DNV·GL

Certificate No:
TAK00000TH

TYPE EXAMINATION CERTIFICATE

This is to certify:

That the Protective Coating Systems

with type designation(s)
IZ-01HS (1x75 µm) / EP-988 (1x465 µm) / UP-450 (1x60 µm)

Issued to
Yung Chi Paint & Varnish Mfg. Co. Ltd.
Kaohsiung, Taiwan

is found to comply with
NORSOK M-501, Surface preparation and protective coating (Edition 6, February 2012)

Application :

The coating system has been tested to Coating System No. 7A requirements in accordance with the stated Standard. The coating system is not specified in accordance with the stated Standard. The use of the tested coating system to be evaluated in each individual case.

Issued at **Høvik** on **2017-06-12**
This Certificate is valid until **2022-06-11**.
DNV GL local station: **Kaohsiung**

for **DNV GL**

Approval Engineer: **Gisle Hersvik**

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 Examination Certificate and not to the approval of equipment/systems installed.

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Product description

IZ-01HS (1x75 µm) / EP-988 (1x465 µm) / UP-450 (1x60 µm)

Description of the Coating system, tested on bare steel;
— **IZ-01HS** Zinc Rich Primer
— **EP-988** Epoxy High Solids Coating for Anti-Corrosion
— **UP-450** Polyurethane Coating

The tested coating system is not defined, and therefore not, in accordance with NORSOK M-501.

The testing has been performed with basis in test requirements of NORSOK M-501 (for Coating system no. 7A, for protection of carbon and stainless steel in the splash zone), however, does not indicate that the coating system is accepted as an alternative of the system specified in NORSOK M-501.

Coating system no. 7A is defined in NORSOK M-501, Surface preparation and protective coating, Rev. 6, February 2012, as two-component epoxy or polyester based coating, a minimum of 3 coats and a total DFT of min. 600 µm.

For details on Coating system no. 7A, please refer to NORSOK M-501, Rev. 6, February 2012.

Application/Limitation

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

Type Examination documentation

Tests carried out

Type Testing carried out in accordance with **Type Examination documentation**, ref.:
- Technical Report No. CDTI-CL-16F026, "Pre-Qualification Test in Accordance with NORSOK M-501, Rev. 6, System No. 7A Used in Splash Zone" from CCS-DNV Technology Institute of 2016-12-30.

Marking of product

Products forming parts of the coating system shall be marked with *manufacturer's name*; **Yung Chi Paint & Varnish Mfg. Co. Ltd., Taiwan** and *type designations*.

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 Examination Certificate.

Periodical assessment

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

Periodical Assessment to be performed after 2 and 3.5 years (Certificate Retention) and at renewal after 5 years (Certificate Renewal).

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

END OF CERTIFICATE