NIS/NOR *NORWEGIAN MARITIME DIRECTORATE*

CIRCULAR no. 1 / 2006

Category

[ ] Operational [ ] Nautical

[x] Technical [ ] Other

Jrn. number: A2-200603486-1

Date: 7. February 2006

Sign.

Issue: CERTIFICATION OF LIFTING PAD EYES (Lifting Brackets) OTHER THAN FASTENING DEVICES USED FOR PERMANENT LIFTING APPLIANCES

For permanent lifting appliances:
Ref. Regulations of 17. January 1978 No. 4 Concerning Cargo-handling Appliances in Ships

Background:

During the recent years there has been some confusion about the certification of lifting pad eyes (Lifting brackets) other than fastening devices used for permanent lifting appliances.

Solution:

The NMD will by this Circular contribute to bring some clarification into this matter.

As an annex to this Circular you will find a guidance on the certification of these lifting pad eyes. You will also find the different load factors and test loads that we recommend.

Decision:

From now on we will strongly recommend you to make use if these certification procedure for lifting pad eyes.

Enclosure:

Annex – Certification of lifting pad eyes (lifting brackets) other than fastening devices used for permanent lifting appliances.

ANNEX

CERTIFICATION OF LIFTING PAD EYES (lifting brackets) OTHER THAN FASTENING DEVICES USED FOR PERMANENT LIFTING APPLIANCES

For permanent lifting appliances:
Ref. Regulations of 17. January 1978 No. 4 Concerning Cargo-Handling Appliances in Ships.

1. Lifting pad eyes with a SWL (Safe Working Load) equal or less than 3 tonnes:

a. Surveyor's on the spot evaluation of the pad eye scantling.
b. Visual inspection (support and welding). Spot NDT or load test if found required.
c. Either individual marking or group marking of the pad eyes by SWL: I. e.
   i. common signboard in each room/space with several identical pad eyes or
   ii. individual marking, i. e. by a colour distinguishing system, of the pad eyes with different SWL in the same room/space.
d. Description of location, SWL and loading direction, to be documented.

2. Lifting pad eyes with a SWL (Safe Working Load) above 3 tonnes:

a. Drawing approval by class at approval centre.
b. Load test: Either 100% load test and spot NDT or spot load test and 100% NDT.
c. Either individual marking or group marking of the pad eyes by SWL: I. e.
   i. common signboard in each room/space with several identical pad eyes or
   ii. individual marking, i. e. by a colour distinguishing system, of the pad eyes with different SWL in the same room/space.
d. Description of location, SWL and loading direction, to be documented.

3. Load factor for pad eyes:

Pad eyes are to be designed with a load factor relative to the SWL in question:

SWL (Safe Working Load)	Load Factor
Up to 5 tonnes	2.0
5 – 20 tonnes	1,75
Above 20 tonnes	1,5

4. Load testing of pad eyes:

Where load testing of pad eyes are required the testing shall be carried out according to the following:

SWL (Safe Working Load)	Test Load
Up to 20 tonnes	1,25 x SWL
20 – 50 tonnes	5 tonnes + SWL
Above 50 tonnes	1,10 x SWL