



INTERNATIONAL TWELVE METRE CLASS

Appendix E Measurement Certificate

12

Yacht's Name	Thea 2001	National letters and Sail Number	D1
Designer	Anker	Builder	Anker & Jensen
Owner	Hans Michael Jebsen		Year built
Owner's Address	DK-1256 Kobenhavn c/o Capitellum Bredgade 56		
Classification certificate (Number or Date)	Lloyds		

This yacht has been measured by approved measurer(s) and has been found to rate not more than 12.000 metres.

This certificate is dated **07-Jul-08 Walsted (DK)** Valid until **7-Jul-10**

Measurer **G.R.Perrin** Measurer signature
ITMA Technical Director



Supersedes Certificate

PROVISIONAL CERTIFICATE REVALIDATION

This yacht has been declared by the Owner to be unchanged from her previous certificate. This certificate is subject to a successful flotation and a rig measurement check being carried out by a class approved measurer prior to racing. Accordingly this certificate has been revalidated and remains valid until March 31, 2020.

Signature March 31, 2018
ITMA Technical Director

RATING CALCULATIONS

OVERALL LENGTH		20.015
Overhang Forward to L1	2.048	
Overhang Aft to L1	2.530	
Total Overhang (Subtract)	4.578	
MEASURED LENGTH (L1 L1)		15.437
Girth at Bow	1.436	
Twice vertical Height at Bow (Subtract)	1.200	
O at Bow	0.236	
Add 1 1/2 O at Bow (min 0.540 m)	0.540	
Girth at Stern	2.801	
Twice vertical Height at Stern (Subtract)	0.694	
O at Stern	1.413	
Add 1/3 O at Stern (min 0.400 m)	0.471	
Add any penalty (Displ.)	0.000	
Sum of length, girth correction and penalty	16.448	
Age and date allowance	1919	Allowance 0.9485
CORRECT LENGTH L		15.601
Skin d to d1 Port	3.135	
Chain d to d1 Port	3.110	
d Port	0.025	
Skin d to d1 Starboard	3.160	
Chain d to d1 Starboard	3.115	
d Starboard	0.045	
Add d	0.070	
Add GIRTH 2 d		0.140
Mean Freeboard Bow O	Actual 1.146	1.146
Mean Freeboard Midship d	Actual 0.912	0.912
Mean Freeboard Stern O	Actual 0.874	0.874
Sum of Freeboards		2.932
Subtract FREEBOARD, F		0.977
Add SAIL AREAS (Square root)		13.081
TOTAL OF MEASUREMENTS		27.845
PENALTY (Draught)		0.000
RATING		11.749

PENALTIES

Overhang Forward to L	2.888	
Overhang Aft to L	3.279	
Subtract from overall length	6.167	
WATERLINE LENGTH		13.848
Minimum Displacement for Zero Penalty [m3]	24.887	
Minimum Weight for Zero Penalty [ton] (Water of sg 1.025)	25.509	
DISPLACEMENT (by weighing)		25.580
Equivalent LWL (for Displ. < min.)		
DISPLACEMENT PENALTY (add to L)		0.000
DRAUGHT (actual)	2.667	
Max. Draught for Zero Penalty	2.716	
Difference (if positive)		
DRAUGHT PENALTY (add to Rating)		0.000
BEAM (Min)	3.600	
Max Beam at 1/3 of Midship Freeboard	3.420	
Difference (if positive)	0.180	
BEAM PENALTY (add to L)		0.000
Tumblehome Max. (2 x 2% of Extr. Beam)	0.137	
Extreme Beam	3.420	
Beam at deck	3.420	
Difference (if positive)		
TUMBLEHOME PENALTY (add to Rating)		0.000

SAIL PLAN

Height of Sail Plan	25.000	J=	6.880	A=	23.600	I =	18.750
Spi pole	8.000	Boom Height	1.400	B=	9.320		
Rated Mainsail Area	109.976	Rated Foretriangle Area=	63.750	TOTAL RATED SAIL AREA =	173.726		
Propeller allowance	0.985	Corrected sail area	171.120	S=	13.081		

SAIL LIMITS

max girth at 1/2 height (68%)	6.338	Genoa max. foot length (J + 4.8m)	11.680
max girth at 3/4 height (41%)	3.821	Spinnaker max. luff length [m]	18.808
		1/2 foot max width (125% J) [m]	10.000

SPARS MEASUREMENTS

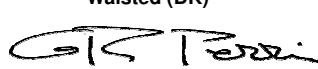

MAST (material)	Wood	Mast Weight [kg]	0	Mast CG position (from meas. point)	0.000
Mast dimensions	Deck 240x300	Half-Height 255x340	Jib-Halyard 200x298	Head 150x204	

Flotation

Water salinity	1.010	Difference of immersion [m] from standard salt water [1.025 kg/dm3]	0.010
Internal Ballast [kg]	800kg	Loc. from bow [m]	6.0 m

Measurer's Notes

- 1- Measured according to the 1934 rule
 2- Age allowance take into account a bermudian rig

Date of Measurement	07-Jul-08	Measurer's Name(s)	G.R.Perrin
Place of Measurement	Walsted (DK)	Measurer's signature	
Certificate Revalidated	March 31,2018	Technical Director endorement	
		Certificate Valid Until	March 30, 2020