

## GENERAL SPECIFICATION

### PIPING VALVES VESSELS

#### GS EP PVV 812

#### Skid mounted flotation units

|      |         |                                    |
|------|---------|------------------------------------|
|      |         |                                    |
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## 1. Scope

The present standard specification specifies the minimum requirements concerning the design and fabrication of metallic flotation units.

There are no specific codes or standards for the fabrication of flotation units, so reference shall be made to the [CODAP](#) code or [ASME](#) code. The choice shall be defined in the job specification and/or in the data sheet, and shall then become the reference to be applied to the word "code".

The minimum rules and requirements to be met with respect to the design, calculation, choice of materials, fabrication, Manufacturer quality control and inspection, as well as pressure relief devices, are those stated in the present document. All these rules and requirements shall apply.

## 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 supplements, is the latest revision published at the effective date of this document.

| Reference                                | Title                                                              |
|------------------------------------------|--------------------------------------------------------------------|
| <a href="#">ASME VIII Division 1 (1)</a> | Boiler and Pressure Vessel Code and Alternative Rules              |
| <a href="#">CODAP (1)</a>                | French code governing the construction of unfired pressure vessels |

### Total General Specifications

Unless otherwise stipulated, the applicable version of these documents, including relevant appendices and supplements, is the latest revision published in the applicable yearly collection.

| Reference                     | Title                                                                            |
|-------------------------------|----------------------------------------------------------------------------------|
| <a href="#">GS EP COR 101</a> | Design of internal cathodic protection of equipment and storage tanks            |
| <a href="#">GS EP COR 350</a> | External protection of offshore and coastal structures and equipment by painting |
| <a href="#">GS EP COR 352</a> | Internal protection of equipment by painting                                     |
| <a href="#">GS EP COR 356</a> | Corrosion Protection of Fasteners for Subsea and Topsides Applications           |
| <a href="#">GS EP ELE 079</a> | Electrical apparatus for potentially explosive gas atmospheres                   |
| <a href="#">GS EP ELE 111</a> | Induction motors                                                                 |

| Reference     | Title                                   |
|---------------|-----------------------------------------|
| GS EP INS 101 | Instrumentation Design                  |
| GS EP PVV 112 | Piping material classes                 |
| GS EP PVV 171 | Steel piping fabrication                |
| GS EP PVV 813 | Skid mounted units for static equipment |

### 3. Engineering conditions

The purchaser shall establish a project particular specification dedicated to the supply. The project particular specification shall complement the present general specification with also specific equipment data sheets for all significant components part of the supply, including valves and vessels.

The project specification will also clarify the scope of work for the engineering, manufacturing and quality control tasks related to the structural, electricity and instrument disciplines with due reference to applicable TEC specifications, quoted or not by the present general specifications.

#### 3.1 Process

Operation of the device must comply with the characteristics specified in the job specification and the data sheets.

The Manufacturer shall specify the flotation system adopted; at present, two systems are accepted by the Company:

- Hydroejector
- Turbine.

#### 3.2 Definition of terms and basic data

##### 3.2.1 Working pressure

The working pressure shall be equal to the blanket gas pressure required for the device to operate.

##### 3.2.2 Design pressure

At the top of the device, this pressure shall be equal to the greater of the following two values:

- Pressure of blanket gas
- Pressure drop in the vent line (minimum: 25 g/cm<sup>2</sup>).

For any component of the device, the pressure to be allowed for in designing the component shall be equal to the sum of the design pressure at the top of the device and the hydrostatic pressure due to the fluid contained at the component level.

##### 3.2.3 Test pressure

When the device is filled with water, the test pressure at the top of the device shall be equal to 1.5 times the design pressure.