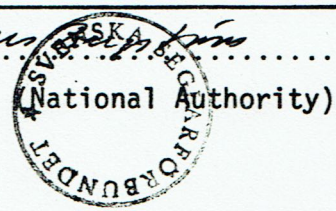
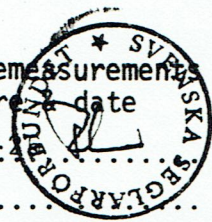


1979

International 5.5 Metre Class Certificate of Rating

Yacht's name	KUNGSÖRNEN	Classification society	Lloyd's Register of shipping
Sail number	S63	Expiration date of classification certificate	
Owner	Carl Åke Wasteson	Measurements or partial remeasurements by N.A. Measurer, signature	
Owner's club	KSSS	date	82-05-
Designer	Håkan Södergren	Weight	1.984
Date completed	March 20, 1981		
Condition of water when marks were sighted			
State fresh or salt	Salt		
Difference in immersion (class rule 5)		0.006	(metres)
Has designer's or builder's declaration been supplied			
I declare that the particulars given on this certificate are correct at this date		Expiration date of rating certificate	
Signature of measurer	<i>Lars Bergström</i>		
Signature of designer or builder	<i>Paul A. Lindenberg</i>		
Signature of owner or representative	<i>Carl Åke Wasteson</i>	Re-rated	



Certificate authorised by SSF Date 3-20-81 for *Lars Bergström*

	Actual ^{x)}	Rule limits	Rule No.
HULL			
Immersion checked in salt/fresh water	3-8-81	date	5;27
Weight of inside ballast placed at _____	no	xx)	6;33
Beam	1.90	min. 1.90 m	7;9
Draft	1.35	max. 1.35 m	7
Freeboard at bow girth station	.690		
" at stern girth station	.579		
" at midship mark	.620		
" average	0.63	min. 0.63 m	
Keel, ballast material	lead	lead or iron	10
" ht. of round at bottom	75	max. 75mm	10
" width at max. section 1 metre below L.W.L.	150	min. 150mm	10
Stern angle	1:5.5	min. 1 in 5.5	12
Round of beams	0	max. 7mm in 305mm	13
Tumble home	0.020		14
2% of max. beam	0.038		
Excess tumble home	subtract	3 x excess added to rating	14
Area of deck openings	2.25	max. 2.25 m ²	24
Cockpit forward of L1 mark	2.65	min. 1.75 m	25
Breadth of side decks	40	min. 35 cm	24
SAILS & RIGGING			
Height of sailplan above covering board level	11.10	max. 11.10 m	16
" " boom (black band) above covering board level	0.55	max. 0.85 m	17
" " fore triangle above covering board level (1)	8.85	max. 8.88 m	16
Base of fore triangle (J) (Deck black band to be checked)	2.65	max. 0.50 x S	16
Min. headsail for measurement purposes = 0.5 x l x J x 80%	9.38		15
Spinnaker, halliard above forestay	0	max. 10 cm	20
" " out from mast	2	max. 3 cm	20
" breadth of halt the foot	6.62	max. 1.25 x J	20
Storm spinnaker, breadth of halt the foot	2.65	max. J	20
Spinnaker boom length	2.65	max. J	21
Mast diameter at 1/2 ht. of fore triangle, round mast	11.6	min. 11.5 cm	22
" " at deck " "	11.6	min. 10.9 cm	22
" " at jib halliards " "	9.3	min. 9.2 cm	22
" " at top " "	5.9	min. 5.8 cm	22
(The athwartships diameter of oval masts may be reduced by 10% of the above, but the sectional areas shall not be less)			
Weight of mast with fixed fittings	> 40	min. 40 kgs	22
Centre of gravity of mast above covering board level	> 38%	min. 38% of mast ht.	22
Boom depth	13.5	max. 15.2 cm	23
Boom width	9.0	min. 3.8 cm	23
MISCELLANEOUS			
Weight of anchor	11	max. 13kgs min. 11kgs	26
Length of warp	30	min. 30 m	26
Top of 1 marks above water with yacht in racing trim			5

	Actual measures		Rule limits
LENGTH L FOR RATING			
Overall length L.O.A.		9.205	
Bow overhang to L ₁	822		
Stern overhang to L ₁	840		
Total overhang	add	1.662	
Measured length L ₁		subtract 7.543	
Girth at bow	0.71		
Twice vertical height at bow (=0.550 m)	0.550		
Bow girth difference	subtract	0.165	min. 0.165 m (rule 3)
Girth at stern	1668		
Twice vertical height at stern	988		
Stern girth difference	subtract 227		
1/3 stern girth difference	div. by 3	0.234	min. 0.234 m (rule 3)
Length L for rating formula	add	7.942	
SAIL AREA FOR RATING			
Largest headsail = 0.5 x $\frac{7.95}{\text{luff}}$ x $\frac{2.40}{\text{perp}}$		9.54	min. see next page
Mainsail = 0.5 x $\frac{10.55}{\text{H}}$ x $\frac{3.51}{\text{B}}$		18.52	min. 26.5 m ² (rule 7)
Total sail area S	add	28.1	max. 29.0 m ²
\sqrt{S}			
DISPLACEMENT			
Weight of yacht (date when weighed <u>3-8-81</u>)		2030	
Displacement D = weight div. by 1025.21 kg/m ³			
$\sqrt[3]{D}$		1.980	min. 1.7 m ³ (rule 7) max. 2.0 m ³
RATING			
Rating calc'd according to formula		5.49	
3 x tumble home excess	0		(rule 14)
FINAL RATING	add	5.49	

