

GENERAL SPECIFICATION

STRUCTURAL

GS EP STR 005

Lifting Appliances other than cranes and winches

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1. Scope

This general specification applies to all lifting appliances (and attached lifting tackles) other than cranes and winches, removable or permanently installed on fixed or floating offshore installations, used either for material handling or maintenance purposes.

The following are excluded:

- Devices used for underwater installations
- Devices used for manned submarine/diving equipment handling operations
- Special drilling devices.

2. Reference documents

The reference documents listed below form an integral part of this General Specification.

External Documents

Unless otherwise stipulated, the applicable version of these documents, including relevant appendices and addendums, is the latest revision published at the effective date of this document.

Reference	Title
EN 1990	Eurocode: Basis for structural design
EN 1991-3	Eurocode 1 - Actions on structures - Part 3 : actions induced by cranes and machinery
EN 1993-6	Eurocode 3 - Design of steel structures - Part 6 : crane supporting structures
EN 13155	Crane - Safety - Non-fixed load lifting attachments
EN 13157	Cranes - Safety - Hand powered lifting equipment
EN 13889	Forged steel shackles for general lifting purposes. Dee shackles and bow shackles – Grade 6 - Safety
EN 14492-2	Cranes - Power driven winches and hoists - Part 2: Power driven hoists
IEC 60079 (All parts)	Electrical apparatus for explosive gas atmospheres – All parts

Total General Specifications

Unless otherwise stipulated, the applicable version of these documents, including relevant appendices and addendums, is the latest revision published.

Reference	Title
GS EP EXP 105	Pre-commissioning Execution

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Reference	Title
GS EP EXP 201	Operations preparation during project - Maintainability & Inspectability criteria
GS EP STR 401	Loadout, seafastening, transportation and installation of offshore structures

3. Purpose

This specification gives the minimum requirements for lifting pad-eyes, lifting beam clamps, monorails equipped with manually operated or powered trolley, manually operated davits (other than escape craft davits) on fixed offshore platforms or floating offshore installations.

Additional or variable requirements specific to each device shall be dealt with in the Project particular specification.

4. Regulation and safety requirements

4.1 Legislation

The country having authority over the installation is designated in the particular specification, as a basic data.

The handling device must comply with the legislation of this country, and be such that it can be accepted in accordance with the conditions imposed or recommended by this legislation. If the country has no specific legislation or less stringent legislation than in Europe, it is European legislation that should be taken into account.

Any certificates of compliance with legislation required by the country having authority shall be supplied with the device.

4.2 Safety

The devices shall be equipped with all components necessary:

- For the safety of the personnel
- For the safety of equipment
- For operating safety
- For easy and safe access for maintenance

in accordance with the requirements stated in this specification.

If the legislation, which prevails over this document, imposes more stringent requirements, the constructive arrangements shall be altered accordingly.

The crane shall incorporate all guards, where reasonably practicable to protect personnel against hazards which cannot be eliminated by design. Where it is not practicable to fit guards around any hazardous area, then clear, unambiguous and relevant warning notices should be posted at suitable positions on the crane.

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5. General Data and requirements

5.1 General Data: site and environment

5.1.1 The site, the zone in the site

The site is the geographical location of the installation on which the handling device in question is installed. It is defined in the basic data by:

- Its name
- Its location (latitude, longitude, distance from the coast)
- The jurisdiction having authority over it.

The zone in the site is the portion of the installation within the handling device operates; it is defined in the particular specification, which includes in particular:

- A descriptive text
- A drawing showing the location and characteristics of the device
- The classification based on the probability of the existence of an explosive gas/air mixture.

5.1.2 Hazardous area

All equipment shall be designed and supplied in accordance with the hazardous area classification as specified on the Project particular specification and data sheets.

Unless otherwise specified the complete equipment will be installed in a hazardous area: Zone 2 Group II A Temperature class T3, IP part 15: [IEC 60079](#).

5.1.3 Environmental conditions

As a general rule, the handling devices shall be designed for outdoor use in an offshore atmosphere (i.e. humid, salt laden and eventually corrosive and subject to equatorial rains). Attention of Supplier shall be drawn on tightness or full protection of all bearings, sliding or movable parts of the equipment that shall be protected from any ingress as sea water, salt spray, sand or dust.

All handling devices must be useable with a maximum service wind of 25 m/sec.

The other specifications to be taken into account are those specified in the basic data, namely:

- Design temperature (average of the coldest month minus 5°C) and corresponding humidity of the air
- The maximum temperature (average of the hottest month) and corresponding humidity of the air
- Ambient temperature
- The extreme wind with the device not in operation: the maximum wind to be expected in a 100-year period, lasting 3 seconds, acting in any direction
- Snow surcharge load (device not in operation)