

PORT Hannover, Georgstr. 40 COPY

No. HNO.F.
60/ 111

LLOYD'S REGISTER OF SHIPPING

Works No. 1/48.791

Order No. S 900 822-739 027

SHIP OR ENGINE FORGINGS OR CASTINGS

I have to report that the Forgings ~~or Castings~~, as herein described, manufactured by Messrs. Klöckner Werke AG., of Osnabrück Georgsmarienwerke being constructed by Messrs. Howaldtswerke AG. *for the Engines No. of Hamburg for the Ship No. being built by 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

"Indian Navigator"

LP 2nd pinion

ITEM

One pinion

Identification No.

LLOYD'S HNO 395 GS 20.1.60

Surveyor's Initials.

Materials.

Charge No.

How made.

Heat treated.

Drawing No.

Dimensions.

Weight.

Progress on Insp.

Yield kg per sqmm

Ult. kg per sqmm

Elong. % on 4 V A
5 x d

Reduc. of Area %

Cold Bend.

Brinell.

DVM Imp. test mkg/cm²

Izod. ft.lbs.

Final date.

G. S.
Examined finished machined
E.-Steel, EN 25
34 829 Port
forged
Date R. M. 20
and marked
yes
for identification
9000-33 J
(Marks)
3970 kg

rough machined		bott. long		bott. tang.		top long		top tang.	
71.4	76.4	72.6	75.1	86.7	90.4	86.7	89.2	22.5	15.7
19.2	16.0	18.0	14.4	59.0	45.0	60.3	22.8	19.5	72.3

180° satisfactory

HB = 261 - 266

8.7	12.2	5.0	5.0	10.9	9.9	4.3	4.7
45.6	60.8	24.6	18.1	42.0	36.9	22.4	18.8

20.1.1960

Date of approval of chemical analysis, physical properties and heat treatment in the case of special steels for reduction gearing forgings Sulphur prints were carried out with satisfactory results. The manufacturer states that

Other tests: supersonic tests have been carried out. Works Cert. attached.

Analysis as stated by the manufacturer:

Charge No.	C%	Si%	Mn%	P%	S%	Cr%	Mo%	Ni%
34 829	0.30	0.27	0.58	0.012	0.011	0.60	0.42	2.32

Fee:

Report on Material Signature

Expenses:

Received at

*Delete where not applicable.

G. Stockfleth
Surveyor to Lloyd's Register of Shipping

Date 4.2.1960

(TURN UP

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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

ITEM	One pinion
Identification No.	
Surveyor's Initials	
Materials	
Charge No.	
How made	
Heat treated	
Drawing No.	
Dimensions	
Weight	
Progress on Insp.	
Yield lb per sq in	
Ult. lb per sq in	
Elong. % on 2 x 4	
Reduc. of Area %	
Cold Bend	
Brinell	
Imp. test mks/cm ²	
Exod. ft. lbs.	
Final date	

Examined finished machined
Port Hamburg
Date 9.4.60 and marked
for identification
(Marks) 11/21 HWO
395 94
20.1.60
Ham 33 M, NFK 9.11.60
(Sureyor's initials) [Signature]