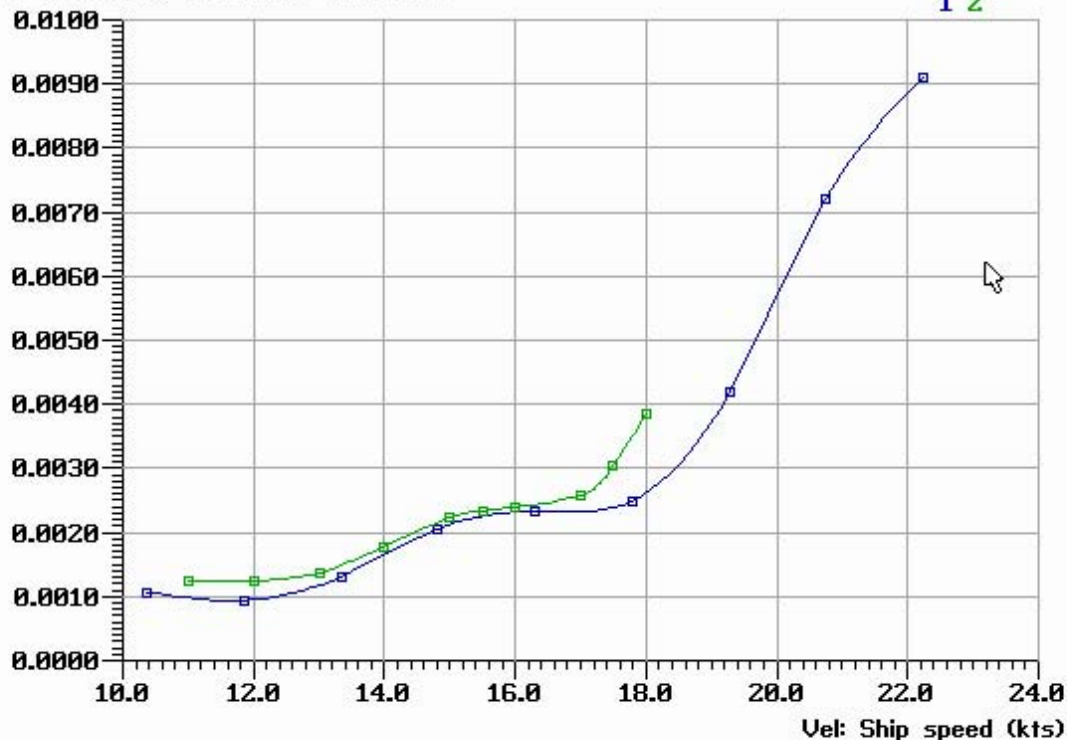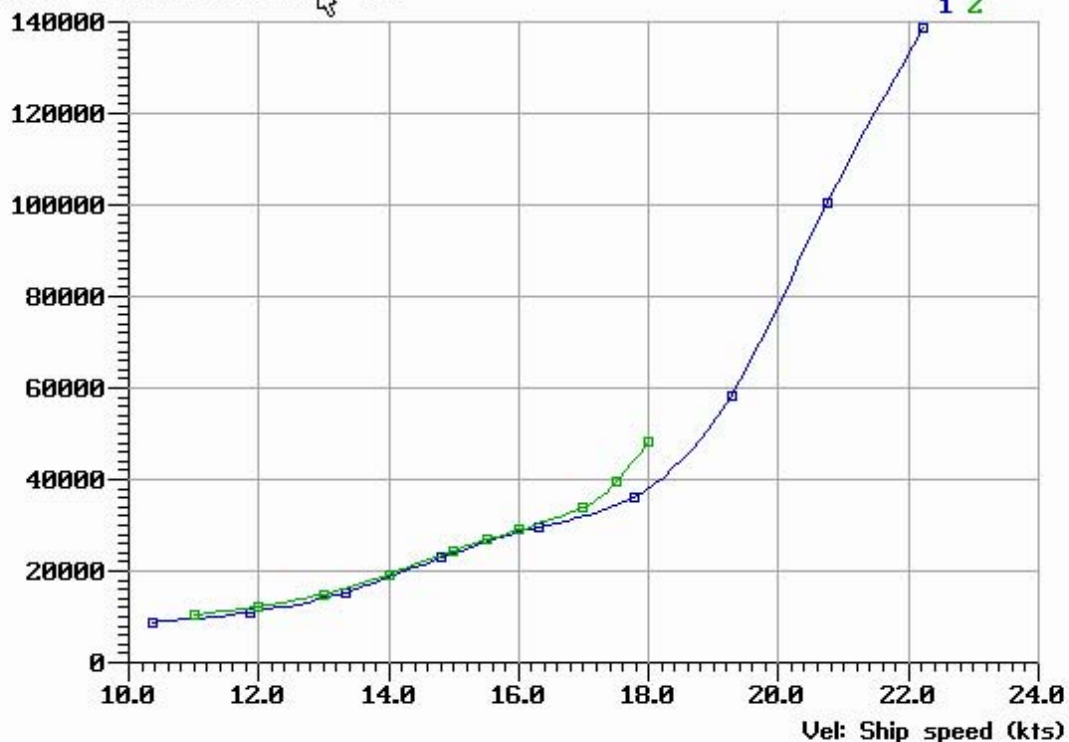
RIDGELEY-NEVITT TRAWLER SERIES RESISTANCE ## Others-M1

18-Mar-2012 19:02:25

Length BP		60.96	m		
Beam Waterline		11.72	m	5.201	Allowable range	3.22 - 5.75
Draft-Midship		5.33	m	2.199	Allowable range	1.94 - 2.42
Displacement volume	2012.26	1963.2	Δ/(0.01Λ)3	247.78	Allowable range	200 - 500
Block coefficient		0.516			Allowable range	0.400 - 0.598
Prismatic coefficient		0.607	0.607		Allowable range	0.554 - 0.700
Midship coefficient		0.850			Allowable range	0.729 - 0.810
Wetted surface area	956.900	917.261	m3-Mumford	5.850	Allowable range	5.198 - 6.255
Water density		1.0259	t/m3	1.0250 at 19oC	→	
Water viscosity		1.18831	x 10-6 m2/s	1.07854 x 10-6 at 19oC		
Correlation allowance		0.0004				

Displacement   2,014.03 t

V/L	V	$10^{-6}Rn$	10^3CF	10^3CR	10^3CT	RT	PE
	kn		ITTC'57			kN	kW
0.7	9.90	261.26	1.821	1.170	3.391	41.38	210.8
0.8	11.31	298.58	1.789	1.338	3.527	56.22	327.2
0.9	12.73	335.90	1.761	1.456	3.617	72.96	477.7
1.0	14.14	373.22	1.736	2.180	4.317	107.51	782.2
1.1	15.56	410.55	1.715	2.605	4.720	142.24	1138.3
1.2	16.97	447.87	1.695	3.448	5.543	198.78	1735.5
1.3	18.38	485.19	1.678	5.886	7.964	335.20	3170.3
1.4	19.80	522.51	1.662	10.339	12.401	605.33	6165.6
1.5	21.21	559.83	1.647	15.640	17.687	991.08	10815.6

```
;**********************************************
;* NavCad model file        HydroComp, Inc. *
;**********************************************
;

[NavCad]
Version=3.00
Release=PreRelease
Date=02/01/1996
Time=12:53:58.51
Precision=6
Description=TRAWLER Mdl= 1 L/Vol=4.87 Cp=0.606 Cb=0.515 Lcb=-5.01A 1962

[Units]
Length=Foot
Area=SqFoot
Weight=LongTon
Speed=Knot
Force=Pound
Power=Horsepower
Density=KgPerCuM
KinemVisc=SqMPerSec

[Condition]
rho=1025.86
nu=1.1883e-06

[Resistance]

[Hull]
HullType=Displ
Loading=LoadDraft
ChineType=RoundBilge
SternShape=Normal
BowShape=Normal
FlapBehind=No
LengthPP=200
LengthWL=200
BeamWL=38.462
Draft=17.483
Trim=6.67
LCBHull=110.02
WettedSurf=9873.32
MaxSecArea=571.566
HullDispl=1980.48
HalfEntAng=10
MidshiCoef=0.85

[Speeds]
Speeds=11.314,12.021,12.728,13.435,13.789,14.142,14.496,14.849,15.203,15.556

[Results]
ResiCoef=0.0008955,0.000925453,0.00102355,0.00126925,0.00140434,0.00154663,0.00165433,0.00176334,0.00184909,0.00191651
BareResist=11052.6,12539,14441,17267.7,18876.6,20619.5,22264.9,24001.5,25679.7,27307.7
ModCfType=ITTC57
ModSource=ModelTest
ModLengthWL=16.67
FroudeLen=0.238052,0.252928,0.267803,0.282679,0.290127,0.297555,0.305003,0.31243,0.319879,0.327306
FroudeVol=0.525326,0.558153,0.59098,0.623807,0.640244,0.656634,0.673071,0.689461,0.705898,0.722288
HullReyNum=2.98589e+08,3.17247e+08,3.35906e+08,3.54564e+08,3.63907e+08,3.73223e+08,3.82565e+08,3.91881e+08,4.01224e+08,4.1054e+08
```
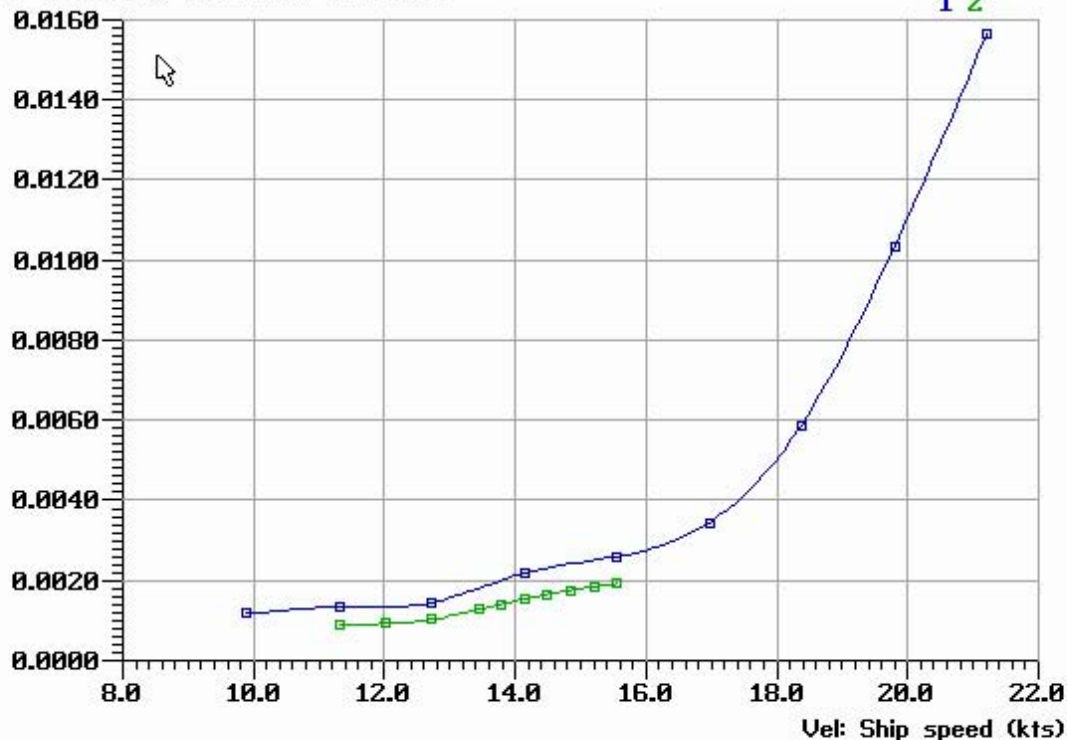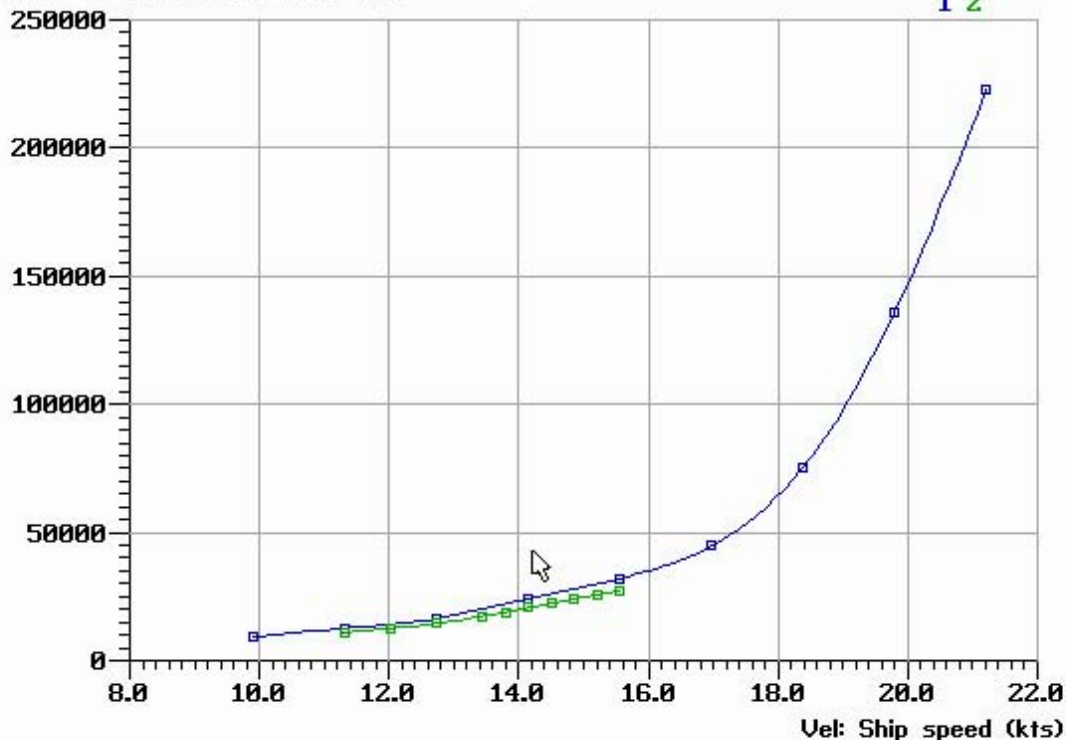
RIDGELEY-NEVITT TRAWLER SERIES RESISTANCE   Others-M2

18-Mar-2012 19:03:09

Length BP		60.96	m		
Beam Waterline		11.95	m	5.100	Allowable range	3.22 - 5.75
Draft-Midship		5.43	m	2.200	Allowable range	1.94 - 2.42
Displacement volume	2241.3	2186.6	$\Delta/(0.01\Lambda)3$	275.98	Allowable range	200 - 500
Block coefficient		0.552			Allowable range	0.400 - 0.598
Prismatic coefficient		0.626	0.626		Allowable range	0.554 - 0.700
Midship coefficient		0.883			Allowable range	0.729 - 0.810
Wetted surface area	1000.344	969.973	m3-Mumford	5.758	Allowable range	5.198 - 6.255
Water density		1.0259	t/m3	1.0250 at 19oC	$\rightarrow$
Water viscosity		1.18831	x 10-6 m2/s	1.07854 x 10-6 at 19oC
Correlation allowance		0.0004		

Displacement   2,243.27 t

V/L	V	10-6Rn	103CF	103CR	103CT	RT	PE
	kn		ITTC'57			kN	kW
0.7	9.90	261.26	1.821	1.227	3.448	44.50	226.6
0.8	11.31	298.58	1.789	1.431	3.619	61.00	355.1
0.9	12.73	335.90	1.761	1.635	3.796	80.97	530.2
1.0	14.14	373.22	1.736	2.778	4.915	129.43	941.6
1.1	15.56	410.55	1.715	3.538	5.653	180.13	1441.5
1.2	16.97	447.87	1.695	4.251	6.346	240.66	2101.1
1.3	18.38	485.19	1.678	6.450	8.528	379.56	3589.9
1.4	19.80	522.51	1.662	10.963	13.024	672.28	6847.5
1.5	21.21	559.83	1.647	16.570	18.617	1103.17	12039.0

```
;*********************************************
;* NavCad model file        HydroComp, Inc. *
;*********************************************

[NavCad]
Version=3.00
Release=PreRelease
Date=02/01/1996
Time=12:59:43.06
Precision=6
Description=TRAWLER Mdl= 2 L/Vol=5.10 Cp=0.625 Cb=0.552 Lcb=-4.6A 1962

[Units]
Length=Foot
Area=SqFoot
Weight=LongTon
Speed=Knot
Force=Pound
Power=Horsepower
Density=KgPerCuM
KinemVisc=SqMPerSec

[Condition]
rho=1025.86
nu=1.1883e-06

[Resistance]

[Hull]
HullType=Displ
Loading=LoadDraft
ChineType=RoundBilge
SternShape=Normal
BowShape=Normal
FlapBehind=No
LengthPP=200
LengthWL=200
BeamWL=39.216
Draft=17.825
Trim=6.67
LCBHull=109.2
WettedSurf=10440.7
MaxSecArea=617.239
HullDispl=2205.9
HalfEntAng=13.5
MidshiCoef=0.883

[Speeds]
Speeds=11.314,12.021,12.728,13.435,13.789,14.142,14.496,14.849,15.203,15.556

[Results]
ResiCoef=0.0010251,0.00105847,0.00121236,0.0016123,0.00184472,0.0020536,0.00223886,0.00238684,0.00253046,0.00261032
BareResist=12178.6,13828.5,16176.3,20092.9,22440,24805.8,27180.3,29450.3,31817.3,33846.9
ModCfType=ITTC57
ModSource=ModelTest
ModLengthWL=16.67
FroudeLen=0.238052,0.252928,0.267803,0.282679,0.290127,0.297555,0.305003,0.31243,0.319879,0.327306
FroudeVol=0.515972,0.548214,0.580457,0.612699,0.628844,0.644942,0.661086,0.677185,0.693329,0.709427
HullReyNum=2.98589e+08,3.17247e+08,3.35906e+08,3.54564e+08,3.63907e+08,3.73223e+08,3.82565e+08,3.91881e+08,4.01224e+08,4.1054e+08
```
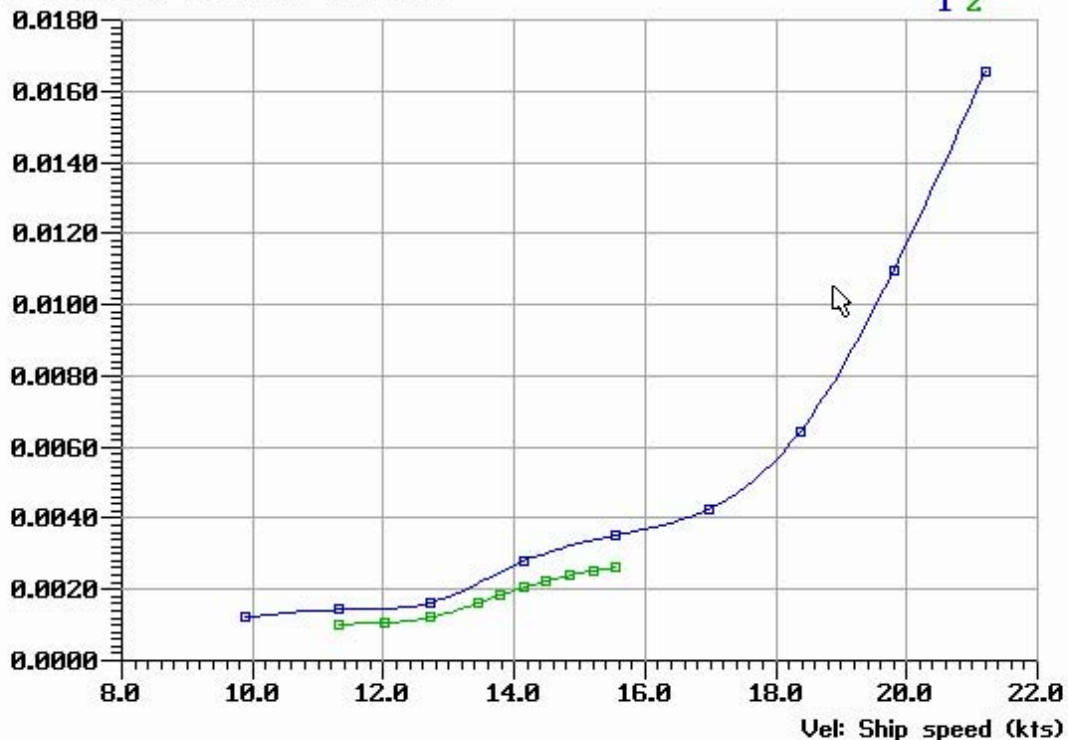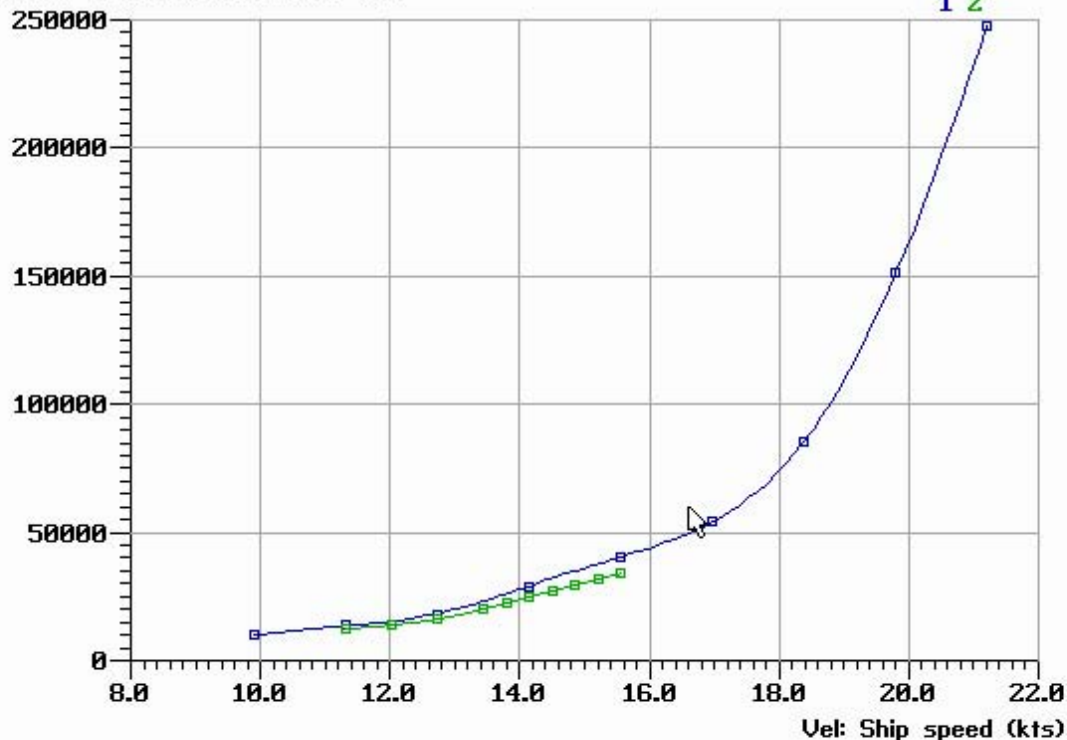
RIDGELEY-NEVITT TRAWLER SERIES RESISTANCE   Others-M3

18-Mar-2012 19:03:42

Length BP		60.96 m			
Beam Waterline		13.86 m	4.400	Allowable range	3.22 - 5.75
Draft-Midship		6.30 m	2.200	Allowable range	1.94 - 2.42
Displacement volume	3133.87	3057.4 Δ/(0.01Λ)3	385.88	Allowable range	200 - 500
Block coefficient		0.575		Allowable range	0.400 - 0.598
Prismatic coefficient		0.650 0.650		Allowable range	0.554 - 0.700
Midship coefficient		0.885		Allowable range	0.729 - 0.810
Wetted surface area	1176.985	1156.380 m3-Mumford	5.489	Allowable range	5.198 - 6.255
Water density		1.0259 t/m3	1.0250 at 19oC	→	
Water viscosity		1.18831 x 10-6 m2/s	1.07854 x 10-6 at 19oC		
Correlation allowance		0.0004			

Displacement   3,136.62 t

V/L	V	10-6Rn	103CF	103CR	103CT	RT	PE
	kn		ITTC'57			kN	kW
0.7	9.90	261.26	1.821	1.352	3.573	54.97	279.9
0.8	11.31	298.58	1.789	1.646	3.834	77.05	448.4
0.9	12.73	335.90	1.761	2.116	4.277	108.76	712.2
1.0	14.14	373.22	1.736	3.747	5.884	184.73	1344.0
1.1	15.56	410.55	1.715	5.297	7.412	281.59	2253.5
1.2	16.97	447.87	1.695	6.156	8.252	373.07	3257.0
1.3	18.38	485.19	1.678	8.299	10.377	550.61	5207.6
1.4	19.80	522.51	1.662	13.669	15.731	968.02	9859.8
1.5	21.21	559.83	1.647	20.555	22.602	1596.67	17424.5

```
;*********************************************
;* NavCad model file        HydroComp, Inc. *
;*********************************************
;

[NavCad]
Version=3.00
Release=PreRelease
Date=02/01/1996
Time=13:04:18.73
Precision=6
Description=TRAWLER Mdl= 3 L/Vol=4.40 Cp=0.649 Cb=0.574 Lcb=-5.6A 1962

[Units]
Length=Foot
Area=SqFoot
Weight=LongTon
Speed=Knot
Force=Pound
Power=Horsepower
Density=KgPerCuM
KinemVisc=SqMPerSec

[Condition]
rho=1025.86
nu=1.1883e-06

[Resistance]

[Hull]
HullType=Displ
Loading=LoadDraft
ChineType=RoundBilge
SternShape=Normal
BowShape=Normal
FlapBehind=No
LengthPP=200
LengthWL=200
BeamWL=45.455
Draft=20.661
Trim=6.67
LCBHull=111.2
WettedSurf=12447.2
MaxSecArea=831.144
HullDispl=3084.38
HalfEntAng=17
MidshiCoef=0.885

[Speeds]
Speeds=11.314,12.021,12.728,13.435,13.789,14.142,14.496,14.849,15.203,15.556

[Results]
ResiCoef=0.0012672,0.00136448,0.00154686,0.00188119,0.00213219,0.00239963,0.00263177,0.00284528,0.0030315,0.00318187
BareResist=15612.9,18046.6,21197.5,25667.2,28681.4,32015.2,35317.5,38677.3,42018.7,45232.5
ModCfType=ITTC57
ModSource=ModelTest
ModLengthWL=16.67
FroudeLen=0.238052,0.252928,0.267803,0.282679,0.290127,0.297555,0.305003,0.31243,0.319879,0.327306
FroudeVol=0.487935,0.518426,0.548917,0.579407,0.594674,0.609898,0.625165,0.640388,0.655655,0.670879
HullReyNum=2.98589e+08,3.17247e+08,3.35906e+08,3.54564e+08,3.63907e+08,3.73223e+08,3.82565e+08,3.91881e+08,4.01224e+08,4.1054e+08
```
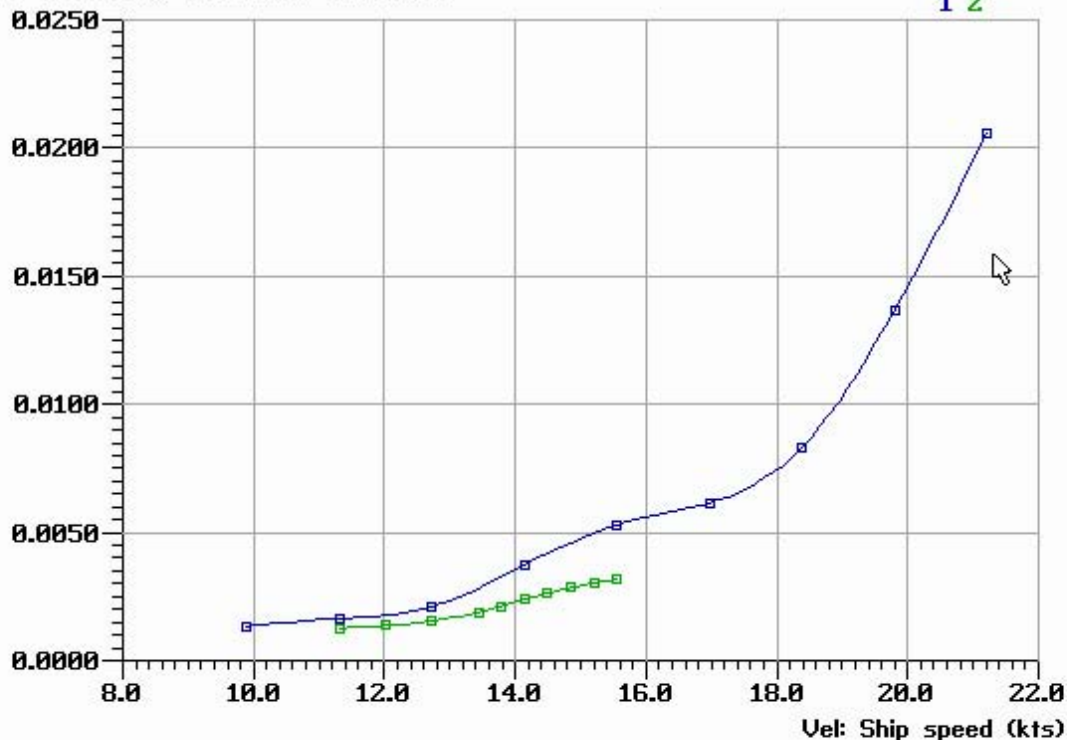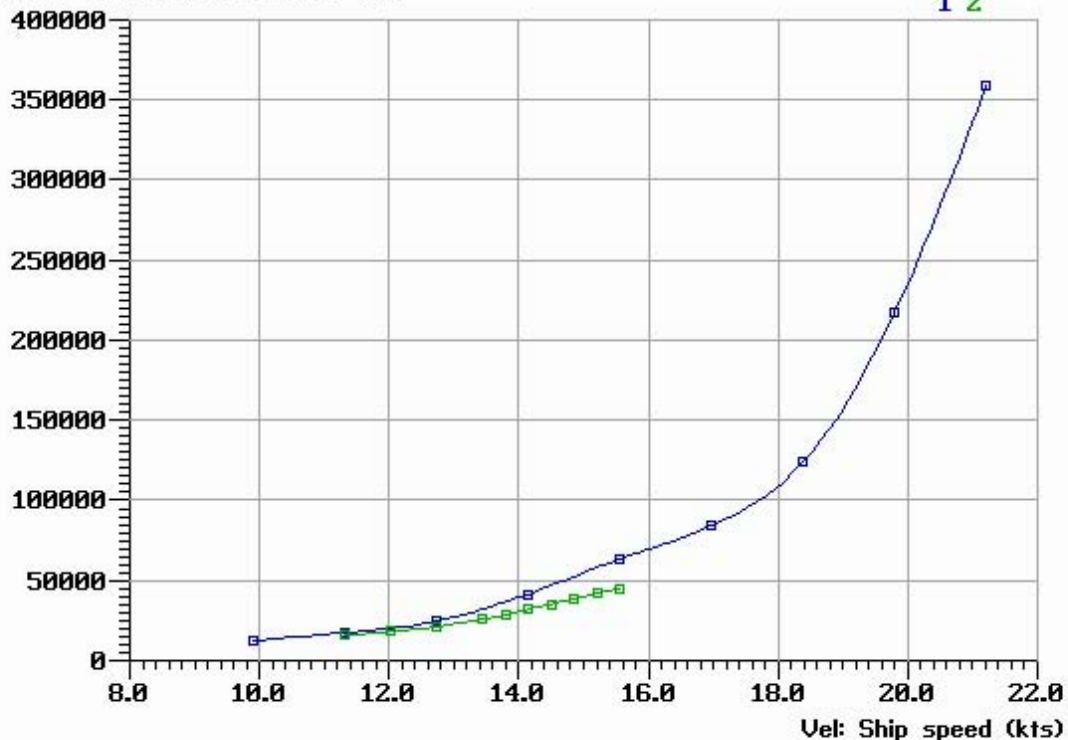
RIDGELEY-NEVITT TRAWLER SERIES RESISTANCE

Others-M4

18-Mar-2012 19:04:16

Length BP		60.96	m			
Beam Waterline		11.19	m	5.450	Allowable range	3.22 - 5.75
Draft-Midship		4.62	m	2.420	Allowable range	1.94 - 2.42
Displacement volume	1567.4	1529.2	Δ/(0.01Λ)3	193.00 Allowable range		200 - 500
Block coefficient		0.485			Allowable range	0.400 - 0.598
Prismatic coefficient		0.582	0.582		Allowable range	0.554 - 0.700
Midship coefficient		0.833			Allowable range	0.729 - 0.810
Wetted surface area	846.095	806.837	m3-Mumford	6.079 Allowable range		5.198 - 6.255
Water density		1.0259	t/m3	1.0250 at 19oC	→	
Water viscosity		1.18831	x 10-6 m2/s	1.07854 x 10-6 at 19oC		
Correlation allowance		0.0004				

Displacement   1,568.78 t

*exceeds

V/L	V	10-6Rn	103CF	103CR	103CT	RT	PE
	kn		ITTC'57			kN	kW
0.7	9.90	261.26	1.821	0.977	3.199	34.33	174.9
0.8	11.31	298.58	1.789	1.059	3.248	45.54	265.0
0.9	12.73	335.90	1.761	1.189	3.350	59.44	389.2
1.0	14.14	373.22	1.736	1.571	3.708	81.22	590.9
1.1	15.56	410.55	1.715	1.811	3.926	104.06	832.7
1.2	16.97	447.87	1.695	2.812	4.907	154.80	1351.4
1.3	18.38	485.19	1.678	5.182	7.259	268.76	2541.9
1.4	19.80	522.51	1.662	8.950	11.012	472.81	4815.8
1.5	21.21	559.83	1.647	13.175	15.222	750.30	8188.0

```
;*********************************************
;* NavCad model file        HydroComp, Inc. *
;*********************************************
;

[NavCad]
Version=3.00
Release=PreRelease
Date=02/01/1996
Time=13:08:38.09
Precision=6
Description=TRAWLER Mdl= 4 L/Vol=5.45 Cp=0.582 Cb=0.485 Lcb=-5.84A 1962

[Units]
Length=Foot
Area=SqFoot
Weight=LongTon
Speed=Knot
Force=Pound
Power=Horsepower
Density=KgPerCuM
KinemVisc=SqMPerSec

[Condition]
rho=1025.86
nu=1.1883e-06

[Resistance]

[Hull]
HullType=Displ
Loading=LoadDraft
ChineType=RoundBilge
SternShape=Normal
BowShape=Normal
FlapBehind=No
LengthPP=200
LengthWL=200
BeamWL=36.697
Draft=15.164
Trim=6.67
LCBHull=111.68
WettedSurf=8684.72
MaxSecArea=463.542
HullDispl=1542.65
HalfEntAng=9
MidshiCoef=0.833

[Speeds]
Speeds=11.314,12.021,12.728,13.435,13.789,14.142,14.496,14.849,15.203,15.556

[Results]
ResiCoef=0.0009463,0.00101401,0.00110356,0.00121788,0.00128908,0.00137606,0.00146017,0.00153797,0.00161513,0.00168644
BareResist=9882.01,11344.6,13021.7,14960.6,16064.6,17297.2,18580,19888.5,21256.8,22649.5
ModCfType=ITTC57
ModSource=ModelTest
ModLengthWL=16.67
FroudeLen=0.238052,0.252928,0.267803,0.282679,0.290127,0.297555,0.305003,0.31243,0.319879,0.327306
FroudeVol=0.547662,0.581885,0.616107,0.65033,0.667466,0.684553,0.701689,0.718776,0.735911,0.752999
HullReyNum=2.98589e+08,3.17247e+08,3.35906e+08,3.54564e+08,3.63907e+08,3.73223e+08,3.82565e+08,3.91881e+08,4.01224e+08,4.1054e+08
```
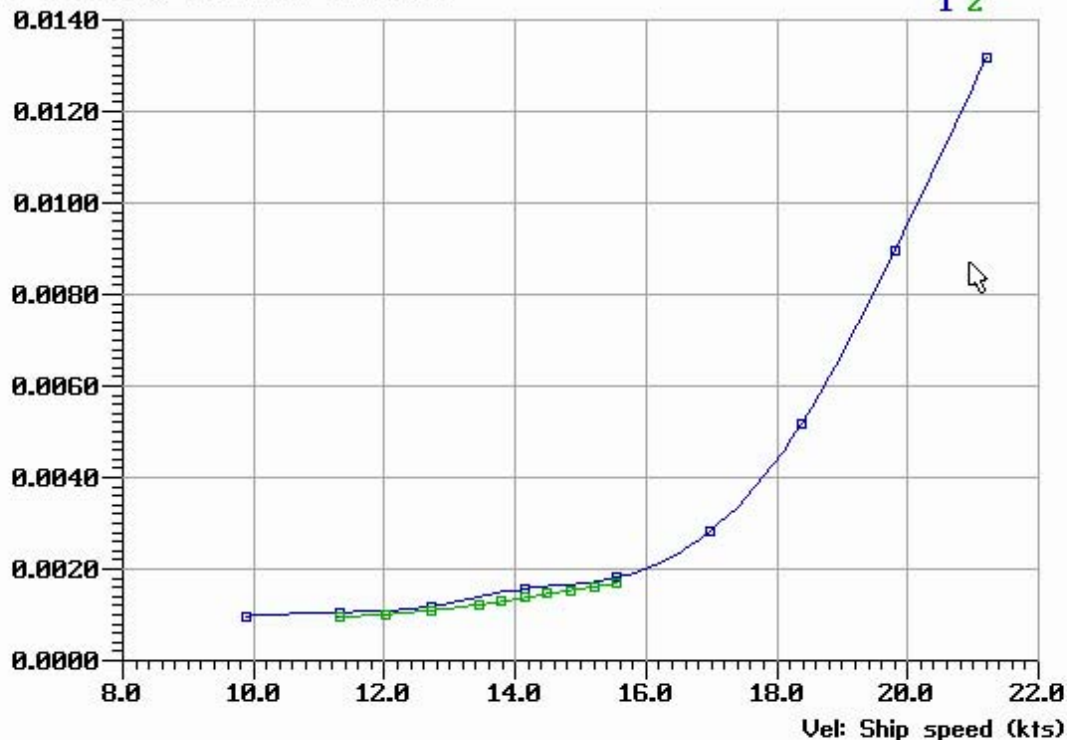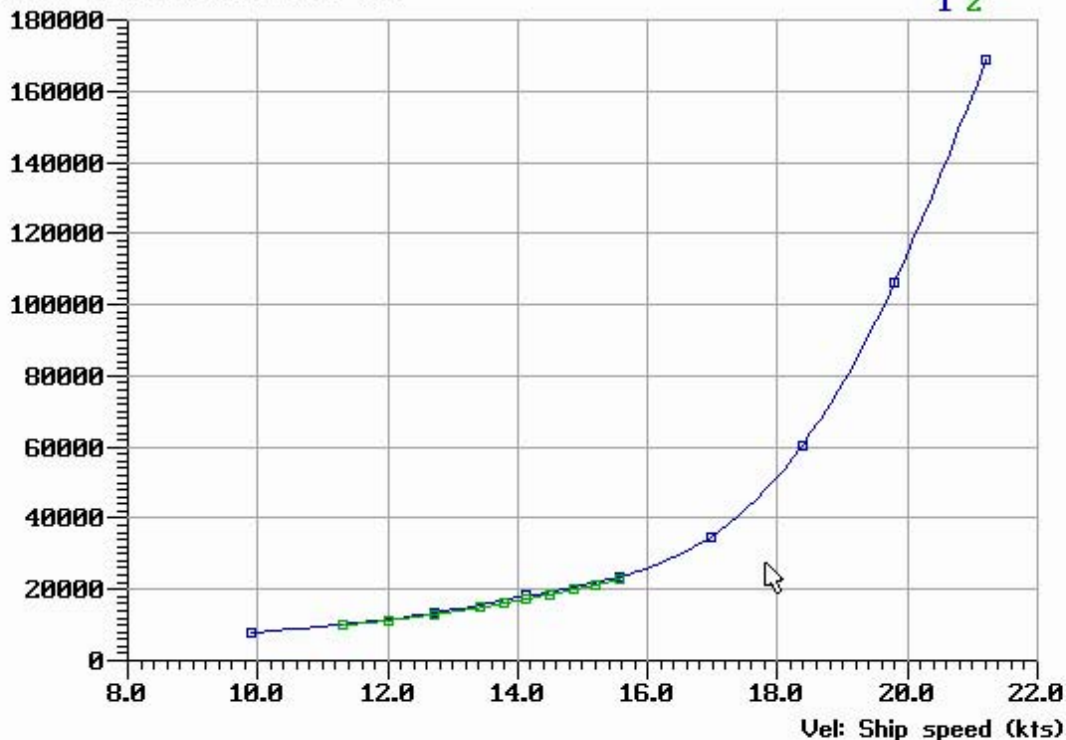
Others-M115

RIDGELEY-NEVITT TRAWLER SERIES RESISTANCE

18-Mar-2012 19:04:53

Length BP		33.53	m		
Beam Waterline		7.62	m	4.400	Allowable range	3.22 - 5.75
Draft-Midship		3.32	m	2.294	Allowable range	1.94 - 2.42
Displacement volume	497.863	485.7	Δ/(0.01Λ)3	368.40 Allowable range	200 - 500
Block coefficient		0.572		Allowable range	0.400 - 0.598
Prismatic coefficient		0.671	0.671	Allowable range	0.554 - 0.700
Midship coefficient		0.853		Allowable range	0.729 - 0.810
Wetted surface area	347.379	341.372	m3-Mumford	5.525 Allowable range	5.198 - 6.255
Water density		1.0259	t/m3	1.0250 at 19oC	→
Water viscosity		1.18831	x 10-6 m2/s	1.07854 x 10-6 at 19oC	
Correlation allowance		0.0004			

Displacement   498.30 t

V/L	V	10-6Rn	103CF	103CR	103CT	RT	PE
	kn		ITTC'57			kN	kW
0.7	7.34	106.57	2.064	1.326	3.790	9.47	35.8
0.8	8.39	121.80	2.025	1.691	4.116	13.43	58.0
0.9	9.44	137.02	1.991	2.219	4.610	19.04	92.5
1.0	10.49	152.25	1.962	4.212	6.574	33.51	180.8
1.1	11.54	167.47	1.936	6.418	8.754	54.00	320.5
1.2	12.59	182.70	1.913	7.304	9.617	70.60	457.1
1.3	13.63	197.92	1.892	8.973	11.264	97.05	680.7
1.4	14.68	213.15	1.873	13.517	15.789	157.77	1191.8
1.5	15.73	228.37	1.855	19.620	21.875	250.91	2030.8

```
;*********************************************
;* NavCad model file       HydroComp, Inc. *
;*********************************************
```

[NavCad]
Version=3.00
Release=PreRelease
Date=05/15/1996
Time=17:31:29.39
Precision=6
Description=FAO Mdl=115 L/B=4.40 B/T=2.29 Cb=0.580 L/Vol=4.246 Lcb=-4.21A

[Units]
Length=Foot
Area=SqFoot
Weight=LongTon
Speed=Knot
Force=Pound
Power=Horsepower
Density=KgPerCuM
KinemVisc=SqMPerSec

[Condition]
rho=1025.86
nu=1.1883e-06

[Resistance]

[Hull]
HullType=Displ
Loading=LoadDraft
ChineType=RoundBilge
SternShape=Normal
BowShape=Normal
FlapBehind=No
LengthPP=110
LengthWL=110
BeamWL=25
Draft=10.9
LCBHull=59.631
WettedSurf=3674.5
MaxSecArea=232.415
HullDispl=490
HalfEntAng=32.3
MidshiCoef=0.8529

[Speeds]
Speeds=9,9.5,10,10.5,11,11.5,12

[Results]
ResiCoef=0.0016417,0.00199837,0.00259537,0.00358302,0.00480657,0.0057336,0.00630494
BareResist=3414.75,4125.7,5178.4,6828.04,9020.09,11119.3,12947.1
ModCfType=ITTC57
ModSource=ModelTest
ModLengthWL=11
FroudeLen=0.255339,0.269525,0.28371,0.297896,0.312081,0.326267,0.340452
FroudeVol=0.527413,0.556713,0.586014,0.615315,0.644616,0.673916,0.703217
HullReyNum=1.30636e+08,1.37893e+08,1.45151e+08,1.52409e+08,1.59666e+08,1.66924e+08,1.74181e+08
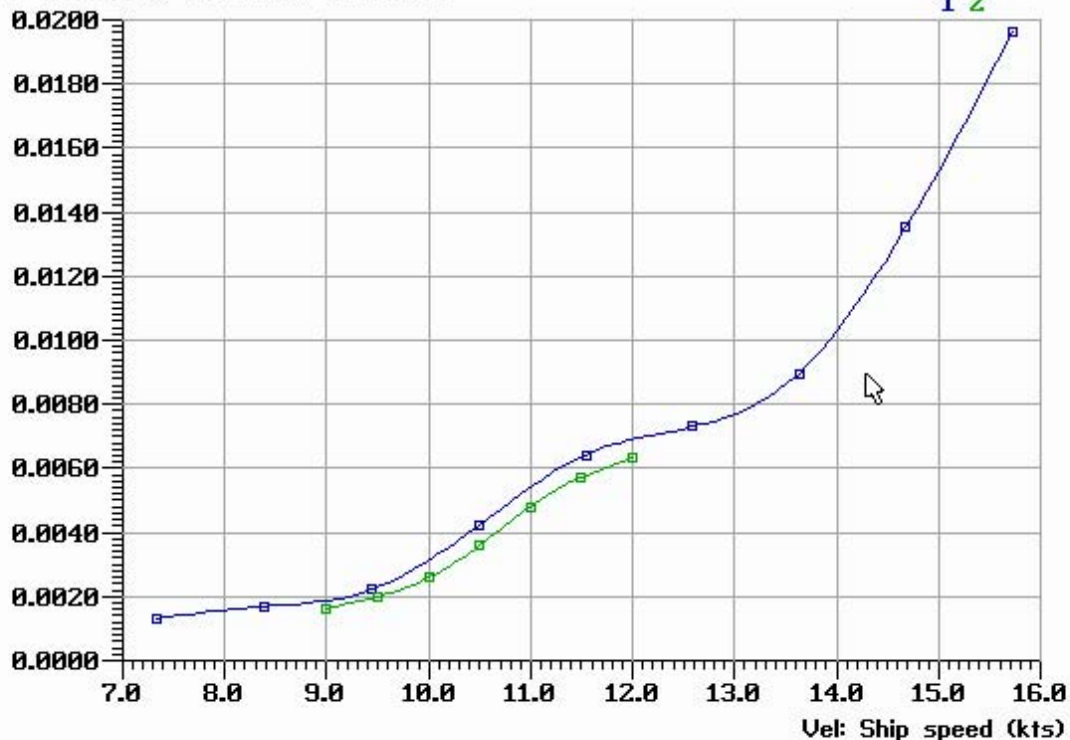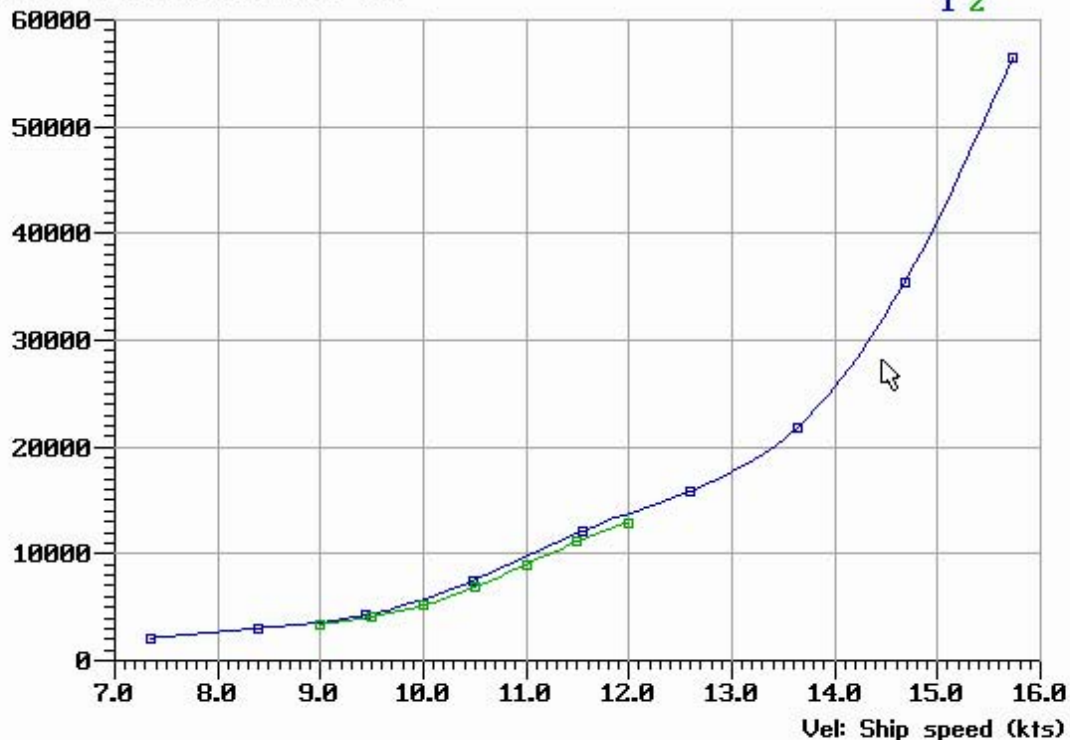
RIDGELEY-NEVITT TRAWLER SERIES RESISTANCE   Others-M140

18-Mar-2012 19:05:51

Length BP		19.10	m		
Beam Waterline		6.30	m	3.031	Allowable range	3.22 - 5.75
Draft-Midship		2.44	m	2.577	Allowable range	1.94 - 2.42
Displacement volume	101.605	99.1	Δ/(0.01Λ)3	407.00 Allowable range	200 - 500
Block coefficient		0.337		Allowable range	0.400 - 0.598
Prismatic coefficient		0.594	0.594	Allowable range	0.554 - 0.700
Midship coefficient		0.567		Allowable range	0.729 - 0.810
Wetted surface area	127.731	139.726	m3-Mumford	6.524 Allowable range	5.198 - 6.255
Water density		1.0259	t/m3	1.0250 at 19oC	→
Water viscosity		1.18831	x 10-6 m2/s	1.07854 x 10-6 at 19oC
Correlation allowance		0.0004		

Displacement   101.69 t

V/L	V	10-6Rn	103CF	103CR	103CT	RT	PE
	kn		ITTC'57			kN	kW
0.7	5.54	45.81	2.340	1.446	4.187	2.44	6.9
0.8	6.33	52.35	2.293	1.619	4.313	3.28	10.7
0.9	7.12	58.89	2.253	1.913	4.565	4.39	16.1
1.0	7.92	65.44	2.217	2.499	5.117	6.08	24.8
1.1	8.71	71.98	2.186	2.952	5.539	7.96	35.7
1.2	9.50	78.52	2.158	4.237	6.795	11.63	56.8
1.3	10.29	85.07	2.133	8.475	11.008	22.11	117.0
1.4	11.08	91.61	2.110	15.030	17.540	40.86	232.9
1.5	11.87	98.15	2.089	23.045	25.534	68.27	417.0

```
;***********************************************
;* NavCad model file        HydroComp, Inc. *
;***********************************************
;
[NavCad]
Version=3.00
Release=PreRelease
Date=05/11/1996
Time=10:24:36.43
Precision=6
Description=FAO Mdl= 140 L/B= 3.031 B/T=2.577 L/Vol=4.126 Lcb=? 1960

[Units]
Length=Foot
Area=SqFoot
Weight=LongTon
Speed=Knot
Force=Pound
Power=Horsepower
Density=KgPerCuM
KinemVisc=SqMPerSec

[Condition]
rho=1025.86
nu=1.1883e-06

[Resistance]

[Hull]
HullType=Displ
Loading=LoadDraft
ChineType=RoundBilge
SternShape=Normal
BowShape=Normal
FlapBehind=No
LengthPP=62.65
LengthWL=62.65
BeamWL=20.67
Draft=8.02
LCBHull=31.325
WettedSurf=1504
MaxSecArea=93.9935
HullDispl=100
HalfEntAng=20
MidshiCoef=0.567
WaterpCoef=0.717

[Speeds]
Speeds=7,7.5,8,8.5,9,9.5,10,10.5,11,11.5

[Results]
ResiCoef=0.0028458,0.00284488,0.00306622,0.00337338,0.00388794,0.0047049,0.00607774,0.00812905,0.0111761,0.0145857
BareResist=1150.17,1314.46,1550.1,1838.42,2232.4,2795.07,3675.51,5009.43,7062.58,9634.3
ModCfType=ITTC57
ModSource=ModelTest
ModLengthWL=3.1325
FroudeLen=0.263153,0.28195,0.300746,0.319543,0.33834,0.357136,0.375933,0.39473,0.413526,0.432323
FroudeVol=0.534612,0.572799,0.610985,0.649172,0.687359,0.725545,0.763732,0.801918,0.840105,0.878291
HullReyNum=5.78691e+07,6.20026e+07,6.61361e+07,7.02696e+07,7.44031e+07,7.85366e+07,8.26701e+07,8.68036e+07,9.09371e+07,9.50706e+07
```
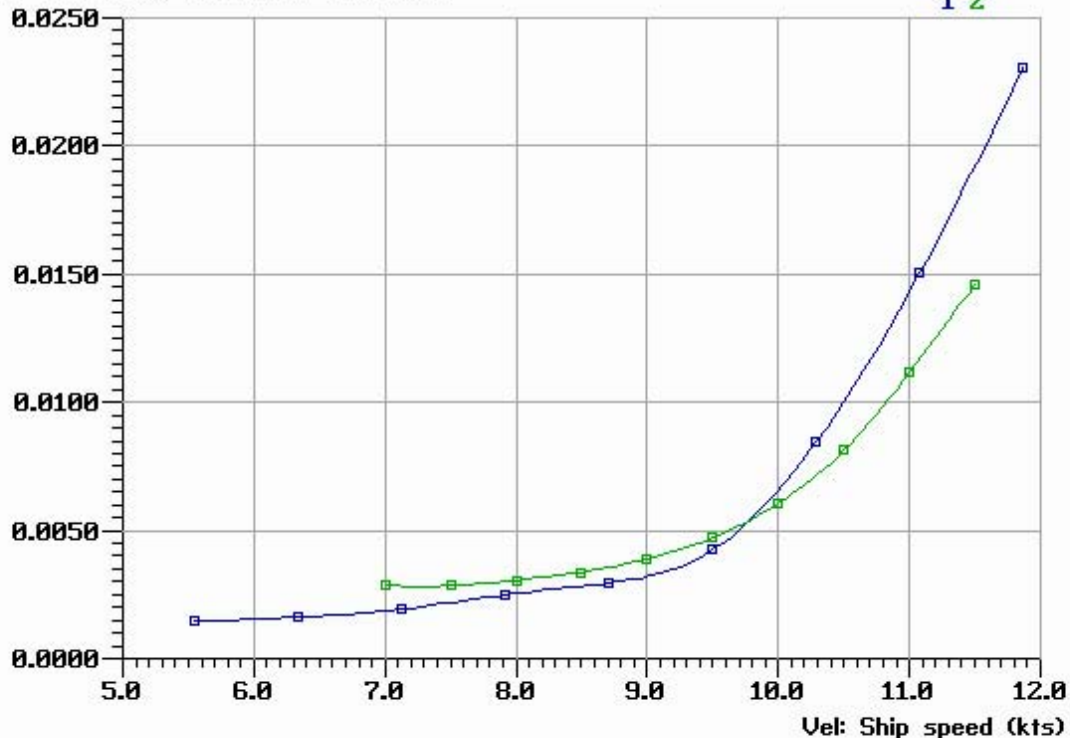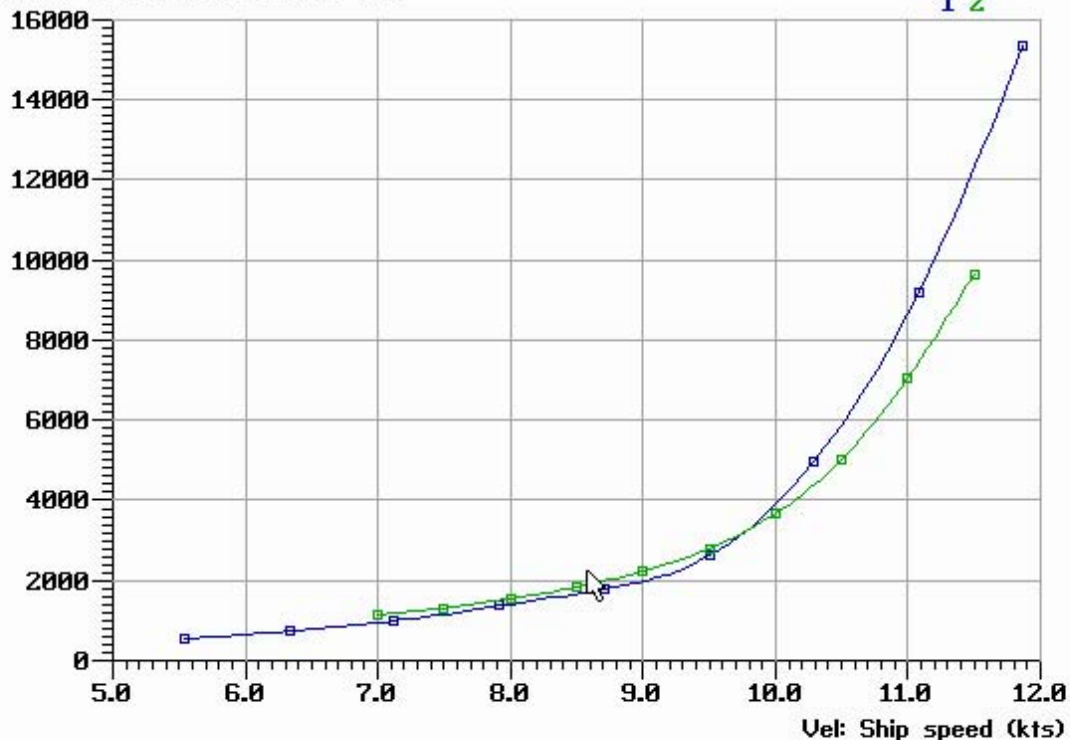
RIDGELEY-NEVITT TRAWLER SERIES RESISTANCE

Others-M146

18-Mar-2012 19:06:24

Length BP		18.52 m			
Beam Waterline		5.78 m	3.204	Allowable range	3.22 - 5.75
Draft-Midship		1.98 m	2.919	Allowable range	1.94 - 2.42
Displacement volume	101.605	99.1 $\Delta/(0.01\Lambda)3$	445.85	Allowable range	200 - 500
Block coefficient		0.467		Allowable range	0.400 - 0.598
Prismatic coefficient		0.611	0.611	Allowable range	0.554 - 0.700
Midship coefficient		0.765		Allowable range	0.729 - 0.810
Wetted surface area	118.274	128.578 m3-Mumford	6.003	Allowable range	5.198 - 6.255
Water density		1.0259 t/m3	1.0250 at 19oC	$\rightarrow$	
Water viscosity		1.18831 x 10-6 m2/s	1.07854 x 10-6 at 19oC		
Correlation allowance		0.0004			

Displacement   101.69 t

V/L	V	10-6Rn	103CF	103CR	103CT	RT	PE
	kn		ITTC'57			kN	kW
0.7	5.46	43.76	2.357	1.520	4.277	2.22	6.2
0.8	6.24	50.02	2.309	1.724	4.434	3.01	9.7
0.9	7.02	56.27	2.268	2.108	4.776	4.10	14.8
1.0	7.80	62.52	2.233	2.947	5.579	5.92	23.7
1.1	8.58	68.77	2.201	3.568	6.169	7.92	34.9
1.2	9.36	75.02	2.173	4.772	7.345	11.22	54.0
1.3	10.13	81.28	2.147	8.677	11.225	20.12	104.9
1.4	10.91	87.53	2.124	15.413	17.937	37.30	209.4
1.5	11.69	93.78	2.103	23.617	26.120	62.35	375.1

```
;***********************************************
;* NavCad model file        HydroComp, Inc. *
;***********************************************

[NavCad]
Version=3.00
Release=PreRelease
Date=05/11/1996
Time=10:29:28.03
Precision=6
Description=FAO Mdl= 146 L/B= 3.256 B/T=2.918 L/Vol=4.067 Lcb=? 1960

[Units]
Length=Foot
Area=SqFoot
Weight=LongTon
Speed=Knot
Force=Pound
Power=Horsepower
Density=KgPerCuM
KinemVisc=SqMPerSec

[Condition]
rho=1025.86
nu=1.1883e-06

[Resistance]

[Hull]
HullType=Displ
Loading=LoadDraft
ChineType=RoundBilge
SternShape=Normal
BowShape=Normal
FlapBehind=No
LengthPP=61.76
LengthWL=61.76
BeamWL=18.97
Draft=6.5
LCBHull=30.88
WettedSurf=1384
MaxSecArea=94.3283
HullDispl=100
HalfEntAng=31
MidshiCoef=0.765
WaterpCoef=0.753

[Speeds]
Speeds=7,7.5,8,8.5,9,9.5,10,10.5,11

[Results]
ResiCoef=0.0026389,0.00318197,0.00386265,0.0045924,0.00556402,0.00693529,0.00894395,0.011676,0.0159032
BareResist=1019.59,1285.04,1627.62,2038.66,2588.46,3363.52,4508.68,6146.11,8745.53
ModCfType=ITTC57
ModSource=ModelTest
ModLengthWL=3.088
FroudeLen=0.265042,0.283974,0.302906,0.321837,0.340769,0.3597,0.378632,0.397564,0.416495
FroudeVol=0.534612,0.572799,0.610985,0.649172,0.687359,0.725545,0.763732,0.801918,0.840105
HullReyNum=5.7047e+07,6.11218e+07,6.51966e+07,6.92713e+07,7.33461e+07,7.74209e+07,8.14957e+07,8.55705e+07,8.96453e+07
```
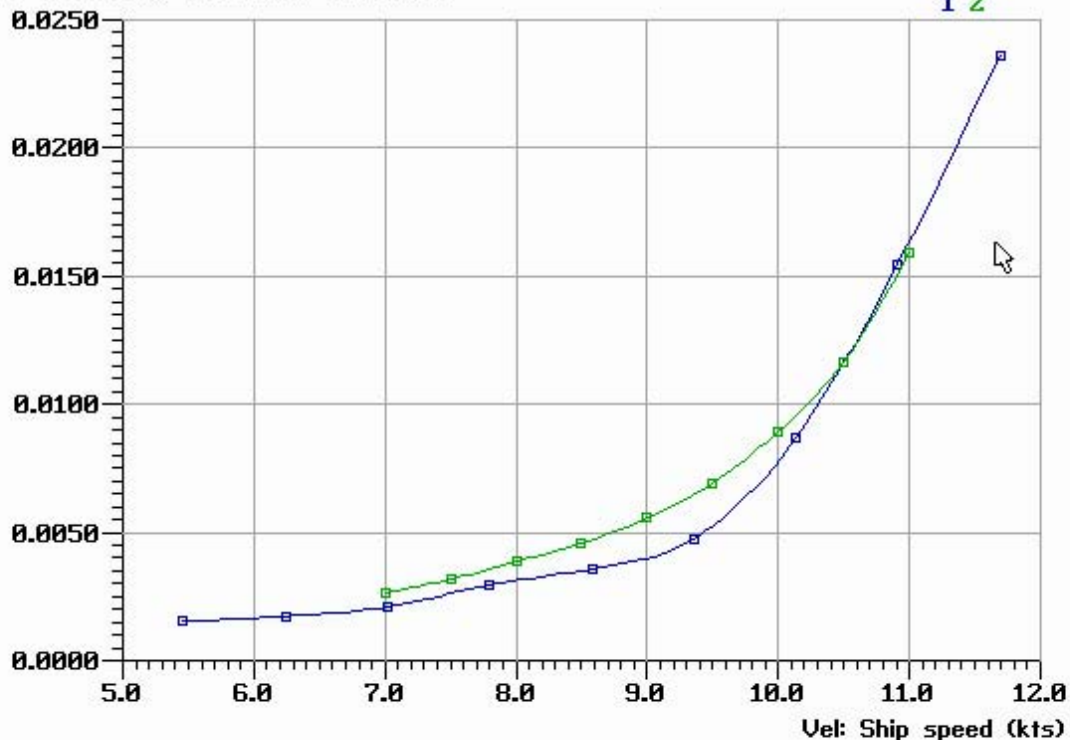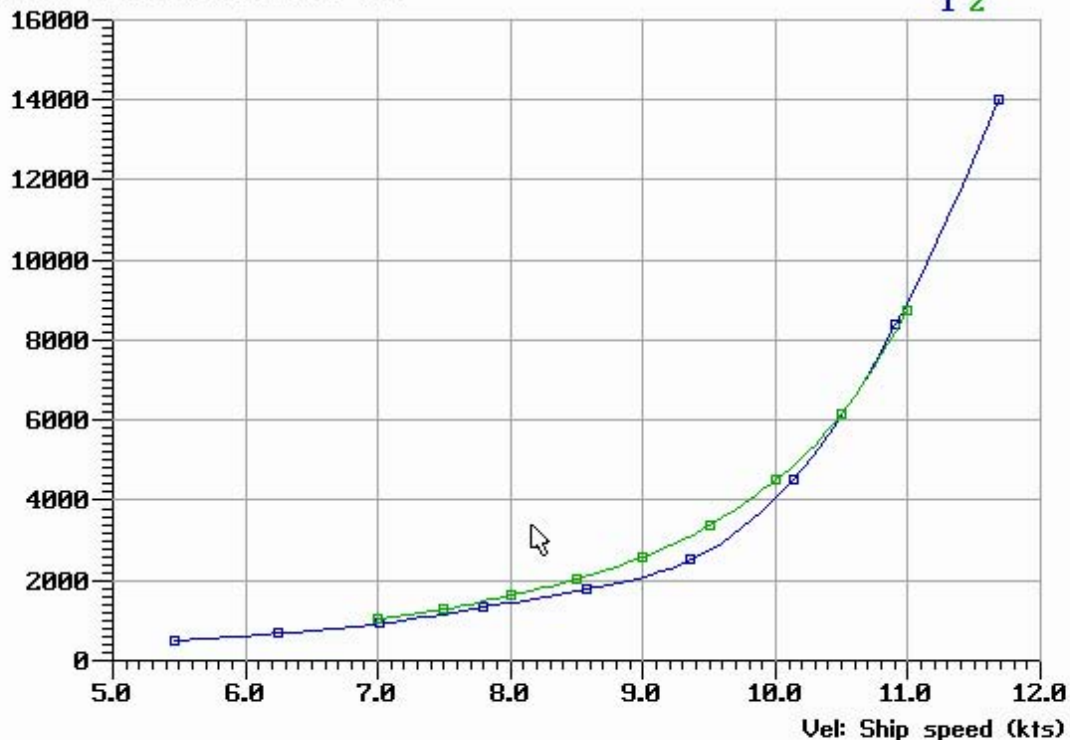
RIDGELEY-NEVITT TRAWLER SERIES RESISTANCE

Others-M147

18-Mar-2012 19:06:54

Length BP		24.23 m			
Beam Waterline		4.67 m	5.193	Allowable range	3.22 - 5.75
Draft-Midship		1.70 m	2.744	Allowable range	1.94 - 2.42
Displacement volume	101.605	99.1 Δ/(0.01Λ)3	199.12 Allowable range		200 - 500
Block coefficient		0.515		Allowable range	0.400 - 0.598
Prismatic coefficient		0.590	0.590	Allowable range	0.554 - 0.700
Midship coefficient		0.873		Allowable range	0.729 - 0.810
Wetted surface area	134.095	128.020 m3-Mumford	5.977 Allowable range		5.198 - 6.255
Water density		1.0259 t/m3	1.0250 at 19oC	→	
Water viscosity		1.18831 x 10-6 m2/s	1.07854 x 10-6 at 19oC		
Correlation allowance		0.0004			

Displacement   101.69 t

exceeds

V/L	V	10-6Rn	103CF	103CR	103CT	RT	PE
	kn		ITTC'57			kN	kW
0.7	6.24	65.49	2.217	1.034	3.651	2.47	7.9
0.8	7.13	74.84	2.174	1.132	3.706	3.28	12.0
0.9	8.03	84.20	2.136	1.258	3.795	4.25	17.5
1.0	8.92	93.55	2.104	1.699	4.203	5.81	26.6
1.1	9.81	102.91	2.075	1.975	4.450	7.44	37.5
1.2	10.70	112.26	2.049	2.884	5.333	10.61	58.4
1.3	11.59	121.62	2.026	5.181	7.607	17.76	105.9
1.4	12.48	130.97	2.004	9.011	11.415	30.92	198.5
1.5	13.38	140.33	1.985	13.348	15.733	48.92	336.6

```
;**********************************************
;* NavCad model file        HydroComp, Inc. *
;**********************************************
;

[NavCad]
Version=3.00
Release=PreRelease
Date=05/11/1996
Time=10:34:00.73
Precision=6
Description=FAO Mdl= 147 L/B= 5.193 B/T=2.744 L/Vol=5.238 Lcb=? 1960

[Units]
Length=Foot
Area=SqFoot
Weight=LongTon
Speed=Knot
Force=Pound
Power=Horsepower
Density=KgPerCuM
KinemVisc=SqMPerSec

[Condition]
rho=1025.86
nu=1.1883e-06

[Resistance]

[Hull]
HullType=Displ
Loading=LoadDraft
ChineType=RoundBilge
SternShape=Normal
BowShape=Normal
FlapBehind=No
LengthPP=79.51
LengthWL=79.51
BeamWL=15.31
Draft=5.58
LCBHull=39.755
WettedSurf=1378
MaxSecArea=74.5802
HullDispl=100
HalfEntAng=24
MidshiCoef=0.873
WaterpCoef=0.754

[Speeds]
Speeds=7,7.5,8,8.5,9,9.5,10,10.5,11

[Results]
ResiCoef=0.0015841,0.00192157,0.00229646,0.00270916,0.00321934,0.00376285,0.00411569,0.00449068,0.00507917
BareResist=797.162,984.333,1208.6,1475.56,1810.15,2202.72,2572.52,2991.48,3554.9
ModCfType=ITTC57
ModSource=ModelTest
ModLengthWL=3.9755
FroudeLen=0.233592,0.250277,0.266962,0.283648,0.300333,0.317018,0.333703,0.350388,0.367073
FroudeVol=0.534612,0.572799,0.610985,0.649172,0.687359,0.725545,0.763732,0.801918,0.840105
HullReyNum=7.34425e+07,7.86883e+07,8.39342e+07,8.91801e+07,9.4426e+07,9.96719e+07,1.04918e+08,1.10164e+08,1.1541e+08
```
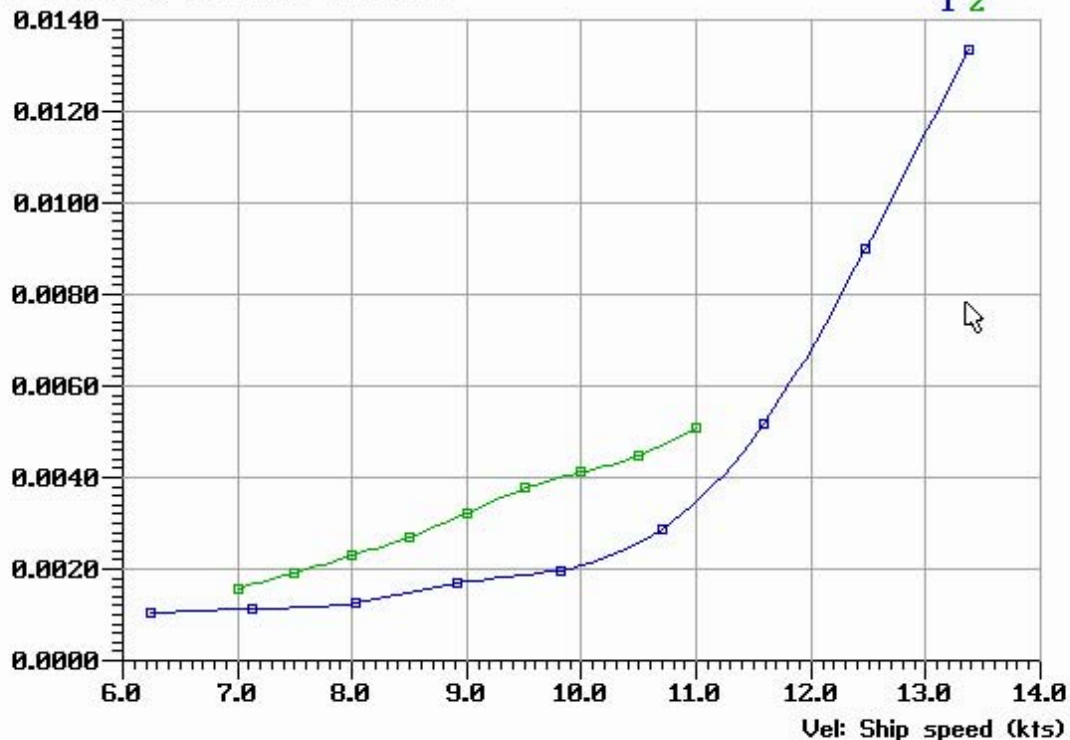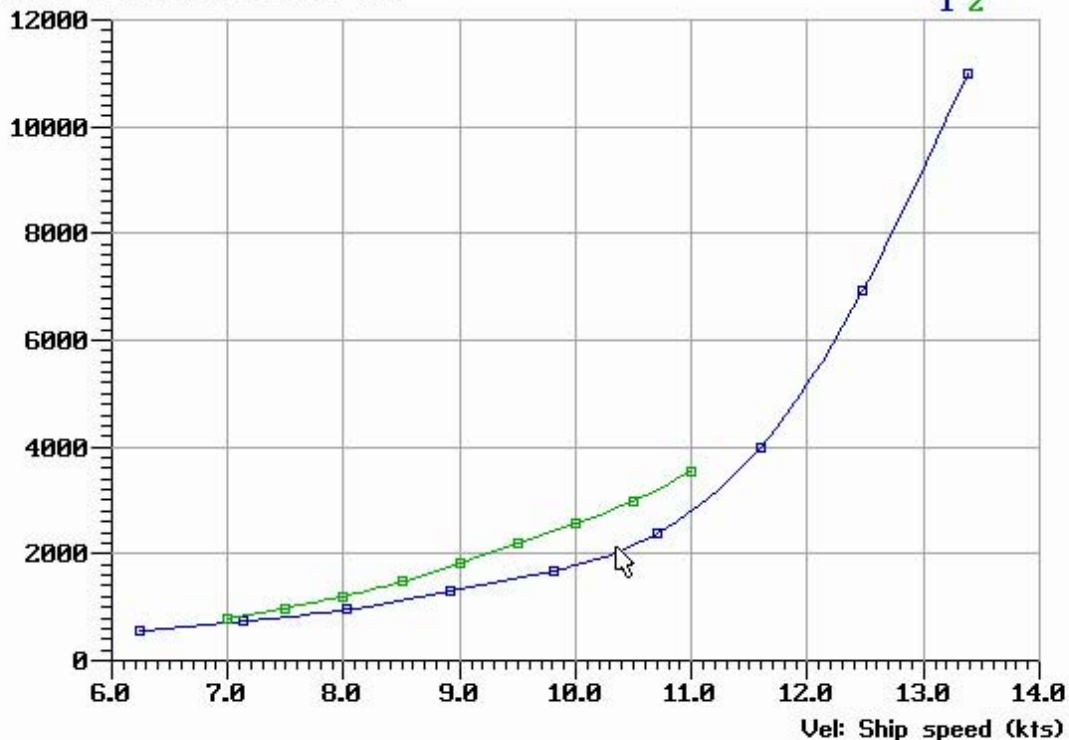
RIDGELEY-NEVITT TRAWLER SERIES RESISTANCE   Others-M575

18-Mar-2012 19:10:24

Length BP		2.00 m			
Beam Waterline		0.54 m	3.676	Allowable range	3.22 - 5.75
Draft-Midship		0.20 m	2.720	Allowable range	1.94 - 2.42
Displacement volume	0.0992	0.1 Δ/(0.01Λ)3	345.89	Allowable range	200 - 500
Block coefficient		0.445		Allowable range	0.400 - 0.598
Prismatic coefficient		0.561	0.561	Allowable range	0.554 - 0.700
Midship coefficient		0.793		Allowable range	0.729 - 0.810
Wetted surface area	1.225	1.236 m3-Mumford	5.865	Allowable range	5.198 - 6.255
Water density		1.0259 t/m3	1.0250 at 19oC	→	
Water viscosity		1.18831 x 10-6 m2/s	1.07854 x 10-6 at 19oC		
Correlation allowance		0.0004			

Displacement   0.10 t

V/L	V	10-6Rn	103CF	103CR	103CT	RT	PE
	kn		ITTC'57			kN	kW
0.7	1.79	1.55	4.270	1.165	5.835	0.00	0.0
0.8	2.05	1.77	4.154	1.245	5.799	0.00	0.0
0.9	2.31	2.00	4.056	1.423	5.879	0.01	0.0
1.0	2.56	2.22	3.971	1.697	6.068	0.01	0.0
1.1	2.82	2.44	3.896	2.216	6.512	0.01	0.0
1.2	3.07	2.66	3.830	4.355	8.585	0.01	0.0
1.3	3.33	2.88	3.771	9.342	13.512	0.03	0.0
1.4	3.59	3.11	3.717	15.938	20.054	0.04	0.1
1.5	3.84	3.33	3.668	22.945	27.013	0.07	0.1

```
;**********************************************
;* NavCad model file          HydroComp, Inc. *
;**********************************************

[NavCad]
Version=3.00
Release=PreRelease
Date=06/20/1996
Time=09:44:27.40
Precision=6
Description=Mdl= M 575 L/B=3.676 B/T=2.720 L/Vol=4.320 Cb=0.4559 Lcb= ??

[Units]
Length=Meter
Area=SqMeter
Weight=Kilogram
Speed=Knot
Force=Pound
Power=Horsepower
Density=KgPerCuM
KinemVisc=SqMPerSec

[Condition]
rho=999.01
nu=1.13902e-06

[Resistance]

[Hull]
HullType=Displ
Loading=LoadDraft
ChineType=RoundBilge
SternShape=Normal
BowShape=Normal
FlapBehind=No
LengthPP=2
LengthWL=2
BeamWL=0.544
Draft=0.2
WettedSurf=1.2364
MaxSecArea=0.0863002
HullDispl=99.2
MidshiCoef=0.7932

[Speeds]
Speeds=1.7206,1.9356,2.1507,2.3658,2.5808,2.7245,2.8673,3.011,3.2261

[Results]
ResiCoef=0.0072373,0.0075698,0.00790102,0.00809898,0.00815863,0.00833756,0.00878426,0.00966244,0.0121485
BareResist=1.29517,1.67075,2.10398,2.57063,3.05683,3.44406,3.93771,4.62258,6.23783
ModCfType=ITTC57
ModSource=ModelTest
ModLengthWL=2
FroudeLen=0.199868,0.224843,0.249829,0.274816,0.29979,0.316483,0.333071,0.349763,0.37475
FroudeVol=0.41537,0.467273,0.5192,0.571127,0.62303,0.657721,0.692194,0.726885,0.778812
HullReyNum=1.55424e+06,1.74845e+06,1.94275e+06,2.13705e+06,2.33127e+06,2.46107e+06,2.59006e+06,2.71987e+06,2.91417e+06
```
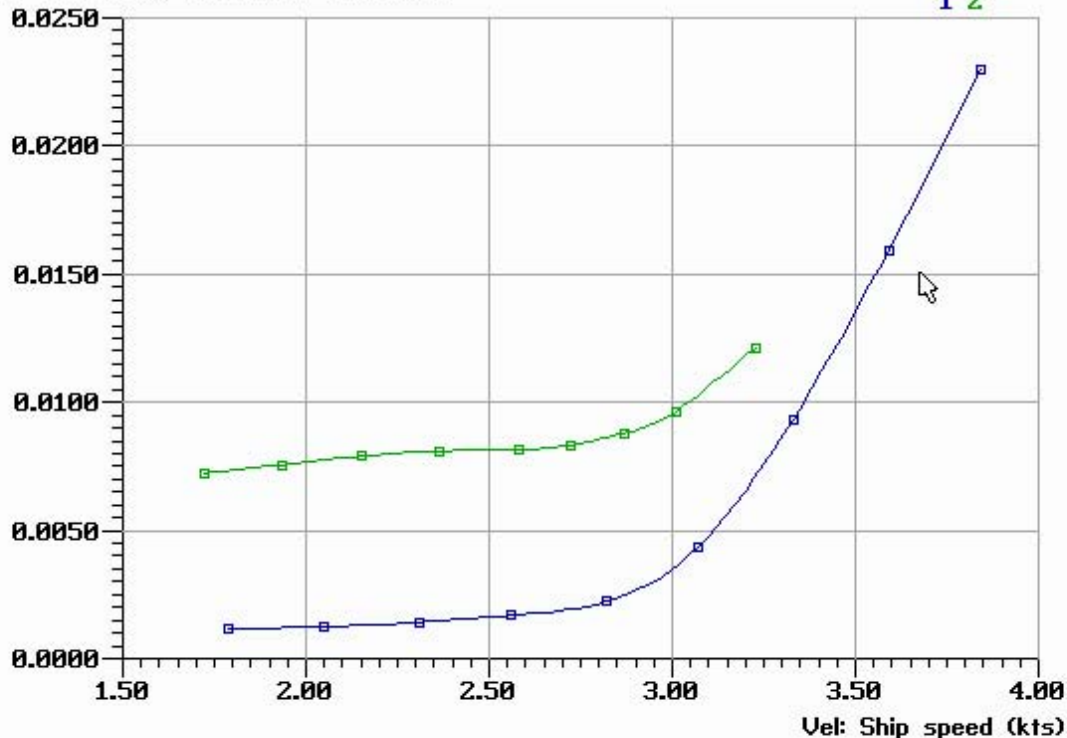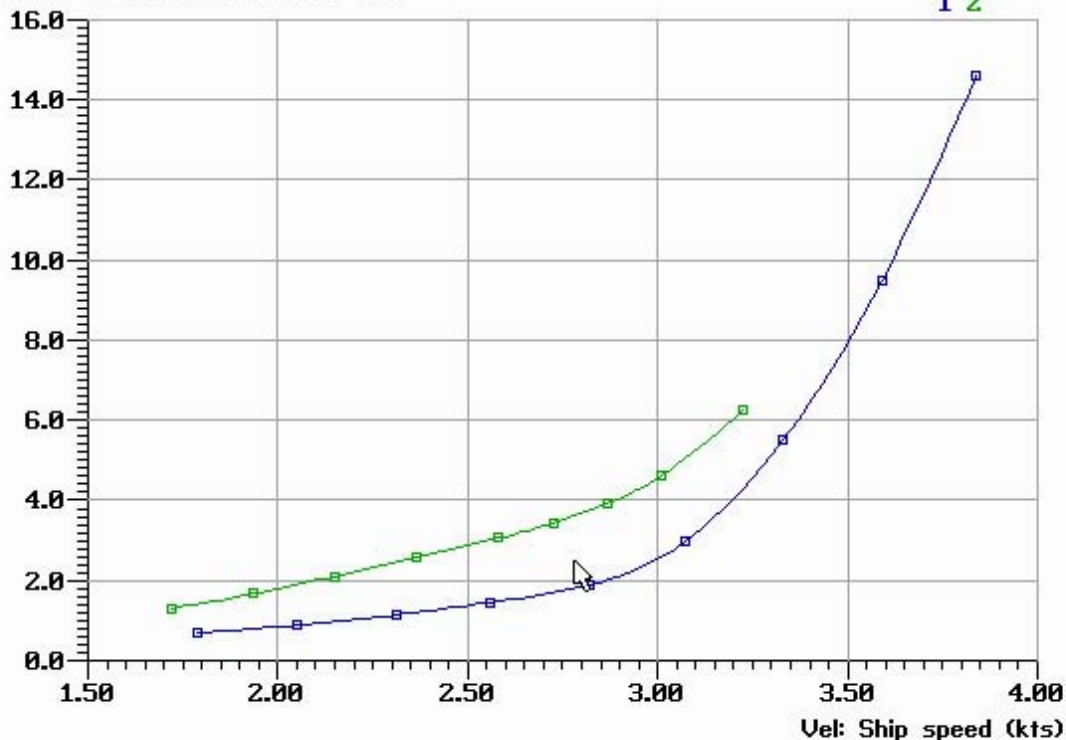
Others-M675

18-Mar-2012 19:09:49

Length BP		2.00	m			
Beam Waterline		0.50	m	3.984	Allowable range	3.22 - 5.75
Draft-Midship		0.19	m	2.714	Allowable range	1.94 - 2.42
Displacement volume	0.0992	0.1	Δ/(0.01Λ)3	345.89 Allowable range		200 - 500
Block coefficient		0.521			Allowable range	0.400 - 0.598
Prismatic coefficient		0.658	0.658		Allowable range	0.554 - 0.700
Midship coefficient		0.791			Allowable range	0.729 - 0.810
Wetted surface area	1.203	1.190	m3-Mumford	5.647 Allowable range		5.198 - 6.255
Water density		1.0259	t/m3	1.0250 at 19oC	→	
Water viscosity		1.18831	x 10-6 m2/s 1.07854 x 10-6 at 19oC			
Correlation allowance		0.0004				

Displacement   0.10 t

V/L	V	10-6Rn	103CF	103CR	103CT	RT	PE
	kn		ITTC'57			kN	kW
0.7	1.79	1.55	4.270	1.287	5.957	0.00	0.0
0.8	2.05	1.77	4.154	1.590	6.144	0.00	0.0
0.9	2.31	2.00	4.056	2.042	6.498	0.01	0.0
1.0	2.56	2.22	3.971	3.864	8.234	0.01	0.0
1.1	2.82	2.44	3.896	5.672	9.969	0.01	0.0
1.2	3.07	2.66	3.830	6.429	10.660	0.02	0.0
1.3	3.33	2.88	3.771	8.236	12.407	0.02	0.0
1.4	3.59	3.11	3.717	12.881	16.998	0.04	0.1
1.5	3.84	3.33	3.668	19.046	23.113	0.06	0.1

```
;**********************************************
;* NavCad model file        HydroComp, Inc. *
;**********************************************

[NavCad]
Version=3.00
Release=PreRelease
Date=06/20/1996
Time=09:54:16.53
Precision=6
Description=Mdl= M 675 L/B=3.984 B/T=2.714 L/Vol=4.320 Cb=0.5341 Lcb= ??

[Units]
Length=Meter
Area=SqMeter
Weight=Kilogram
Speed=Knot
Force=Pound
Power=Horsepower
Density=KgPerCuM
KinemVisc=SqMPerSec

[Condition]
rho=999.01
nu=1.13902e-06

[Resistance]

[Hull]
HullType=Displ
Loading=LoadDraft
ChineType=RoundBilge
SternShape=Normal
BowShape=Normal
FlapBehind=No
LengthPP=2
LengthWL=2
BeamWL=0.502
Draft=0.185
WettedSurf=1.1904
MaxSecArea=0.0734973
HullDispl=99.2
MidshiCoef=0.7914

[Speeds]
Speeds=1.7206,1.9356,2.1507,2.3658,2.5808,2.7245,2.8673,3.011,3.2261

[Results]
ResiCoef=0.0083147,0.00880838,0.00947208,0.0104061,0.0116574,0.0125622,0.0132703,0.0136675,0.0148325
BareResist=1.35982,1.77276,2.28279,2.93182,3.76751,4.42531,5.09597,5.73516,6.994
ModCfType=ITTC57
ModSource=ModelTest
ModLengthWL=2
FroudeLen=0.199868,0.224843,0.249829,0.274816,0.29979,0.316483,0.333071,0.349763,0.37475
FroudeVol=0.41537,0.467273,0.5192,0.571127,0.62303,0.657721,0.692194,0.726885,0.778812
HullReyNum=1.55424e+06,1.74845e+06,1.94275e+06,2.13705e+06,2.33127e+06,2.46107e+06,2.59006e+06,2.71987e+06,2.91417e+06
```
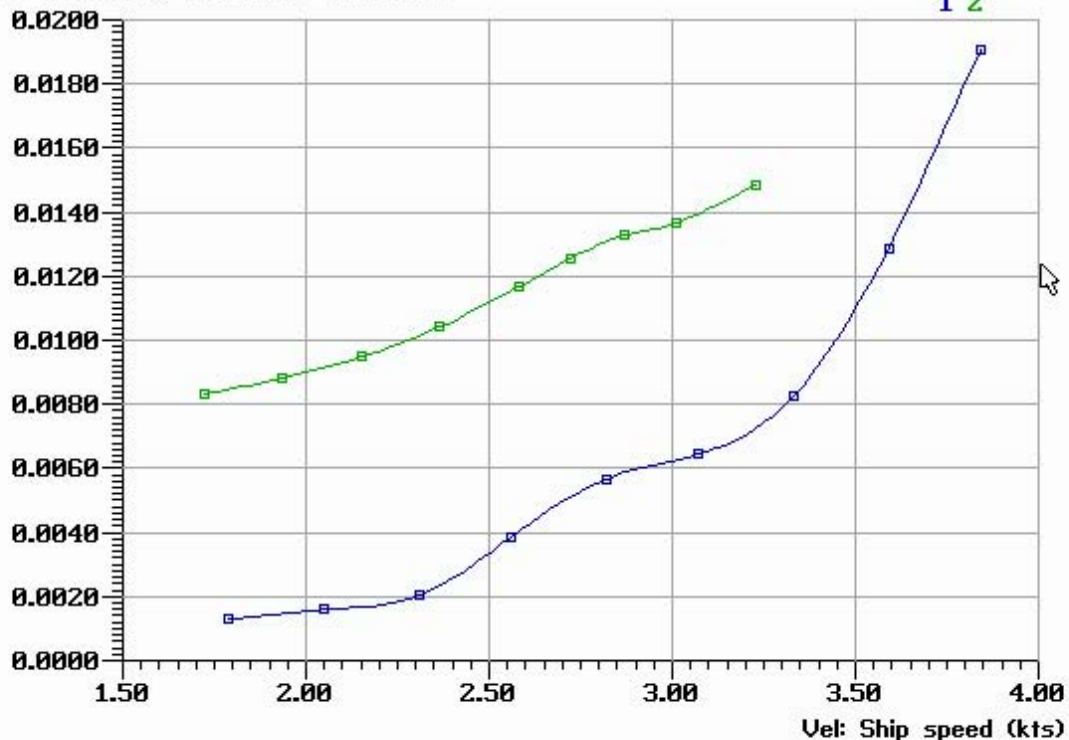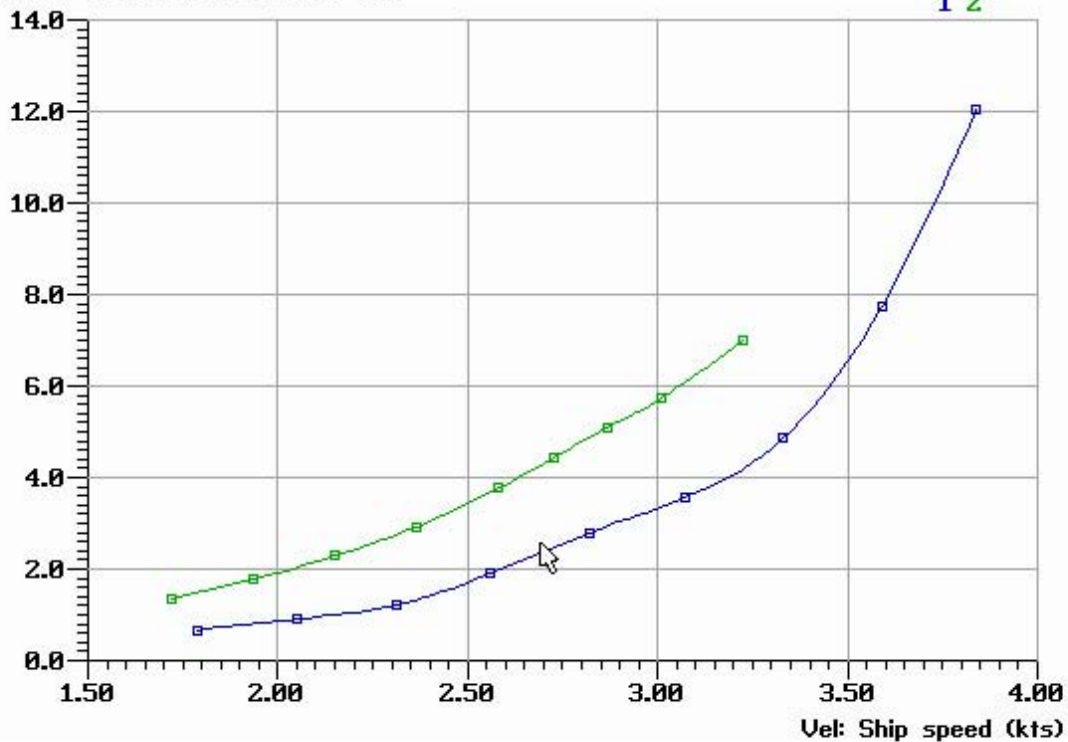
RIDGELEY-NEVITT TRAWLER SERIES RESISTANCE   Others-MWrA

18-Mar-2012 19:07:37

Length BP		30.48 m		
Beam Waterline		6.13 m	4.970	Allowable range	3.22 - 5.75
Draft-Midship		2.75 m	2.230	Allowable range	1.94 - 2.42
Displacement volume	298.718	291.4 Δ/(0.01Λ)3	294.26	Allowable range	200 - 500
Block coefficient		0.567		Allowable range	0.400 - 0.598
Prismatic coefficient		0.638	0.638	Allowable range	0.554 - 0.700
Midship coefficient		0.889		Allowable range	0.729 - 0.810
Wetted surface area	257.189	250.727 m3-Mumford	5.704	Allowable range	5.198 - 6.255
Water density		1.0259 t/m3	1.0250 at 19oC	→	
Water viscosity		1.18831 x 10-6 m2/s	1.07854 x 10-6 at 19oC		
Correlation allowance		0.0004			

Displacement   298.98 t

V/L	V	10-6Rn	103CF	103CR	103CT	RT	PE
	kn		ITTC'57			kN	kW
0.7	7.00	92.37	2.107	1.241	3.749	6.25	22.5
0.8	8.00	105.56	2.067	1.470	3.937	8.58	35.3
0.9	9.00	118.76	2.032	1.750	4.182	11.53	53.4
1.0	10.00	131.95	2.002	3.173	5.575	18.98	97.6
1.1	11.00	145.15	1.975	4.264	6.639	27.34	154.7
1.2	12.00	158.35	1.951	4.934	7.285	35.71	220.4
1.3	13.00	171.54	1.930	6.954	9.284	53.40	357.2
1.4	14.00	184.74	1.910	11.448	13.758	91.79	661.1
1.5	15.00	197.93	1.892	17.219	19.511	149.42	1153.0

```
;**********************************************
;* NavCad model file          HydroComp, Inc. *
;**********************************************

[NavCad]
Version=3.00
Release=PreRelease
Date=01/29/1996
Time=17:47:31.91
Precision=6
Description=TRAWLER Mdl= WR-A L/Vol=4.60 Cp=0.637 Cb=0.566 Lcb=-0.89A 1967

[Units]
Length=Foot
Area=SqFoot
Weight=LongTon
Speed=Knot
Force=Pound
Power=Horsepower
Density=KgPerCuM
KinemVisc=SqMPerSec

[Condition]
rho=1025.86
nu=1.1883e-06

[Resistance]

[Hull]
HullType=Displ
Loading=LoadDraft
ChineType=RoundBilge
SternShape=Normal
BowShape=Normal
FlapBehind=No
LengthPP=100
LengthWL=100
BeamWL=20.121
Draft=9.023
LCBHull=50.89
WettedSurf=2698.8
MaxSecArea=161.4
HullDispl=294
HalfEntAng=21.7
MidshiCoef=0.889
WaterpCoef=0.795

[Speeds]
Speeds=8.354,9.194,10.033,10.873,11.713

[Results]
ResiCoef=0.0016016,0.00211444,0.00363955,0.00467612,0.00522543
BareResist=2165.68,2936.84,4652.68,6381.56,7960.67
ModCfType=ITTC57
ModSource=ModelTest
ModLengthWL=8.333
FroudeLen=0.24858,0.273574,0.29854,0.323534,0.348529
FroudeVol=0.533062,0.586661,0.640197,0.693797,0.747397
HullReyNum=1.10236e+08,1.2132e+08,1.32391e+08,1.43475e+08,1.54559e+08
```
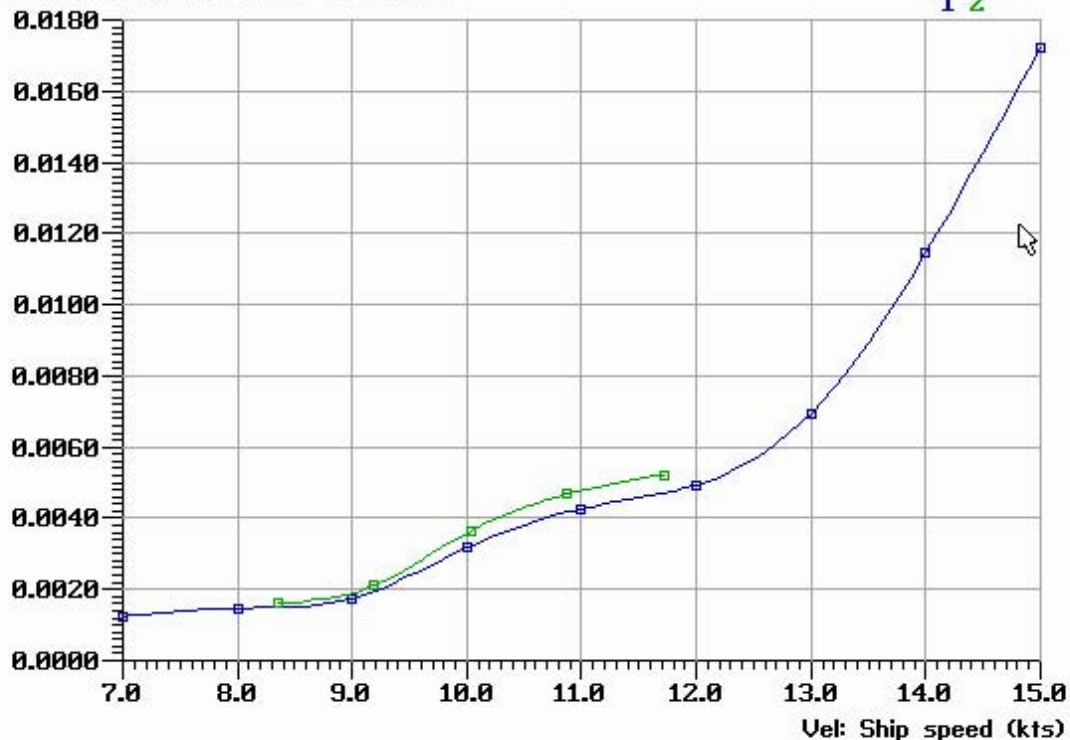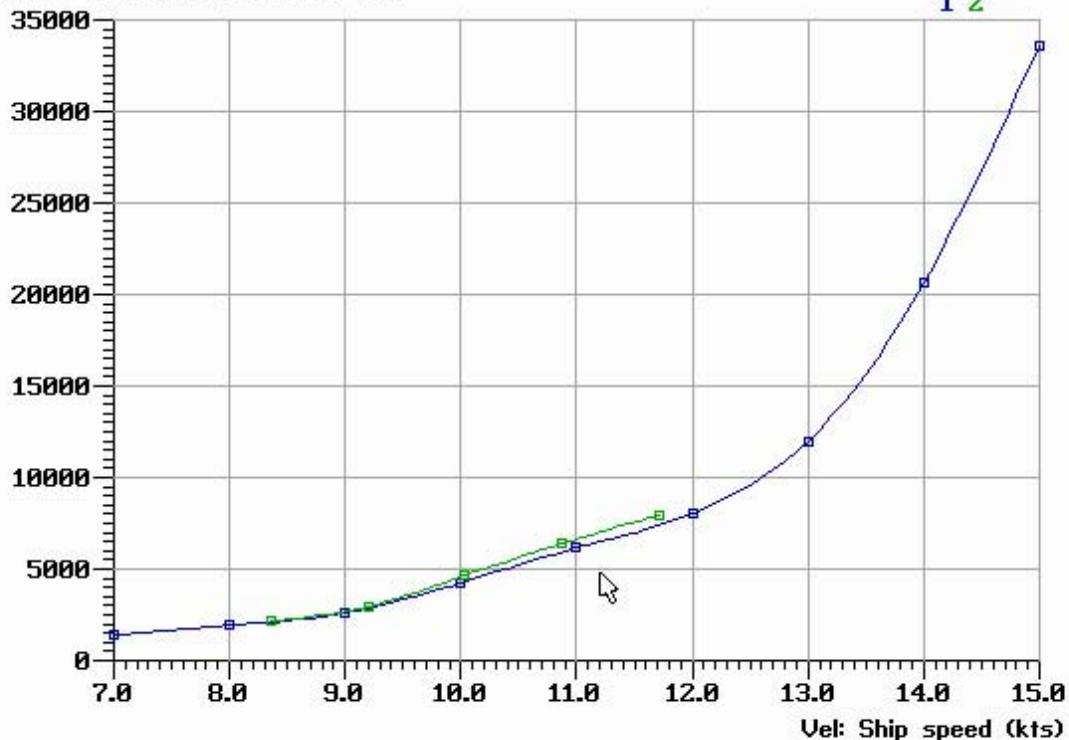
RIDGELEY-NEVITT TRAWLER SERIES RESISTANCE   Others-Fao70

18-Mar-2012 19:11:22

Length BP		4.88 m			
Beam Waterline		1.32 m	3.700	Allowable range	3.22 - 5.75
Draft-Midship		0.45 m	2.900	Allowable range	1.94 - 2.42
Displacement volume	1.28764	1.3 Δ/(0.01Λ)3	309.63	Allowable range	200 - 500
Block coefficient		0.430		Allowable range	0.400 - 0.598
Prismatic coefficient		0.572	0.572	Allowable range	0.554 - 0.700
Midship coefficient		0.752		Allowable range	0.729 - 0.810
Wetted surface area	6.902	6.596 m3-Mumford	5.665 Allowable range		5.198 - 6.255
Water density		1.0259 t/m3	1.0250 at 19oC	→	
Water viscosity		1.18831 x 10-6 m2/s	1.07854 x 10-6 at 19oC		
Correlation allowance		0.0004			

Displacement   1.29 t

V/L	V	10-6Rn	103CF	103CR	103CT	RT	PE
	kn		ITTC'57			kN	kW
0.7	2.80	5.91	3.294	1.132	4.826	0.03	0.0
0.8	3.20	6.76	3.215	1.235	4.851	0.04	0.1
0.9	3.60	7.60	3.148	1.358	4.906	0.06	0.1
1.0	4.00	8.45	3.090	1.699	5.189	0.07	0.2
1.1	4.40	9.29	3.039	2.084	5.523	0.10	0.2
1.2	4.80	10.13	2.993	3.656	7.050	0.15	0.4
1.3	5.20	10.98	2.952	7.759	11.110	0.27	0.7
1.4	5.60	11.82	2.915	13.712	17.026	0.48	1.4
1.5	6.00	12.67	2.880	20.206	23.486	0.76	2.3

```
;*******************************************
;* NavCad model file        HydroComp, Inc. *
;*******************************************

[NavCad]
Version=3.00
Release=PreRelease
Date=05/10/1996
Time=17:35:48.53
Precision=6
Description=FAO Mdl=70 L/B=3.70 B/T=2.90 Cb=0.436 L/Vol=4.498 Lcb=-3.10A Based=Cr16

[Units]
Length=Foot
Area=SqFoot
Weight=LongTon
Speed=Knot
Force=Pound
Power=Horsepower
Density=KgPerCuM
KinemVisc=SqMPerSec

[Condition]
rho=1025.86
nu=1.1883e-06

[Resistance]

[Hull]
HullType=Displ
Loading=LoadDraft
ChineType=RoundBilge
SternShape=Normal
BowShape=Normal
FlapBehind=No
LengthPP=16
LengthWL=16
BeamWL=4.3243
Draft=1.4911
Trim=0.8
LCBHull=8.496
WettedSurf=71
MaxSecArea=4.84887
HullDispl=1.2673
HalfEntAng=15
MidshiCoef=0.752

[Speeds]
Speeds=3.4,3.6,3.8,4,4.2,4.4,4.6,4.8

[Results]
ResiCoef=0.0012587,0.00154334,0.00182872,0.00213287,0.00240308,0.00266422,0.00318346,0.00407522
BareResist=11.262,13.283,15.542,18.11,20.832,23.784,28.107,34.637
ModCfType=ITTC57
ModSource=ModelTest
ModLengthWL=2.666
FroudeLen=0.252924,0.267802,0.28268,0.297558,0.312435,0.327313,0.342191,0.357069
FroudeVol=0.537782,0.569417,0.601051,0.632685,0.664319,0.695954,0.727588,0.759222
HullReyNum=7.17838e+06,7.60063e+06,8.02289e+06,8.44515e+06,8.86741e+06,9.28966e+06,9.71192e+06,1.01342e+07
```
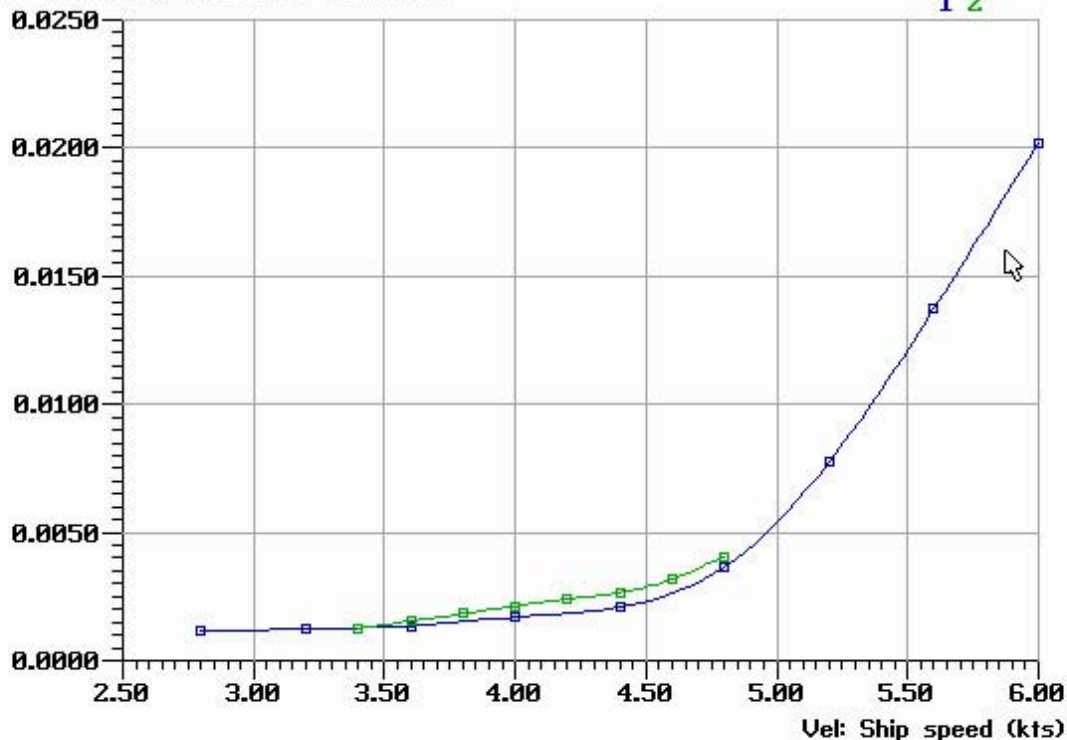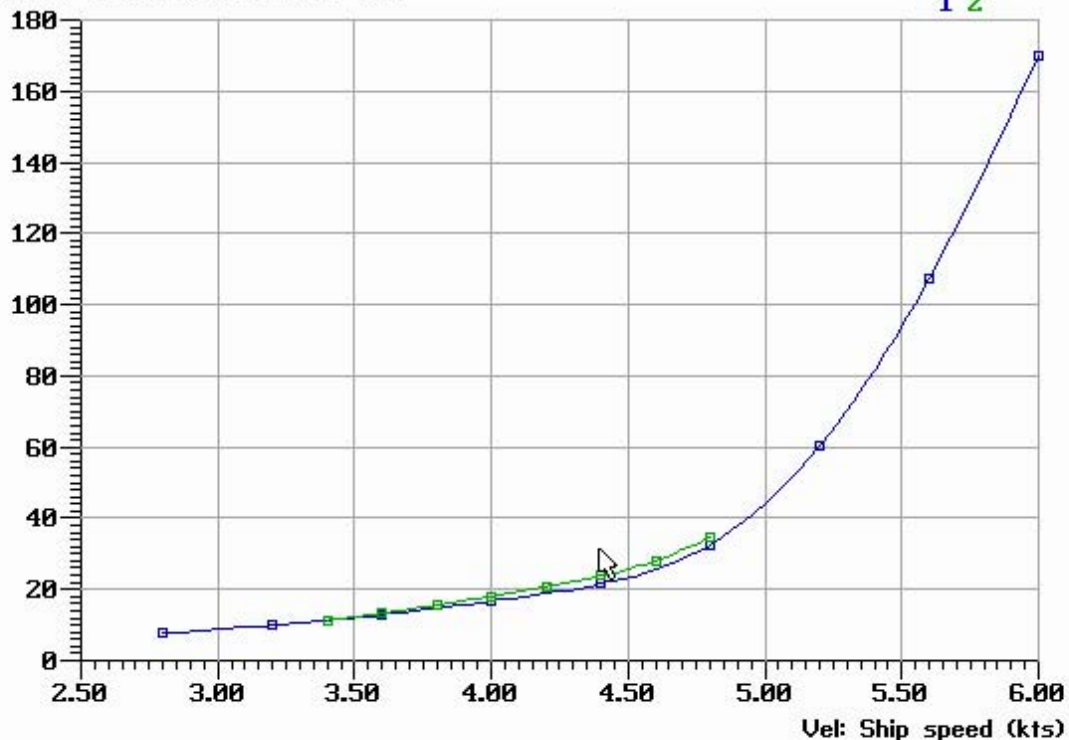
RIDGELEY-NEVITT TRAWLER SERIES RESISTANCE   Others-Fao85

18-Mar-2012 19:12:07

Length BP   4.88 m
Beam Waterline   1.23 m   3.962   Allowable range   3.22 - 5.75
Draft-Midship   0.42 m   2.943   Allowable range   1.94 - 2.42
Displacement volume   1.10952   1.1 Δ/(0.01Λ)3   266.80 Allowable range   200 - 500
Block coefficient   0.431   Allowable range   0.400 - 0.598
Prismatic coefficient   0.576   0.576   Allowable range   0.554 - 0.700
Midship coefficient   0.748   Allowable range   0.729 - 0.810
Wetted surface area   6.401   6.104 m3-Mumford   5.790 Allowable range   5.198 - 6.255
Water density   1.0259 t/m3   1.0250 at 19oC   →
Water viscosity   1.18831 x 10-6 m2/s 1.07854 x 10-6 at 19oC
Correlation allowance   0.0004

Displacement   1.11 t

V/L	V	10-6Rn	103CF	103CR	103CT	RT	PE
	kn		ITTC'57			kN	kW
0.7	2.80	5.91	3.294	1.066	4.760	0.03	0.0
0.8	3.20	6.76	3.215	1.184	4.799	0.04	0.1
0.9	3.60	7.60	3.148	1.259	4.807	0.05	0.1
1.0	4.00	8.45	3.090	1.613	5.103	0.07	0.1
1.1	4.40	9.29	3.039	1.954	5.393	0.09	0.2
1.2	4.80	10.13	2.993	3.294	6.687	0.13	0.3
1.3	5.20	10.98	2.952	6.717	10.069	0.23	0.6
1.4	5.60	11.82	2.915	11.984	15.298	0.40	1.1
1.5	6.00	12.67	2.880	17.869	21.150	0.63	1.9

```
;***********************************************
;* NavCad model file        HydroComp, Inc. *
;***********************************************
;

[NavCad]
Version=3.00
Release=PreRelease
Date=05/10/1996
Time=17:40:28.43
Precision=6
Description=FAO Mdl=85 L/B=4.02 B/T=2.90 Cb=0.4421 L/Vol=4.733 Lcb=-2.00A Based=Cr16

[Units]
Length=Foot
Area=SqFoot
Weight=LongTon
Speed=Knot
Force=Pound
Power=Horsepower
Density=KgPerCuM
KinemVisc=SqMPerSec

[Condition]
rho=1025.86
nu=1.1883e-06

[Resistance]

[Hull]
HullType=Displ
Loading=LoadDraft
ChineType=RoundBilge
SternShape=Normal
BowShape=Normal
FlapBehind=No
LengthPP=16
LengthWL=16
BeamWL=3.9801
Draft=1.3724
Trim=0.8
LCBHull=8.32
WettedSurf=65.7
MaxSecArea=4.08579
HullDispl=1.092
HalfEntAng=15.5
MidshiCoef=0.748

[Speeds]
Speeds=3.4,3.6,3.8,4,4.2,4.4,4.6,4.8

[Results]
ResiCoef=0.0015781,0.00164381,0.00184589,0.00207209,0.00229628,0.00252624,0.00270728,0.00320227
BareResist=11.109,12.534,14.428,16.577,18.926,21.511,24.132,28.305
ModCfType=ITTC57
ModSource=ModelTest
ModLengthWL=2.666
FroudeLen=0.252924,0.267802,0.28268,0.297558,0.312435,0.327313,0.342191,0.357069
FroudeVol=0.551293,0.583722,0.616151,0.64858,0.681009,0.713438,0.745867,0.778296
HullReyNum=7.17838e+06,7.60063e+06,8.02289e+06,8.44515e+06,8.86741e+06,9.28966e+06,9.71192e+06,1.01342e+07
```
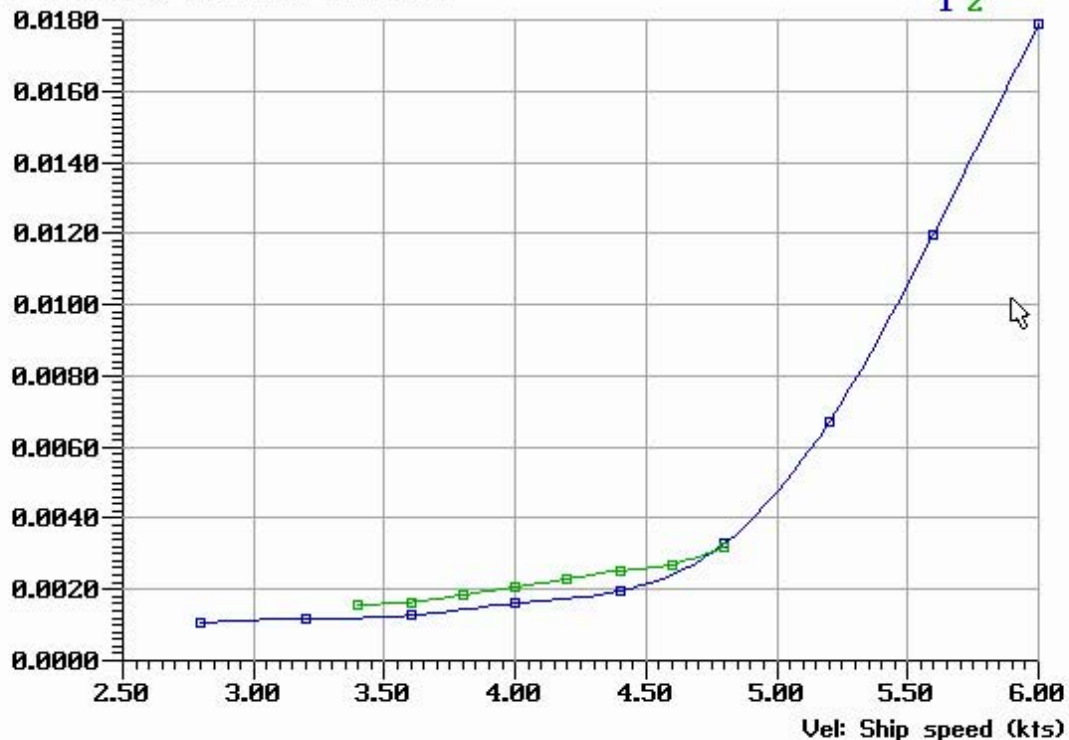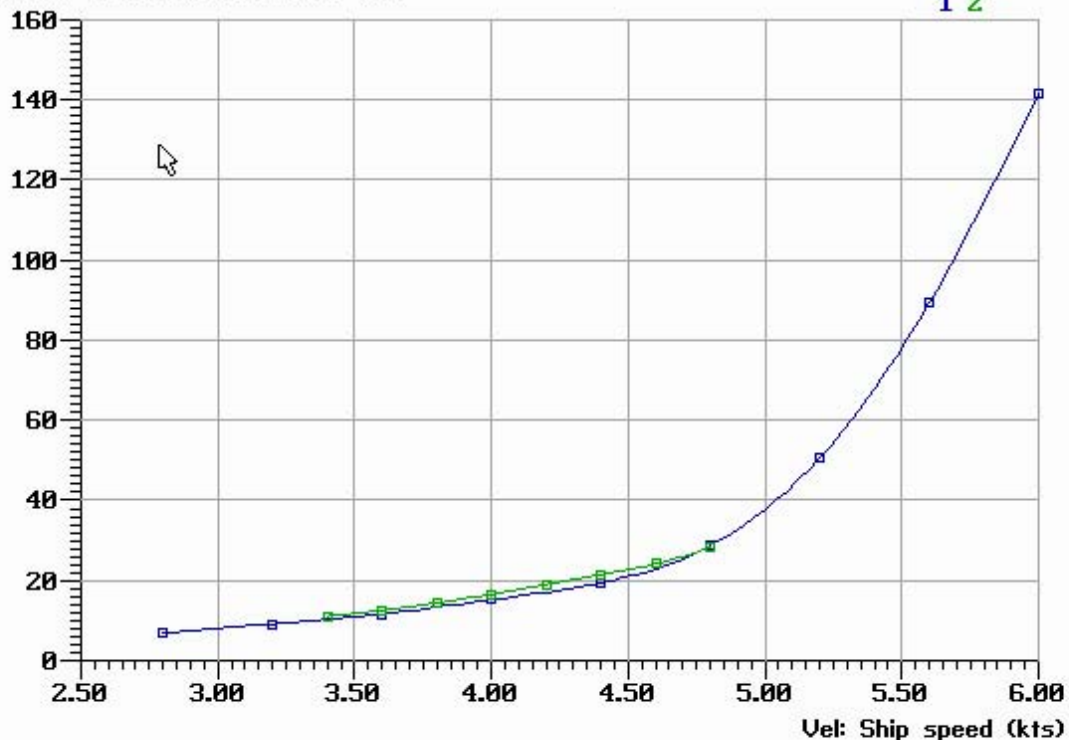
RIDGELEY-NEVITT TRAWLER SERIES RESISTANCE

Others-Fao85A

Length BP		21.86 m			
Beam Waterline		4.69 m	4.666	Allowable range	3.22 - 5.75
Draft-Midship		2.01 m	2.335	Allowable range	1.94 - 2.42
Displacement volume	101.605	99.1 $\Delta/(0.01\Lambda)3$	271.32	Allowable range	200 - 500
Block coefficient		0.483		Allowable range	0.400 - 0.598
Prismatic coefficient		0.560	0.560	Allowable range	0.554 - 0.700
Midship coefficient		0.861		Allowable range	0.729 - 0.810
Wetted surface area	129.431	122.818 m3-Mumford	5.734	Allowable range	5.198 - 6.255
Water density		1.0259 t/m3	1.0250 at 19oC	$\rightarrow$	
Water viscosity		1.18831 x 10-6 m2/s	1.07854 x 10-6 at 19oC		
Correlation allowance		0.0004			

Displacement   101.69 t

V/L	V	10-6Rn	103CF	103CR	103CT	RT	PE
	kn		ITTC'57			kN	kW
0.7	5.93	56.10	2.269	0.955	3.624	2.12	6.5
0.8	6.77	64.12	2.224	1.020	3.644	2.79	9.7
0.9	7.62	72.13	2.185	1.120	3.705	3.59	14.1
1.0	8.47	80.15	2.152	1.393	3.945	4.72	20.6
1.1	9.32	88.16	2.122	1.817	4.339	6.28	30.1
1.2	10.16	96.17	2.095	3.651	6.146	10.58	55.3
1.3	11.01	104.19	2.071	7.658	10.129	20.47	115.9
1.4	11.86	112.20	2.049	13.325	15.774	36.97	225.5
1.5	12.70	120.22	2.029	19.285	21.714	58.42	381.8

```
;*********************************************
;* NavCad model file          HydroComp, Inc. *
;*********************************************

[NavCad]
Version=3.00
Release=PreRelease
Date=05/11/1996
Time=10:12:58.54
Precision=6
Description=FAO Mdl=85A L/B= 4.666 B/T=2.336 L/Vol=4.732 Lcb=? 1960

[Units]
Length=Foot
Area=SqFoot
Weight=LongTon
Speed=Knot
Force=Pound
Power=Horsepower
Density=KgPerCuM
KinemVisc=SqMPerSec

[Condition]
rho=1025.86
nu=1.1883e-06

[Resistance]

[Hull]
HullType=Displ
Loading=LoadDraft
ChineType=RoundBilge
SternShape=Normal
BowShape=Normal
FlapBehind=No
LengthPP=71.72
LengthWL=71.72
BeamWL=15.37
Draft=6.58
LCBHull=35.86
WettedSurf=1322
MaxSecArea=87.0769
HullDispl=100
HalfEntAng=22
MidshiCoef=0.861
WaterpCoef=0.744

[Speeds]
Speeds=7,7.5,8,8.5,9,9.5,10,10.5

[Results]
ResiCoef=0.0017219,0.00208227,0.00248109,0.00291845,0.00322538,0.00377515,0.00480141,0.00682138
BareResist=796.137,985.202,1211.61,1481,1748.09,2128.01,2736.66,3845.75
ModCfType=ITTC57
ModSource=ModelTest
ModLengthWL=3.586
FroudeLen=0.245951,0.263519,0.281087,0.298655,0.316223,0.333791,0.351359,0.368927
FroudeVol=0.534612,0.572799,0.610985,0.649172,0.687359,0.725545,0.763732,0.801918
HullReyNum=6.62469e+07,7.09788e+07,7.57108e+07,8.04427e+07,8.51746e+07,8.99065e+07,9.46385e+07,9.93704e+07
```
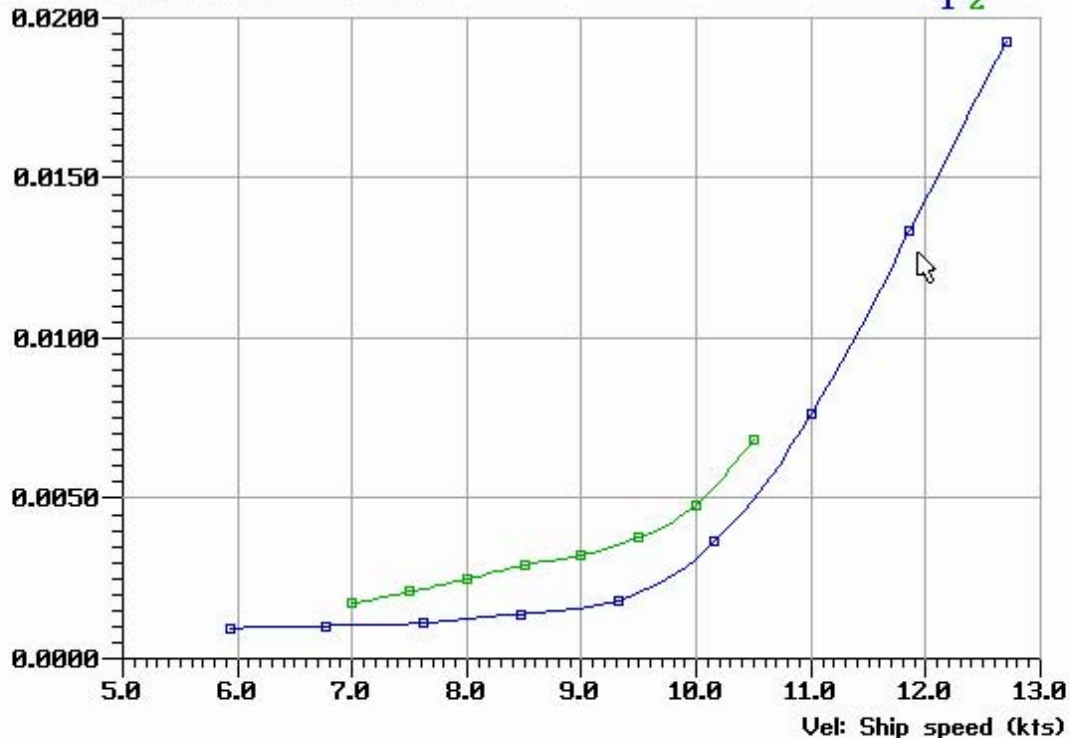
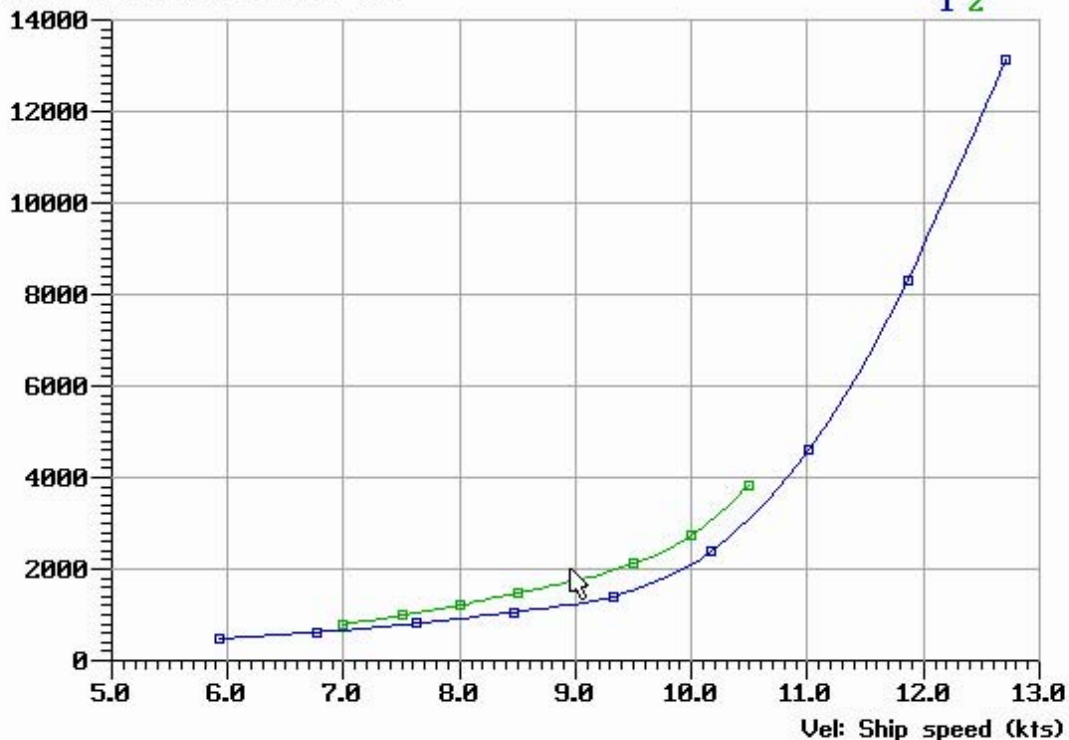Graph results

Graph Parameters

Rbare: Bare-hull resistance (lbs)

1 2

14000

12000

10000

8000

6000

4000

2000

0

5.0   6.0   7.0   8.0   9.0   10.0   11.0   12.0   13.0

Vel: Ship speed (kts)

if requested, would be more