

TYPE APPROVAL CERTIFICATE

This is to certify:**That the Shop Primers**with type designation(s)
Muki Z 2008

Issued to

Jotun A/S
SANDEFJORD, Norway

is found to comply with

DNV GL class programme DNVGL-CP-0109 – Type approval – Shop primers for corrosion protection of steel plates and sections
DNV GL rules for classification – Ships**Application :****The shopprimer is approved for application on blast cleaned steel plates and sections.****Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV GL.**This Certificate is valid until **2021-10-23**.Issued at **Høvik** on **2016-10-24**DNV GL local station: **Sandefjord**Approval Engineer: **Gisle Hersvik**for **DNV GL**

Martin Strande
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.

Product description

Muki Z 2008; two-pack, zinc ethyl silicate shop primer.

Manufactured by

Jotun Coatings (Zhangjiagang) Co. Ltd., Jiangtse River Internat., Chemical Industry Park, Zhangjiagang Free Trade Zone, Jiangsu 215634, China.

DNV GL local office: Nanjing

Responsibility

The Company (stated on the front page of this 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

The shopprimer is approved for application on blast cleaned steel plates and sections.

The approval test does not include any examination of possible effects of welding with this primer on the welders' state of health.

This approval verifies only that the shopprimer tested has no detrimental effect on the finished weld, it is presumed that the film thickness applied is in accordance with the manufacturer's recommendation.

Type Approval documentation

- 1.
- 2.
- 3.

Tests carried out

Type Testing carried out according to **Type Approval documentation**. Type Testing carried out according to DIN EN ISO 17652-2, GSI SLV Report No. 2016 655 0124 of 2016-10-12, with result:

- Mean total pore area 39,26 mm² (max. allowed pore area 125 mm²).

Marking of product

Product shall be marked with *manufacturer's name*; **Jotun A/S**, *place of manufacture*, and *type designation*; **Muki Z 2008**.

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 to be performed after 2.5 years (Certificate Retention) and at renewal after 5 years (Certificate Renewal).

Job Id: **262.1-004279-3**
Certificate No: **TAK00000GZ**

The main elements of the Periodical Assessment are to:

- Ensure that **Type Approval documentation** is available.
- Review design, materials, production process, and performance with respect to possible changes, in order to ensure compliance with **Type Approval documentation** and/or referenced material specifications.
- Ensure traceability between manufacturer's product marking and the DNV GL Type Approval Certificate.

END OF CERTIFICATE