

TYPE EXAMINATION CERTIFICATE

Certificate No:

7AS0000095
DNV GL

This is to certify:

That the Lifting Gear

with type designation(s)

Slings made of steel wire rope intended for lifting purpose

Manufactured by

LTI Steel Wire Rope (Shanghai) Co., Ltd.
Shanghai, China

is found to comply with

Standard for Certification 2.22 Lifting Appliances, 2013

Application :

Slings made from Ø24 to Ø39.9 mm steel wire rope in qualities and executions as detailed under 'Product description'

This Certificate is valid until **2020-01-06**.

Issued at **Høvik** on **2016-01-07**

DNV GL local station: **Shanghai**

Approval Engineer: **Finn-Roger Sørland**

for **DNV GL**

Aldo Matteucci
Head of Section

This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid. The validity date relates to the Type Examination Certificate and not to the approval of equipment/systems installed.

Product description

Slings with swaged ferrule terminations

- Wire rope Class 35(W)x7 grade 1960 N/mm² , wire sizes from 28 mm up to and including 39.9 mm
- Wire rope Class 8x19 grade 1960 N/mm² , wire sizes from 24 mm up to and including 35.9 mm
- Safe working load, SWL, is product of minimum breaking load from the manufacturer's tables and factor of 0.18

Slings with cast termination with resin.

- Termination either by open type socket or close type socket
- Wire rope Class 35(W)x7 grade 1960 N/mm² , wire sizes from 28 mm up to and including 39 mm
- Wire rope Class 8x19 grade 1960 N/mm² , wire sizes from 24 mm up to and including 36 mm
- Safe working load, SWL, is product of minimum breaking load from the manufacturer's tables and factor of 0.20

The type examination is based on the requirements given in the following standards:

EN13411-3: 2004+A1:2008 (E), EN13411-4:2011 (E), EN12385-1: 2002+A1:2008 (E) and EN12385-4: 2002+A1:2008 (E).

Application/Limitation

1. Production and testing of each produced unit are to follow the above mentioned standards.
2. Referenced standards found in above standards are also understood followed.
3. Safe working load is based on a safety factor of 5 against applied static load.
4. Proof load testing shall be not less than 2 times SWL and should not exceed 0.4 time's minimum breaking load depending clients request and national requirements.
5. Tolerance of length of multilegged sling assemblies are understood carried out in compliance with ISO 7531: 1987 if not otherwise agreed on a specific project.
6. Wire rope certificate in compliance with form No. 4 of ILO152-recommended forms is understood made available to the attending surveyor who witness tests and issues DNV GL form no. CG 3.

Type Examination documentation

Tests carried out

Marking of product

Each sling is to be properly marked with manufacturer's identification number and capacity in conformance with DNVs Standard for Certification No.22 "Lifting Appliances" June 2013, Ch.2 Sec.12 (4.5) conforming to ILO's "Safety and Health in Dock Work", Item 20.6.

Certificate Retention Survey



Job Id: **262.1-007693-2**
Certificate No: **TAS0000095**

For retention of the Type Examination, DNV GL surveyor shall perform a survey every second year and before expire date of this certificate to verify that the conditions of the type approval are complied with.

END OF CERTIFICATE