



Marine & Offshore

Certificate number: 01909/I0 BV

File number: ACM 141/1901/002

Product code: 3715H

*This certificate is not valid when presented without the full attached schedule composed of 7 sections*

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## TYPE APPROVAL CERTIFICATE

*This certificate is issued to*

**SEETRU LTD**

Bristol - UNITED KINGDOM

*for the type of product*

**LEVEL GAUGE - GLASS TYPE**  
SEETRU SEEFLEX liquid level gauge (G31)

**Requirements:**

- BUREAU VERITAS Rules for the Classification of Steel Ships
- BUREAU VERITAS Rules for the Classification of Offshore Units

*This certificate is issued to attest that Bureau Veritas Marine & Offshore did undertake the relevant approval procedures for the product identified above which was found to comply with the relevant requirements mentioned above.*

**This certificate will expire on: 17 Dec 2024**

For Bureau Veritas Marine & Offshore,

At BV LONDON, on 17 Dec 2019,

Spencer Yule



This certificate remains valid until the date stated above, unless cancelled or revoked, provided the conditions indicated in the subsequent page(s) are complied with and the product remains satisfactory in service. This certificate will not be valid if the applicant makes any changes or modifications to the approved product, which have not been notified to, and agreed in writing with Bureau Veritas Marine & Offshore. Should the specified regulations or standards be amended during the validity of this certificate, the product(s) is/are to be re-approved prior to it/they being placed on board vessels to which the amended regulations or standards apply. This certificate is issued within the scope of the General Conditions of Bureau Veritas Marine & Offshore available on the internet site www.veristar.com. Any Person not a party to the contract pursuant to which this document is delivered may not assert a claim against Bureau Veritas Marine & Offshore for any liability arising out of errors or omissions which may be contained in said document, or for errors of judgement, fault or negligence committed by personnel of the Society or of its Agents in establishment or issuance of this document, and in connection with any activities for which it may provide.

The electronic version is available at: <http://www.veristarpm.com/veristarnb/jsp/viewPublicPdfTypec.jsp?id=cyavk49pwm>

BV Mod. Ad.E 530 June 2017

This certificate consists of 3 page(s)

## **THE SCHEDULE OF APPROVAL**

### **1. PRODUCT DESCRIPTION**

#### **SEETRU SEEFLEX liquid level gauge (G31)**

##### 1.1 Design

The gauge consists of a flat borosilicate heat resistant reflex glass on a stainless steel back channel with a front plate of mild steel, polyester coated. The gauge may be alternately fitted with:

- self-closing valves;
- hydraulic actuation system - lever type;
- hydraulic actuation system - push button type;
- hydraulic head;
- copper or nylon tube.

##### 1.2 Technical Data

Temperature range: - 35°C to + 80°C

Maximum working pressure: 2.67 bar (38.7 psi)

Maximum length: 9 meters

*When other choices of materials are used per manufacturer's recommendations, the BV agreement is to be obtained.*

### **2. DOCUMENTS AND DRAWINGS**

#### 2.1 Flat borosilicate heat resistant reflex glass type

- Drawings N° G 211 940 Sheet 1 and 2 - issue 5, N° G 211 941 Sheet 1 and 2 - issue 5, N° G 211 942 Sheet 1- issue 5 and 2 - issue 6, N° G 211 943 Sheet 1- issue 5 and 2 - issue 6, N° G 211 944 Sheet 1- issue 5 and 2 - issue 6

#### 2.2 Marine gauge valve unit

- Self-closing valves: Drawings N° GSA 101110 issue 11 and GSA 101200 issue 10, N° GSA-170110 issue 2, N° GSA-170200 issue 0

- Hydraulic actuation system-lever type: Drawings N° G313183 issue 1 and N° G313184 issue 1

- Hydraulic actuation system-push button type: Drawings N° G313185 issue 1 and N° G313187 issue 1

- Hydraulic head: Drawings N° GSA115110 issue 5 (bronze valve) and N° GSA146110 issue 5 (St-steel valve)

*No departure from the above documents shall be made without the prior consent of the Society. The manufacturer must inform the Society of any modification or changes to these documents and drawings.*

### **3. TEST REPORTS**

Not applicable

### **4. APPLICATION / LIMITATION**

4.1 - May be used for tanks intended for fresh water, lub oil and oil fuel according to requirements Pt C, Ch 1, Sec 10 [2.9.2] of Bureau Veritas Rules.

4.2 - The devices are not admitted for oil fuel and other flammable oils on board passenger ships having to comply with SOLAS Convention, as amended.

4.3 - The flat glass level gauges are to be fitted with self-closing valves at the lower end and also at the upper end if the tank connection is made below the maximum oil level.

4.4 - The manufacturer has to inform its clients about proper methods of arrangement, mounting and general maintenance of the self-powered content gauges as per their instructions as well as the Rules and Regulations applicable to each particular ship.

4.5 - The flat glass level gauges are to be adequately supported with intermediate support brackets at every 1 meter intervals.

4.6 - The devices are to be installed and tested to the Surveyor's satisfaction.

4.7 - Each device is to be supplied with its manuals for installation, use and maintenance.



## **5. PRODUCTION SURVEY REQUIREMENTS**

- 5.1 - The products are to be supplied by **SEETRU LTD** in compliance with the type described in this certificate.
- 5.2 - This type of product is within the category HBV of Bureau Veritas Rule Note NR320 and as such does not require a BV product certificate.
- 5.3 - **SEETRU LTD** has to make the necessary arrangements to have its works recognised by Bureau Veritas in compliance with the requirements of NR320 for HBV products.
- 5.4 - For information, **SEETRU LTD** has declared to Bureau Veritas the following production site:

**SEETRU LTD**  
**Albion Dockside Works**  
**Hanover Place**  
**Bristol**  
**UNITED KINGDOM**

## **6. MARKING OF PRODUCT**

Each level gauge shall be marked with at least:

- Manufacturer' s name or trade mark
- Designation
- Test pressure

## **7. OTHERS**

It is **SEETRU LTD**'s responsibility to inform shipbuilders or their sub-contractors of the proper methods of fitting, use and general maintenance of the approved equipment and the conditions of this approval.

*This certificate supersedes the Type Approval Certificate N° 01909/H0 issued by the Society.*

\*\*\* END OF CERTIFICATE \*\*\*