

PORT of Düsseldorf, Berliner Allee 61

Df. F. No. 59/117

LLOYD'S REGISTER OF SHIPPING

*SHIP OR ENGINE FORGINGS OR CASTINGS

Works No. 335 890
 Order No. 30 980/57 KZ, 27.9.57 Zi
 I have to report that the Forgings ~~xxx~~ as herein described, manufactured
 by Messrs. Gutehoffnungshütte of Oberhausen-Sterkrade
 Sterkrade A.G. of Messrs. Maschinenfabrik
 *for the Engines No. being constructed by Augsburg-Nürnberg AG.,
 of Hamburg for the Ship No. being built by Werk Hamburg

of
 have been inspected by me as set forth below, and found to be, so far as can be seen,
 sound and free from defects. These have been despatched to Hamburg.

Kaiserslautern 605313

ITEM	one 7-throw solid forged crankshaft
Identification No.	LLOYD'S Dsf. 88 G.S. 21.1.59
Surveyor's Initials.	G.S.
Materials.	S.M. Steel
How made.	forged
Heat treated.	yes
Dimensions.	to sketch D 168 172/3, Part 1-5
Weight.	12.5 to
Progress on Insp.	finished condition
Yield kg per sq. mm	28.6 35.1
Ult. kg per sq. mm	53.3 53.3
Elong. % on 50 mm	32.0 30.8
	27.4 26.3
Reduc. of Area %	55.9 54.9
	180 degr. good
Cold Bend.	
D.V.M. Impact Test	
3.0 x 2.0 mkg/cm ²	5.8 6.6
Izod.	-
Final date.	21.1.59

010309-010316-0102

Date of approval of chemical analysis, physical properties and heat treatment in the case of special steels for reduction gearing forgings.

Chemical analysis as stated by the steel makers:

Other tests:	Charge No.	C	Si	Mn	P	S	%
	11696	0.32	0.35	0.64	0.022	0.021	%

Wf. Fee: _____
 Expenses: _____
 Signature of Surveyor to Lloyd's Register of Shipping: *[Signature]*
 Date: 27.1.59

This Certificate is issued upon the terms of the Rules and Regulations of the Society, which provide that...
 "While the Committee of the Society use their best endeavours to ensure that the information contained in this Register is true and correct, they accept no responsibility for any error or omission in the Register, or for any error of judgment, default or negligence of any of its Committees or any Member thereof, or the Surveyors, or other Officers or Agents of the Society."