

12



INTERNATIONAL TWELVE METRE CLASS

Yacht's Name Kiwi Magic

National letters and Sail Number KZ 7 **Club** _____

Designer Farr / Holland / Davidson

Builder Marten Marine **Building Year** 1986

Owner J. Blach Petersen: Business Development A/S

Owner's Address Strandvejen 112
8000 Aarhus, Denmark

Lloyds R class certificate (Number or Date) _____

RATING CERTIFICATE

This yacht has been measured by measurer(s) appointed by the International Twelve Metre Association and has been found to rate not more than 12.000 metres.

This certificate is dated: January 1, 2019

Measurer Kay-Enno Brink Signature 

Valid until January 1, 2021

Supersedes September 17, 2012

Is this an **Appendix E** Certificate? Y / N N

Was **Appendix F** used for Measurement? Y / N N

Signature 
ITMA Technical Director



Stamp of Authority of the
International Twelve Metre Association

Yacht's name : Kiwi Magic

Date January 1, 2019

RATING CALCULATION**OVERALL LENGTH**

Overhang Forward to FGS
 Overhang Aft to AGS
 Total Overhang (Subtract)

2.171
 2.020
 4.191

19.415**MEASURED LENGTH (L_{BG})**

Girth at Bow
 Twice vertical Height at Bow (Subtract)
 Girth Difference at FGS
 Add 1.5 Girth Difference at FGS (min 0.540 m)
 Girth at Stern
 Twice vertical Height at Stern (Subtract)
 Girth Difference at AGS
 Add 1/3 Girth Difference at AGS (min 0.400 m)
 Add any penalty (Beam or Displacement)
 Sum of Length and Girth Corrections

1.701
 1.200
 0.501
0.752
 3.362
 1.886
 1.476
0.492
0.000

15.224**16.468**

Age/Date Correction Factor (ADCF)(see page 3)

1.0000

LENGTH (L)

Skin IM to d1 Port
 Chain IM to d1 Port
 d Port
 Skin IM to d1 Starboard
 Chain IM to d1 Starboard
 d Starboard
 Add d

3.254
 3.247
 0.007
 3.253
 3.246
 0.007
 0.014

16.468**Add GIRTH 2 d****0.028**

Mean Freeboard Bow
 Mean Freeboard Midship
 Mean Freeboard Stern
 Sum of Freeboards

Datum Sta.	Actual Sta.	Rating FB
	1.351	1.351
	1.119	1.119
	1.123	1.115
		3.585

See Notes

1.193**Subtract FREEBOARD, F****Add SAIL AREAS (Square root)****13.039****TOTAL OF MEASUREMENTS****28.341**

PENALTY (Draft or Tumblehome)

0.000

RATING**11.958**

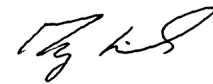
Date and Place of Measurement

9-Jun-18 Glücksburg

Measurer's Name(s)

Kay-Enno Brink


Signature



Yacht's name : Kiwi Magic		Date	January 1, 2019
Range Measurement (Yes or No)	N	Date:	9-Jun-18

PENALTIES

Overhang Forward to MWL	2.775	
Overhang Aft to MWL	2.956	
Subtract from overall length	5.731	
Difference of immersion from salt to fresh water	Meas. Density	
WATERLINE LENGTH (LWL)		13.684
Minimum Displacement for Zero Penalty [m3]	24.057	
Minimum Weight for Zero Penalty [ton] (Water of sg 1.025)	24.659	
WEIGHT [tonne] Actual weight		25.090
Equivalent LWL (for Displ. < min.)	13.768	
Difference	0.084	
DISPLACEMENT PENALTY (add to L)		0.000
Displacement Determination Method		
DRAFT (actual)	2.687	
Max. Draft for Zero Penalty	2.689	
Difference (if positive)		
DRAFT PENALTY (add to Rating)		0.000
BEAM (Min)	3.600	
Max Beam at 1/3 of Midship Freeboard	3.630	
Difference (if positive)		
BEAM PENALTY (add to L)		0.000
Tumblehome Max. (2 x 2% of Extr. Beam)	0.000	
Extreme Beam	0.000	
Beam at deck	0.000	
Difference (if positive)	0.000	
TUMBLEHOME PENALTY (add to Rating)		0.000

Date and Place of Measurement	9-Jun-18	Glücksburg	
Measurer's Name(s)	Kay-Enno Brink	Signature	

Design/Age Correction Factor Calculation			
Age Date	1986		
ADCF (Table E-2)	1		
Hull Alteration Scope and Date			
Appendage Change Scope and Date			
Change/Alteration Correction ADCF			
Accommodation Deficiency Ballast	none		

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SAIL PLAN

Max Height of Sail Plan =	<input type="text" value="25.000"/>	J=	<input type="text" value="7.725"/>	I =	<input type="text" value="18.750"/>
Boom above Mast Datum =	<input type="text" value="1.550"/>	P=	<input type="text" value="23.450"/>	E=	<input type="text" value="9.470"/>
Rated Mainsail Area	<input type="text" value="111.036"/>	Spi boom=	<input type="text" value="7.725"/>	√S=	<input type="text" value="13.039"/>
J used for Rating	<input type="text" value="7.725"/>				
Rated Foretriangle Area	<input type="text" value="61.559"/>	Propeller allowance		<input type="text" value="0.985"/>	
TOTAL RATED SAIL AREA (S)	<input type="text" value="172.594"/>	Corrected sail area		<input type="text" value="170.005"/>	

SAIL LIMITS

Mainsail max girth:	1/2 height (68% of E)	<input type="text" value="6.440"/>	3/4 height (41% of E)	<input type="text" value="3.883"/>
Genoa:	max. foot length (J + 4.8m)	<input type="text" value="12.525"/>		
Spinnaker:	1/2 foot max breadth (125% J)	<input type="text" value="9.656"/>	max. luff length=	<input type="text" value="18.723"/>

Spar Measurement

MAST (material)	<input type="text" value="Aluminium"/>	Mast Weight	<input type="text" value="460"/>	CG pos.	<input type="text" value="9.770"/>
Mast dimensions [mm]	<input type="text" value="340*250"/>	Deck	<input type="text" value="340*250"/>	Jib-Halyard	<input type="text" value="282*207"/>
		Half-Height	<input type="text" value="340*250"/>	Head	<input type="text" value="167*128"/>
Sections area [cm ²]	<input type="text" value="667"/>		<input type="text" value="667"/>		<input type="text" value="458"/>
			<input type="text" value="667"/>		<input type="text" value="168"/>
Mast CG Correction (if applicable) Wt & CG	<input type="text"/>			Mk ²	<input type="text"/>

Engine/Propeller Installation

Engine and propeller weight	<input type="text" value="YANMAR 70 hp"/>	Propeller diameter =	<input type="text" value="0.560"/>
Minimum boat speed with engine	<input type="text" value="> 7 kn"/>	Propeller position =	<input type="text" value="on CL"/>
Propeller Type (folding feathering fixed pitch etc.), no of blades		<input type="text" value="folding"/>	<input type="text" value="3 blades"/>
Propeller Skew			<input type="text" value="16 deg"/>

Flotation

Internal Ballast	Amount	Location from Bow
Lead Pigs	604 kg	11.05 m
Lead Pigs	1276 kg	12.71 m
Lead Pigs	160 kg	13.95 m

Measurer's Notes

1	New Keel 2005
2	New Bow 2007
3	New Keel 2008
4	Motor with strut drive added 2017

Date and Place of Measurement

9-Jun-18 Glücksburg

Measurer's Name(s)

Kay-Enno Brink

