DNV·GL

Certificate No:
TAK00001YR

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Protective Coating Systems - Seawater Ballast Tanks

with type designation(s)
Jotacote Universal S120

Issued to
Jotun A/S
SANDEFJORD, Norway

is found to comply with
DNV GL class programme DNVGL-CP-0108 – Type approval – Protective coating systems for seawater ballast tanks and double-side skin spaces
IMO Resolution MSC.215(82) Performance Standard for Protective Coatings (PSPC)
IACS Unified Interpretations SC223. For Application of SOLAS Regulation II-1/3-2 Performance Standard for Protective Coatings (PSPC) for Dedicated Seawater Ballast Tanks in All Types of Ships and Double-side Skin Spaces of Bulk Carriers.

Application :

Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV GL.

Issued at **Hamburg** on **2020-10-15**
This Certificate is valid until **2025-10-14**.
DNV GL local station: **Sandefjord**

Approval Engineer: **Enno Brück**

for **DNV GL**

Thorsten Lohmann
Head of Section

This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid. The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV GL AS, its parent companies and subsidiaries as well as their officers, directors and employees ("DNV GL") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to 300,000 USD.

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Product description

Jotacote Universal S120, is a two component polyamine cured epoxy coating based on Covallox Technology. One coat (1 x 320 µm) system and two coat (2 x 160 µm) system.

Manufactured by

Jotun Paints (Europe) Ltd., Stather Road, Flixborough, Scunthorpe, North Lincolnshire DN15 8RR, United Kingdom.

DNV GL local office: Busan

Responsibility

The holder of Certificate takes the responsibility that both design and production are in compliance with Rules, Standards and/or Regulations listed on page 1 of this certificate.

Application/Limitation

This approval is solely connected to the corrosion prevention properties of the coating material. The approval does not include any evaluation of toxicity, contamination, pollution, or fire technical properties.

Jotacote Universal S120 is approved for application on blast cleaned surfaces and on prequalified shop primed surfaces. The following shop primer has been prequalified:

- Muki Z 2001 [Jotun A/S]
- Sigmaweld 165 [Sigma Coating]
- Galvany IZ 182(S) [KCC] (only two coat system)
- KCI Zinc 1000 [KCI]
- Cerabond 2000 [Chugoku Paints]
- Sigmaweld 199 [Sigma Coating]
- Interplate 937 [International Protective Coatings]
- Hempel 15890 [Hempel A/S]
- Galvany IZ 182(J) [KCC]
- Interplate 855 [International Protective Coatings]
- Sigmaweld 190 [Sigma Coating]

Surface preparation and coating application according to PSPC or manufacturer's recommendations, whichever is stricter.

The durability of the applied coating system will depend on the steel surface preparation, coating application and the environmental conditions.

The Type Approval Certificate is invalid if the formulation of the epoxy coating **Jotacote Universal S120** is changed to a degree deemed significant by DNV GL. If the formulation of the listed pre-qualified shop primer is changed to a degree deemed significant by DNV GL the shop primer cannot be used as part of the Protective Coating System.

Tests carried out

Type Testing carried out in accordance with DNV GL CP-0108. The tests are carried out according to the procedures in IMO Resolution MSC.215(82) Performance Standard for Protective Coatings (PSPC), ref. IACS UI SC223:

- DNV GL Technical Report No. 2020-5068A Rev.00, of 2020-09-29
- DNV GL Technical Report No. 2020-5460 Rev.00, of 2020-09-18

- DNV GL Technical Report No. 2020-5099 Rev.00, of 2020-09-29
- DNV GL Technical Report No. 2020-5462 Rev.00, of 2020-09-18
- DNV GL Technical Report No. 2020-5464 Rev.00, of 2020-09-18
- DNV GL Technical Report No. 2020-5466 Rev.00, of 2020-09-18
- DNV GL Technical Report No. 2020-5467 Rev.00, of 2020-09-18
- DNV GL Technical Report No. 2020-5469 Rev.00, of 2020-09-18
- DNV GL Technical Report No. 2020-5477 Rev.00, of 2020-09-21
- DNV GL Technical Report No. 2020-5480 Rev.00, of 2020-09-22
- DNV GL Technical Report No. 2020-5481 Rev.00, of 2020-09-22
- DNV GL Technical Report No. 2020-5502 Rev.00, of 2020-09-29
- DNV GL Technical Report No. 2020-5470 Rev.00, of 2020-09-18
- DNV GL Technical Report No. 2020-5471 Rev.00, of 2020-09-18
- DNV GL Technical Report No. 2020-5472 Rev.00, of 2020-09-18
- DNV GL Technical Report No. 2020-5473 Rev.00, of 2020-09-18
- DNV GL Technical Report No. 2020-5474 Rev.00, of 2020-09-18
- DNV GL Technical Report No. 2020-5475 Rev.00, of 2020-09-21
- DNV GL Technical Report No. 2020-5478 Rev.00, of 2020-09-22
- DNV GL Technical Report No. 2020-5483 Rev.00, of 2020-09-23
- DNV GL Technical Report No. 2020-5584 Rev.00, of 2020-09-23

Marking of product

Product/package shall be marked with *manufacturer's name and address* **Jotun Paints (Europe) Ltd.,** Scunthorpe, United Kingdom, *type designation* Jotacote Universal S120, and *date of production/batch number*.

The marking is to be carried out in such a way that it is visible, legible and indelible. The marking of product is to enable traceability to the DNV GL Type Approval Certificate.

Periodical assessment

The scope of the Periodical Assessment is to verify that the conditions stipulated for the Type Approval is complied with and that no alterations are made to the product design or choice of materials.

Periodical Assessment (Certificate Retention) and renewal after 5 years (Certificate Renewal) shall be performed acc. DNV GL CP-0338.

END OF CERTIFICATE