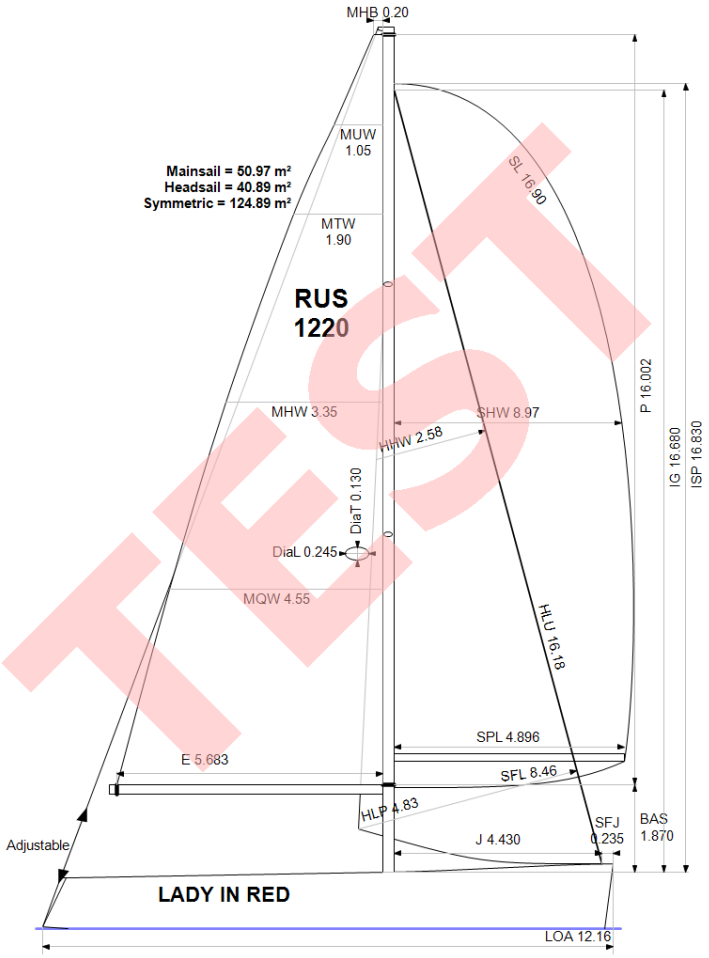
Club
Certificate
2022

Boat
Lady in Red
RUS 1220

Novokolomiazhskii av 11-70
St-Petersburg
Russia

APH: **523.2** CDL: **10.550**

GPH: **587.7** CertNo: **1220.5**



TEST

Rated boat velocities in knots							
Wind Velocity	**6 kt**	**8 kt**	**10 kt**	**12 kt**	**14 kt**	**16 kt**	**20 kt**
Beat Angles	43.2°	41.2°	40.6°	39.6°	39.3°	39.0°	38.5°
Beat VMG	3.61	4.41	4.98	5.26	5.38	5.43	5.58
52°	5.53	6.60	7.30	7.57	7.68	7.73	7.86
60°	5.85	6.92	7.53	7.79	7.90	7.97	8.06
75°	6.11	7.16	7.70	8.00	8.20	8.33	8.46
90°	6.04	7.17	7.72	8.06	8.35	8.63	9.05
110°	6.03	7.30	7.94	8.33	8.59	8.83	9.28
120°	5.87	7.16	7.87	8.32	8.80	9.19	9.77
135°	5.28	6.55	7.51	8.03	8.49	9.03	10.33
150°	4.43	5.60	6.66	7.51	8.01	8.43	9.49
Run VMG	3.84	4.85	5.77	6.58	7.21	7.75	8.58
Gybe Angles	141.2°	147.5°	149.3°	155.6°	164.6°	176.3°	177.2°

BOAT

Class	**Ricochet 1220**
Designer	**Ricochet Design Gr**
Builder	**Spray Ltd**
Age date	**05.2011**
Series date	**09.2006**
Offset file	**Rik1220.off**
Data file	**RU1220_LadyRed**

HULL

Length Overall	**12.160 m**
Maximum Beam	**3.788 m**
Draft	**2.470 m**
Displacement	**7 718 kg**
DLR	**4.8601**
IMS Division	**Cruiser/Racer**
Dynamic Allowance	**0.186%**
Age Allowance	**0.487%**

PROPELLER

Installation	**Strut**
Type	**Folding 2 blades**
Diameter	**0.380m**

CREW

Maximum weight	**720 kg**
Minimum weight	**540 kg** ** when applied*
Non Manual Power	
Crew Arm Extension	

SAIL AREAS (m²)

	Measured	Rated
Mainsail	**50.97**	**51.66**
Headsail Luffed	**40.89**	**40.89**
Headsail Flying		
Symmetric	**124.89**	**124.89**
Asymmetric		

STORM SAIL AREAS (m²)

Trysail	**15.92**
Storm Jib	**14.02**
Heavy Weather Jib	**37.85**

SAIL LIMITS

Headsails	**6**
Spinnakers	**4**

STABILITY

Righting Moment	**167.6 kg·m**
Stability Index	**N/A**

COMMENTS

FFS. FAS adjusted to match DSPM=7740

The owner and any other person in charge is responsible that boat is complying with her certificate in accordance with RRS 78.1 and ORC Rule 304.

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Time Allowances in secs/NM							
Wind Velocity	**6 kt**	**8 kt**	**10 kt**	**12 kt**	**14 kt**	**16 kt**	**20 kt**
Beat VMG	996.2	816.0	722.4	684.6	669.5	662.8	645.3
52°	651.4	545.5	492.8	475.3	468.8	465.6	458.0
60°	615.5	520.3	477.8	461.9	455.4	451.9	446.5
75°	588.9	503.1	467.4	450.0	438.8	432.1	425.7
90°	595.6	502.3	466.2	446.6	431.0	416.9	397.6
110°	597.2	493.0	453.2	432.2	419.1	407.6	388.1
120°	613.4	502.8	457.4	432.5	409.0	391.7	368.5
135°	681.7	549.4	479.2	448.1	424.2	398.7	348.7
150°	812.4	642.6	540.4	479.1	449.6	426.9	379.2
Run VMG	938.0	742.0	624.0	547.3	499.3	464.5	419.7
Selected Courses							
Windward / Leeward	967.1	779.0	673.2	616.0	584.4	563.7	532.5
All purpose	742.4	607.5	538.7	504.2	484.6	470.6	446.6

Single Number Scoring Options		
Course	**Time On Distance**	**Time On Time**
Windward / Leeward	645.6	0.9294
All purpose	523.2	1.1468

Custom scoring options for Russia

Single Number	Time On Distance	Time On Time
Predominantly Upwind	568.5	1.0555
Predominantly Downwind	529.1	1.1339

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Data in **meters/kilograms (Metric)**

HULL AND APPENDAGES (Lightship Trim)

Class	**Ricochet 1220**	LOA	**12.160**	VCGD	**-0.054**
Measurement	**29.04.2011**	Max. Beam	**3.788**	VCGM	**0.004**
HIN		Draft	**2.470**	RM Measured (kg·m)	**167.6**
Plan review		Displacement	**7 718**	RM Default (kg·m)	**179.1**
Hull construction	**Solid**	Wetted area	**33.12**	Limit of positive stability(°)	**N/A**
Aramid Hull Core	**No**	IMS L	**11.584**	Stability Index	**N/A**
Carbon Rudder	**No**	LSM0	**11.666**		
Light stanchions	**No**	Acc. length	**12.160**		
Trim tab	**No**	Sink (kg/mm)	**23.69**		

PROPELLER

Propeller Type	**Folding 2 blades**						
Installation	**Strut**	PRD	**0.380**	EDL	**2.900**	ST3	**0.200**
Twin screw	**No**	PBW	**0.100**	ST1	**0.048**	ST4	**0.112**
Hydro generator	**No**	PIPA	**0.0036**	ST2	**0.200**	ST5	**0.225**

RIG

Forestay tension	**Aft**	P	**16.002**	E	**5.683**
Inner stay	**None Fitted**	IG	**16.680**	J	**4.430**
Carbon mast	**No**	ISP	**16.830**	BAS	**1.870**
Headsail furler	**No**	MDT1	**0.130**	FSD	**0.030**
Mainsail furler	**No**	MDL1	**0.245**	SFJ	**0.235**
Articulated bowsprit	**No**	MDT2		SPL	**4.896**
Non-circular rigging	**No**	MDL2		WPL	
Fiber rigging	**No**	TL	**0.000**	TPS	
Runners/Checkstays	**0**	MW	**0.245**	BD	
Spreaders	**2**	GO	**0.262**	MWT	**260.00**
				MCG	**5.850**

FLOTATION AND STABILITY

Calculation method	**Poles inclining**	SFFP	**0.235**	SAFP	**11.660**	W1	**104.9**	PD1	**265.1**	WD	**12.040**
Flotation Date	**29.05.2011**	FFM		FAM		W2	**104.9**	PD2	**265.9**	PLM	**2020.00**
Measurer		FF	**1.370**	FA	**1.050**	W3	**104.9**	PD3	**264.5**	GSA	**28.3**
Comment		LCFcl	**6.931**	LCFsh	**7.172**	W4	**104.9**	PD4	**264.6**	RSA	**5670.0**
		SG	**1.0000**	HBI	**1.199**						

INVENTORY

OTHER ITEMS	*Id*	*Kind*	*Description*	*Weight*	*LCG*	*VCG*
	#1	Anchor	Plough	~~20~~	0.00	
			Total deductible	**20**	**0.00**	

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MAINSAIL

Id	*MHB*	*MUW*	*MTW*	*MHW*	*MQW*	*Area*	*Meas.Date*	*Maker*	*Material*	*Comment*
459363	0.20	1.05	1.90	3.35	4.55	50.97	05.10.2019	UK Sailmakers	Polyester	

HEADSAIL

Id	*HHB*	*HUW*	*HTW*	*HHW*	*HQW*	*HLP*	*HLU*	*Btn*	*Flying*	*FT*	*Area*	*Meas.Date*	*Maker*	*Material*	*Comment*
G1	0.13	0.74	1.35	2.58	3.75	4.83	16.18	No	No		40.89	05.10.2019	UK	Polyester	
G2	0.00	0.51	1.08	2.23	3.39	4.56	15.70	No	No		35.33	05.10.2019	SevSijanie	Dacron	

SYMMETRIC SPINNAKER

Id	*SLU*	*SLE*	*SL*	*SHW*	*SFL*	*Area*	*Meas.Date*	*Maker*	*Material*	*Comment*
#2	16.90	16.90	16.90	8.97	8.46	124.89	21.05.2011		Nylon	
#1	16.02	16.02	16.02	7.88	8.01	105.55	21.05.2011		Nylon	