

# Lloyd's Register of Shipping.

Order: G. P. A. 429.

Surveyors' Office, DÜSSELDORF.

This is to certify, that Wolke Berg the undersigned surveyor to this Society tested in the works of Messrs. Vereinigte Stahlwerke A.G. Ruhrländer Union of Dortmund the Stiemts - Martin Boiler steel Round bars specified hereunder, ordered by Messrs. Harina Dockyard & Co. of Moaba for the ship No. 189 Boiler No. \_\_\_\_\_ and that the results of tests were as are set forth below.

Batch-number.	Dimensions. <i>in feet &amp; inches</i>			Intended for	Sample number Charge-number	Tensile tenacity <i>Req. per sq. mm</i>			Elongation in 200 mm. in %.	Bending tests.		Remarks.
	Length.	Breadth.	Thick-ness.			As per rules.	Ordered.	By test.		Cold.	Tem-pered	
6	12-3"	φ	2 1/2"	Long. stays	8	695	44/55	44/50	48.9	24.0	good	good ✓
2	12-1"	φ	"	"	9	170	"	"	48.5	24.0	"	" ✓
1	8-11"	φ	"	"								" ✓
3	16"	φ	2 1/2"	Stay bars	10	854	41/47	41/47	41.2	29.0	"	" ✓
4	18"	φ	1 7/8"	"	11	"	"	"	42.3	27.5	"	" ✓
11	18"	φ	1 5/8"	"	12	560	"	"	43.4	26.0	"	" ✓
1	16"	φ	1"	Rivet bars		960						" ✓
54	16"	φ	7/8"	"	13	"	"	"	46.3	33.0	"	" ✓

Sulphur print No 13 has been made in the presence of the undersigned and was found to be satisfactory.  
Düsseldorf 20<sup>th</sup> February 1933.

*W. Berg*  
Surveyor to Lloyd's Register

*Examined and checked*  
25/5/33.  
*Adm.*

This Certificate is issued upon the terms of the Rules and Regulations of the Society, which provide that:—  
"While the Committee use their best endeavours to ensure that the functions of the Society are properly executed, it is to be understood that neither the Committee nor the Society are under any circumstances whatever to be held responsible for any inaccuracy in any report or certificate issued by the Society or its Surveyors, or in any entry in the Register Book or other publication of the Society, or for any error of judgment, default, or negligence of the Surveyors, or other Officers or Agents of the Society."  
N.B.—Material with less than 26 Tons tensile strength may not be used in the construction of boilers for classed vessels, unless specially sanctioned by the Committee.  
1 Ton per square inch = 1,574 Kilo per square millimeter. 1 Kilo per square millimeter = 0.635 Tons per square inch.

