



# INTERNATIONAL TWELVE METRE CLASS

Yacht's Name ANITRA

National letters and Sail Number US-5 Club Flensburger Segel-Club

Designer S. Burgess

Builder Abeking&Rasmussen/J. Martin Building Year 1928

Owner GBR ANITRA

Owner's Address Yacht & Bootswerft Martin, Strandbadstr. 25, 78315 Radolfzell

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: Sept 17 2021

Measurer Kay-Enno Brink Signature 

Valid until Sept 17 2023

Supersedes June 1 2019

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

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 : ANITRA

Date

Sept 17 2021

**RATING CALCULATION****OVERALL LENGTH****21.316**

Overhang Forward to FGS

3.390

Overhang Aft to AGS

2.944

Total Overhang (Subtract)

6.334

**MEASURED LENGTH (L<sub>BG</sub>)****14.982**

Girth at Bow

1.828

Twice vertical Height at Bow (Subtract)

1.200

Girth Difference at FGS

0.628

Add 1.5 Girth Difference at FGS (min 0.540 m)

**0.942**

Girth at Stern

3.302

Twice vertical Height at Stern (Subtract)

1.704

Girth Difference at AGS

1.598

Add 1/3 Girth Difference at AGS (min 0.400 m)

**0.533**

Add any penalty (Beam or Displacement)

**0.000**

Sum of Length and Girth Corrections

**16.457**

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

0.9540

**LENGTH (L)****15.700**

Skin IM to d1 Port

3.269

Chain IM to d1 Port

3.249

d Port

0.020

Skin IM to d1 Starboard

3.278

Chain IM to d1 Starboard

3.255

d Starboard

0.023

Add d

0.043

**Add GIRTH 2 d****0.086**

Mean Freeboard Bow

Datum Sta.	Actual Sta.	Rating FB
	1.403	1.403
	1.055	1.055
	1.032	1.032
		3.490

Mean Freeboard Midship

Mean Freeboard Stern

Sum of Freeboards

See Notes

**1.163****Subtract FREEBOARD, F****Add SAIL AREAS (Square root)****13.450****TOTAL OF MEASUREMENTS****28.072**

PENALTY (Draft or Tumblehome)

0.000

**RATING****11.845**

Date and Place of Measurement

17-Sep-21 Flensburg

Measurer's Name(s)

Kay-Enno Brink

Signature



<b>Yacht's name : ANITRA</b>		<b>Date</b>	<b>Sept 17 2021</b>
Range Measurement (Yes or No)	N	Date:	17-Sep-21

## PENALTIES

Overhang Forward to <b>MWL</b>	3.982	
Overhang Aft to <b>MWL</b>	3.558	
Subtract from overall length	7.540	
Difference of immersion from salt to fresh water	Meas. Density	
<b>WATERLINE LENGTH (LWL)</b>		<b>13.776</b>
Minimum Displacement for Zero Penalty [m3]	24.520	
Minimum Weight for Zero Penalty [ton] (Water of sg 1.025)	25.133	
<b>WEIGHT [tonne]</b> Actual weight		<b>Appendix E</b>
Equivalent LWL (for Displ. < min.)		
Difference		
<b>DISPLACEMENT PENALTY (add to L)</b>		<b>0.000</b>
Displacement Determination Method		
<b>DRAFT (actual)</b>	2.657	
Max. Draft for Zero Penalty	2.704	
Difference (if positive)		
<b>DRAFT PENALTY (add to Rating)</b>		<b>0.000</b>
<b>BEAM (Min)</b>	3.600	
Max Beam at 1/3 of Midship Freeboard	3.780	
Difference (if positive)		
<b>BEAM PENALTY (add to L)</b>		<b>0.000</b>
Tumblehome Max. (2 x 2% of Extr. Beam)	0.151	
Extreme Beam	3.780	
Beam at deck	3.720	
Difference (if positive)	0.060	
<b>TUMBLEHOME PENALTY (add to Rating)</b>		<b>0.000</b>

Date and Place of Measurement	17-Sep-21    Flensburg	
Measurer's Name(s)	Kay-Enno Brink	Signature

Design/Age Correction Factor Calculation		
Age Date	1928	
ADCF ( Table E-2)	0.9540	
Hull Alteration Scope and Date		
Appendage Change Scope and Date		
Change/Alteration Correction ADCF		
Accommodation Deficiency Ballast	none	

Yacht's name : ANITRA

Date

Sept 17 2021

**SAIL PLAN**

Max Height of Sail Plan =	<input type="text" value="24.979"/>	J=	<input type="text" value="7.270"/>	I =	<input type="text" value="18.701"/>
Boom above Mast Datum =	<input type="text" value="1.379"/>	P=	<input type="text" value="23.600"/>	E=	<input type="text" value="10.630"/>
Rated Mainsail Area	<input type="text" value="125.434"/>	Spi boom=	<input type="text" value="7.325"/>	√S=	<input type="text" value="13.450"/>
J used for Rating	<input type="text" value="7.325"/>				
Rated Foretriangle Area	<input type="text" value="58.219"/>	Propeller allowance		<input type="text" value="0.985"/>	
TOTAL RATED SAIL AREA (S)	<input type="text" value="183.653"/>	Corrected sail area		<input type="text" value="180.898"/>	

**SAIL LIMITS**

Mainsail max girth:	1/2 height (68% of E)	<input type="text" value="7.228"/>	3/4 height (41% of E)	<input type="text" value="4.358"/>
Genoa:	max. foot length (J + 4.8m)	<input type="text" value="12.070"/>		
Spinnaker:	1/2 foot max breadth (125% J)	<input type="text" value="9.156"/>	max. luff length=	<input type="text" value="18.568"/>

**Spar Measurement**

MAST (material)	<input type="text" value="wood"/>	Mast Weight	<input type="text" value="540"/>	CG pos.	<input type="text" value="&gt;9.5"/>
	Deck	Half-Height	Jib-Halyard	Head	
Mast dimensions [mm]	<input type="text" value="337*244"/>	<input type="text" value="345*245"/>	<input type="text" value="292*220"/>	<input type="text" value="198*172"/>	
Sections area [cm <sup>2</sup> ]	<input type="text" value="645"/>	<input type="text" value="664"/>	<input type="text" value="504"/>	<input type="text" value="267"/>	
Mast CG Correction (if applicable) Wt & CG	<input type="text"/>		Mk <sup>2</sup>	<input type="text"/>	

**Engine/Propeller Installation**

Engine and propeller weight	<input type="text"/>	Propeller diameter =	<input type="text" value="0.520"/>
Minimum boat speed with engine	<input type="text" value="&lt; 7 kn"/>	Propeller position =	<input type="text" value="in aperture"/>
Propeller Type (folding feathering fixed pitch etc.), no of blades		feathering	<input type="text" value="4 blades"/>
Propeller Skew			<input type="text" value="0.000"/>

**Flotation**

1 No internal ballast

**Measurer's Notes**

Date and Place of Measurement

17-Sep-21 Flensburg

Measurer's Name(s)

Kay-Enno Brink

