

MARINE DIVISION

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Certificate number: 20336/A0 BV

File number : ACM103/286/1

Product code : 2130H

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

TYPE APPROVAL CERTIFICATE

This certificate is issued to

VOSS Fluid GmbH
Wipperfürth - GERMANY

for the type of product

SCREW COUPLINGS

Compression Coupling 24°, L & S series
VOSS 2S plus Cutting Ring

Regulations and standards :

- 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 did undertake the relevant approval procedures for the product identified above which was found to comply with the relevant requirements of the Regulations and standards mentioned above.

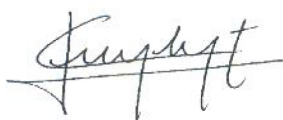
This certificate is valid until : 09 Feb 2014

At Neuilly, on : 09 Feb 2009

For BUREAU VERITAS,
By order of the Secretary

Approval office

Local office : BV HAMBURG
Surveyor : A. Diene


L. COURREGELONGUE



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. 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 Division. Any Person not a party to the contract pursuant to which this document is delivered may not assert a claim against BUREAU VERITAS 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 SCHEDULE OF APPROVAL

1. PRODUCT DESCRIPTION

Compression Coupling 24°, L & S series
VOSS 2S plus Cutting Ring

1.1 Rating

Series	Tube OD (mm)	Nominal Pressure (bar)
L	6-10	500
L	12-18	400
L	22-42	250
S	6-10	800
S	12-16	630
S	20-38	420

Maximum working pressure and torque as per the manufacturer's recommendations given in the catalogues.

Allowable temperature range for VOSS 2S plus Cutting Ring couplings : -20°C / 120°C

1.3 Material specification

Coupling materials : carbon steel in accordance with DIN 3859-1

2. DOCUMENTS AND DRAWINGS

- As per catalogue Product Presentation 2S plus
- IMA Dresden Test Report N° C101/06
- Voss Examination report N° AEL 214/06/1

3. TEST REPORTS

- Tests carried out in the presence of a Classification Society's Surveyor:
Assembly test, hydraulic pressure test, pressure impulse test, burst test, vibration test
- IMA Test Report N° C101/06
- Examination Report: AEL 214/06/1 (VOSS)

4. APPLICATION / LIMITATION

- 4.1 To use as tubing/piping systems for marine and offshore applications.
- 4.2 Assembly instructions given by the manufacturer are to be complied with.
- 4.3 In all cases, the associated pipes are to be suitably supported and anchored. The joints are to be at any time accessible, excepting inside tanks where permitted by the Bureau Veritas rules.
- 4.4 The wall thickness and the material of tubes used are to be in accordance with the Bureau Veritas Rules.

5. PRODUCTION SURVEY REQUIREMENTS

Arrangement shall be made for the Society's Surveyor to carry out, on a periodic basis, visits of the manufacturer's premises and product audits.

6. MARKING OF PRODUCT

The product is to be marked with at least:

- Manufacturer's name or logo
- Model
- Size

7. OTHERS

This approval is given on the understanding that the manufacturer will accept full responsibility for informing shipbuilders or their sub-contractors of the proper method of fittings and general maintenance of the products and of the conditions of this approval.

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