

LLOYD'S REGISTER OF SHIPPING

Cert.No. 60/ 1562

Port of Augsburg, Moritzplatz 4

16th September, 1960



131 755
A 80 86
BD 63

This is to Certify that

Günther H a a c k

the undersigned Surveyor to this Society did at the request of Messrs. Zahnradfabrik Renk A.G. of Augsburg attend their works at Augsburg on 21st March, 1960 subsequently for the purpose of testing and surveying during construction one gear made to the order of Messrs. A.G. "Weser" of Bremerhaven and intended for a floating crane, Yard No. 1343.

The gear has been constructed under special survey in accordance with the requirements of the Rules and otherwise with the approved plans. Date of approval: 17th February, 1960.

The output of the engines is 450 BHP at 500 RPM and the generators have a power of 90 kW at 1298.1 RPM. The gear ratio is 2.6 : 1.

The materials used in the construction have been procured from Steelworks recognised by the Committee and were tested with satisfactory results as shown on Augsburg certificate: 60/1559, Dortmund certificates: F59/559; F60/496; F60/497, Mannheim certificates: M60/277; M60/319 and Köln certificate: F60/735.

The material of the output shaft has been tested at the works of Messrs. Renk A.G. and the following results were obtained:-

| Sample No. | Yield ₂ P. kg/mm | U.T.S ₂ kg/mm | Elong. % on 50mm | Reduct. of area % | Bend test |
|------------|--------------------------------|-----------------------------|---------------------|----------------------|-----------|
| 2216 | 41.5 | 65.6 | 29.4 | 57.8 | 180° good |

On completion of construction the gear was tested running on makers' test bed for a suitable time with no load. The results were satisfactory. After the trial the gear was dismantled for inspection and the inner parts were found, so far as could be seen, to be sound and in order and the workmanship to be satisfactory.

The shrinkage allowances were checked and found to be in order.

The pinion, rim and intermediate wheel were magnetic crack detected with satisfactory results. As stated by the makers supersonic tests have been carried with satisfactory results.

For identification the gear-box was stamped with:-

131 755
LLOYD'S AUG BD 63
G.H. 17.8.60 G.H.

© 2021

- 2 -

is issued upon the terms of the Rules and Regulations of the Society, which provide that:—
The Committees of the Society use their best endeavours to ensure that the functions of the Society are properly performed and that neither the Society nor any Member of any of its Committees is under any circumstances to be held responsible for any inaccuracy in any report or certificate issued by the Society or its Surveyors, or in any Register Book or other publication of the Society, or for any error of judgment, default or negligence of any of its Members or any Member thereof, or the Surveyors, or other Officers or Agents of the Society."

The inner parts of the gear are stamped as follows:-

| | | |
|-----------------------------|--------------------|-------------------|
| <u>Gear-box bottom part</u> | <u>Input shaft</u> | <u>Wheel body</u> |
| <u>St. 37.12</u> | <u>C.45V</u> | <u>GG-22</u> |
| 131 755 HK | 131 755 | 131 755 |
| LLOYD'S A/C DC 91 | 137 275 | 2120 |
| OEL 26.4.50 GH | 61 805 | |
| GH 25.3.0 | LLOYD'S DTM | |
| | HAK 24 GH 14.9.59 | |
| | (M) | |

| | | |
|----------------|---------------------------|---------------------------|
| <u>Rim</u> | <u>Intermediate shaft</u> | <u>Intermediate wheel</u> |
| <u>4CrMo4V</u> | <u>C45V</u> | <u>42CrMo4V</u> |
| 131 755 | 131 755 | 131 755 |
| 49544 | 137 275 | 8255 |
| 54513 | 61805 | LLOYD'S KLN |
| LLOYD'S DTM | LLOYD'S DTM | 2957E |
| HD 25.5.60 | HAK 23 GH | KW 23.6.60 GH |
| HD 25.5.60 | 14.9.59 | WPUS 1468 |
| WPUS 1417 | (M) | (M) |
| (M) | | |

| | | |
|---------------------|--------------------|-----------------------------|
| <u>Output shaft</u> | <u>Pinion</u> | <u>Oilfilter cooler</u> |
| <u>C.45</u> | <u>34 CrNiMo6V</u> | <u>No. 15040</u> |
| 131 755 | 131 755 | LLOYD'S MHM |
| CH 027254 | LLOYD'S DTM | TP 12/12 kg/cm ² |
| GH. 2216 GH | HD 282 HD | KS 5.5.60 KS |
| (M) | 8.6.60 HD | |
| | WPUS 1439 | |
| | W 5702 | |
| | (M) | |

Oil Pump
No. 767724
 LLOYD'S MHM
 T.P. 6 kg/cm²
 H.W. 24.5.60 HW

Retain with Bremen
 Machinery First Entry
 Report No. 4892

PONTOON ~~SCMS~~ GABBAR



Surveyor to Lloyd's Register of Shipping.

Surveyor to Lloyd's Register
 (A. Holts)

KEY TO ABBREVIATIONS

- AS Special Survey
- AS(D) Special Survey
- AS(M) Special Survey
- AS(S) Special Survey (No Sparring)
- SS Hull Special Survey
- SS(D) Hull Special Survey (Discharge)
- SS(M) Hull Special Survey (Maintenance)
- SS(P) Hull Special Survey (Periodic)



© 2021

Lloyd's Register
 Foundation