



Marine & Offshore
Division

Certificate number: 04086/E0 BV

File number: ACM 135/0509/001

Product code: 2130H

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

EIFELER MASCHINENBAU GMBH

Euskirchen - GERMANY

for the type of product

SCREW COUPLINGS

EMB PIPE SCREW-JOINTS Series L and S

Requirements:

BUREAU VERITAS Rules for the Classification of Steel Ships

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 mentioned above.

This certificate is a renewal of certificate N° 04086/D0 BV expiring on 05/11/2014

This certificate will expire on: 05 Nov 2019

For BUREAU VERITAS,

At BV HAMBURG, on 22 Jul 2014,

Adama Diene



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 & Offshore Division 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 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.

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BV Mod. Ad.E 530 May 2009

This certificate consists of 3 page(s)

THE SCHEDULE OF APPROVAL

1. PRODUCT DESCRIPTION:

EMB Pipe Screw-Joints Series L and S

1.1 Identification:

Type, Size and the corresponding Nominal Pressure are given in the Manufacturer's Catalogue

1.2 Temperature range for the used Materials:

Material	Minimum allowable Temperature [°C]	Maximum allowable Temperature [°C]
Steel	-40	+120
Stainless steel	-60	+400
Perbunan	-35	+100
Viton	-25	+200

2. DOCUMENTS AND DRAWINGS:

According to the followings documents:

- Manufacturer's drawings
- Manufacturer's Catalogue 1.000.D/GB/F.0409.

3. TEST REPORTS:

Test Report no. 12 0617 1 88, 1990/08/10 from MPA NRW, Dortmund/GERMANY

4. APPLICATION / LIMITATION:

4.1 Pipe Screw-Joints intended to be used for the following services on board:

- Fresh and Sea water
- Fuel oil
- Lubricating- and Hydraulic oil
- Compressed air

4.2 The cutting ring screw couplings are to be at any time accessible.

4.3 The bulkhead unions are not to be used as fittings in way of watertight or oil tight bulkheads or decks.

4.4 In all cases, the associated pipes are to be suitably adjusted, aligned and anchored.

4.5 The manufacturer's assembly instructions are to be complied with.

4.6 The wall thickness and the material of the used tubes are to be in accordance with the Rules of BUREAU VERITAS.

5. PRODUCTION SURVEY REQUIREMENTS:

5.1 The Pipe Screw-Joints are to be supplied by the manufacturer 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.

5.3 **Eifeler Maschinenbau GmbH** has to make the necessary arrangements to have its works recognized by BUREAU VERITAS in compliance with the requirements of NR320 for HBV products:

Eifeler Maschinenbau GmbH
Euskirchen / GERMANY

6. MARKING OF PRODUCT:

Each Pipe Screw-Joint is to be clearly identified to avoid any wrong utilization as manufacturer's instructions:

- Manufacturer's name or logo
- Model
- Size
- Nominal Diameter
- Nominal Pressure

7. OTHERS:

7.1 This approval is given on the understanding that the Society reserves the right to require check test to be carried out on the units at any time and that **Eifeler Maschinenbau GmbH, Euskirchen/GERMANY** will accept full responsibility for informing shipbuilders, shipowners or their sub-contractors of the proper methods of fitting and general maintenance of the Pipe Screw-Joints and of the conditions of this approval.

7.2 This certificate supersedes Type Approval Certificate N° 040861/D0 BV issued on 05/11/2009 by the Society.

*** END OF CERTIFICATE ***