

## Lloyd's Register of Shipping.

\*SHIP OR ENGINE FORGINGS OR CASTINGS.

I have to report that the Forgings, ~~as castings~~, as herein described, manufactured by Mitsubishi Steel Mfg.Co., Ltd. of Nagasaki  
 \*for the Engines No. - being constructed by -  
 of - for the Ship No. 144 being built by Mitsubishi Zosen K.K. of Hiroshima  
 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 the above Shipyard.

## ITEM Two (2) 3rd &amp; 5th Intermediate Shafts

Identification No.	Nag.	3219	3221
Surveyor's Initials.		A. I.	A. I.
Materials. (Heat No. Test Mark)	F.S.	NSW.60570 HL-13	F.S. NSW.60564 HL-11
How made.		Electric furnace	
Heat treated.		Yes	
Dimensions.	Dia of Shaft	Dia of flange	Total length
	425mm-426mm	761mm-762mm	7,362mm, 7,366mm
Weight.	8,620 x 2 as rough turned		
Progress on Insp.	(T) (B)	Rough turned condition (T) (B)	
Yield. T per sq.in.	15.8 15.8	15.8 15.6	
Ult. T. per sq.in.	30.0 29.6	30.0 29.6	
Elong. % on 2 in.	37.0 36.0	36.0 37.0	
Reduc. of Area %	59.7 59.7	57.2 58.8	
Gold Bend. 180°	good good	good good	
Brinell.	134 137	128 131	
Izod.	- -	- -	
Final date.	Both 5-8-60		

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

Other tests:

NSW.60570  
HL-13  
LLOYD'S NAG  
NO.3219  
AIR 5-8-60

NSW.60564  
HL-11  
LLOYD'S NAG  
No.3221  
AIR 5-8-60

Fee:

Expenses

Signature

K. Chada for A. Imai

\*Delete where not applicable.

Examined finished machined

Port Shimonoseki  
 Date 19-10-60 and marked  
 24-10-60  
 for identification  
 LLOYD'S LLOYD'S  
 SMK SMK  
 NAG NO.3219 NAG NO.3221  
 K.O.R. K.O.R.  
 24-10-60 19-10-60

Date 23.8.1960