



Marine Design Appraisal Document

Lloyd's Register EMEA
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Date
18 March 2016

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DE HAAN SPECIAL EQUIPMENT B.V. LOWER BLOCK SWL 780 TONNE

1. The Document(s) listed in paragraph 1 of the appendix have been examined for compliance with: Lloyd's Register's "Code for Lifting Appliances in a Marine Environment, January 2016" Chapter 8, Section 3.5, as applicable and are assigned an appraisal status as indicated, in accordance with the following conditions:
2. The structural aspects of the lower block have been examined for the following design conditions, as specified by the designer:

SWL	: 780 tonne
Own weight	: 34 tonne
Duty factor	: 1.05
Hoisting factor	: 1.10
Sheave efficiency allowance	: 1%
Number of reeved sheaves / wire rope parts	: 7 sheaves / 14 parts
Minimum design temperature	: -10 °C
Test load	: 858 tonne
3. Comments
 - 3.1 The following items are outside the scope of appraisal:
 - Fatigue aspects
 - Handling, operational, and stowage aspects
 - Link plate and shackle
 - 3.2 Drawings 03-892 & 03-891. The material specifications of the sheaves are not submitted or specified; however, based on the satisfactory in-service performance up to date, the sheaves can be accepted in this instance provided all the sheaves are found in order by the surveyor. AQS
 - 3.3 The following items are the operator's responsibility: To ensure that under no circumstances the fleet angle of the hoist wires exceeds 2.5 degrees. AQS
 - 3.4 All materials and workmanship (including weld details and NDE) are to be to the Surveyor's satisfaction. AQS

FINAL ACCEPTANCE OF ACTUAL ITEM(S) DEPEND(S) ON SATISFACTORY SURVEY AND TESTING

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- 3.5 Loose gear items (e.g. wire ropes, shackles, hooks) are not covered by this appraisal. However they should comply with a recognized national code or standard. Details are to be to the Surveyor's satisfaction. AQS
- 3.6 To obtain Lloyd's certification the lower block assembly is to be surveyed, marked and tested in accordance with the appropriate requirements of Chapter 12 of the Code to the Surveyor's satisfaction. AQS
- 3.7 The requirements of the appropriate National Authorities and any Safety at Work regulations should be complied with as applicable.



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