

Certificate number: 03892/E0 BV File number: ACM 171/2301/001

Product code: 0015H

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

www.veristar.com

TYPE APPROVAL CERTIFICATE

This certificate is issued to

WENCON Aps (SUPPLIER)

Bogense - DENMARK

for the type of product

SURFACE PROTECTION AND COLD REPAIR PRODUCTS

BASIC PRODUCTS: WENCON CREAM, RAPID, COATING, HI-TEMP, PUTTY, PIPE TAPE, EXHAUST REPAIR UNIQUE PRODUCTS: WENCON UW CREAM, UW COATING, UW PUTTY, CERAMIC CREAM, CERAMIC COATING

Requirements:

BUREAU VERITAS Rules for the Classification of Steel Ships, BUREAU VERITAS Rules for 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 mentioned above.

This certificate will expire on: 09 Jan 2019

For BUREAU VERITAS,

At BV FREDERICIA, on 09 Jan 2014,

Jesper Jensen



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 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.

Certificate number: 03892/E0 BV

THE SCHEDULE OF APPROVAL

1. PRODUCT DESCRIPTION:

WENCON PLASTIC STEEL consists of a range of one and two-component epoxy, polyurethane and silica based products.

Resistant products to oil, water, sea water and some other products (as diluted acids, solvents, etc.) manufactured by **WENCON ApS.**

The range of products is as follows:

BASIC PRODUCTS: WENCON Cream, Rapid, Coating, Hi-Temp, Putty, Pipe Tape, Exhaust repair.

UNIQUE PRODUCTS: WENCON UW Cream, UW Coating, UW Putty, Ceramic Cream, Ceramic Coating.

Nota: UW indication is for products suitable for wet surface or underwater application.

2. DOCUMENTS AND DRAWINGS:

Specification: as per Manufacturer's files.

Main characteristics:

COMPRESSIVE STRENGTH: Mini 60 N/mm2. TEMPERATURE RESISTANCE: 60°C - 250°C. HARDNESS: Shore D 80. SPECIFIC GRAVITY at 20°C: About 1.5.

POT LIFE: - WENCON Cream: 1/2 - 1 Hour at 20°C

WENCON Coating:
WENCON Rapid:
WENCON Putty:
WENCON Hi-Temp:
15 - 30 minutes at 20°C
10 - 15 minutes at 20°C
6 minutes at 20°C
20 - 40 minutes at 20°C

3. TEST REPORTS:

The production takes place under the governance of ISO 9001/14001.

All tests have been carried out in the Manufacturer's works to either BSI, DIN or ASTM test methods.

4. APPLICATION / LIMITATION:

- 4.1 Products are dedicated for:
 - Repair and/or protection against bimetallic corrosion and erosion/corrosion attacks in pump, valves, filters, pipes, tanks, coolers, etc.
 - For creating fixture and preventing future corrosion in the seats for rudder stock bushing, rudder heel bushing, rudder cone assembly, rudder pintle bushing, rudder pintle cone, sterntube, etc.

4.2 - Limitations:

Components in rubbing or cycling contact with other components where temperature exceeds 90°C.

4.3 - As per Manufacturer's instructions.

5. PRODUCTION SURVEY REQUIREMENTS:

- 5.1 The WENCON PLASTIC STEEL are to be supplied by **WENCON ApS** 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 **WENCON ApS** 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 **WENCON ApS** has declared to Bureau Veritas that the type of product described in this certificate may be manufactured at the following production site:

WENCON ApS JYLLANDSVEJ 15 Postboks 74 DK-5400 Bogense DENMARK

Certificate number: 03892/E0 BV

6. MARKING OF PRODUCT:

Packages are to be marked with the following indications:

- Name of the supplier.
- Product designation.
- Packing date.
- Storage conditions.

7. OTHERS:

- 7.1 Prior to an application, a WENCON Engineer or somebody appointed by WENCON should be contacted to help projecting the application.
- 7.2 Each delivery is provided with a "Certificate of Conformity".
- "Instructions for Use" shall explain actions which are to be taken during the product application in order to avoid some physical troubles. Further more detailed instructions for use, application data sheets, technical data and safety data sheets are included in the WENCON technical manual, available as hardcopy, on CD-Rom or to be down-loaded from internet at www.wencon.com.
- 7.3 This approval is given on the understanding that the Society reserves the right to require check tests to be carried out on the units at any time and that **WENCON ApS**, will accept full responsibility for informing shipbuilders, shipowners or their sub-contractors of the proper methods of use and general maintenance of the units and the conditions of this approval.
- 7.4 This certificate supersedes the Type Approval Certificate n° 03892/D0 issued on 09 Feb 2009 by the Society.

*** END OF CERTIFICATE ***