

Certificate No: **TAK0000185** 

# TYPE APPROVAL CERTIFICATE

| This is to certify:  |                   |
|--|-------------------|
| That the Epoxy Systems   |                   |
| with type designation(s) Plastic Steel Weicon SF   |                   |
| Issued to Weicon GmbH & Co. KG Münster, Germany  |                   |
| is found to comply with  DNV GL rules for classification – Ships  GL Rules for Classification and Construction VI - Additional Rules and Guidelines Part 9 -  Materials and Welding Chapter 5 - Guidelines for the Approval of Reaction Plastics and  Composite Materials for the Seating and Repair of Components |                   |
| Application:   |                   |
| Repairs of machinery and equipment. The application shall be carried out in accordance with manufacturers' instructions and under survey of DNVGL.   |                   |
| Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV GL.   |                   |
| Issued at <b>Hamburg</b> on <b>2018-05-16</b> This Certificate is valid until <b>2023-05-15</b> . DNV GL local station: <b>Essen</b>   | for <b>DNV GL</b> |
| Approval Engineer: Joachim Rehbein   |                   |
|  | 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.



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Job Id: **262.1-027601-1** Certificate No: **TAK0000185** 

## **Product description**

Plastic Steel Weicon SF: 2 - component epoxy resin system with filler

### Application/Limitation

Repair activities for components which affect or might affect the Class of the ship, have to be reported in advance to DNVGL.

Installation only in accordance with DNVGL rules and work instruction of manufacturer.

Without further tests the maximum working temperature is restricted to 50°C.

An adequate curing shall be proven by a Shore D test. A hardness of 78 shall be achieved.

Any significant changes in design and/or quality of the material will render the approval invalid.

#### Type Approval documentation

## Marking of product

The product to be marked with manufacturer's name or trademark and type number identification.

#### **Periodical assessment**

The scope of the periodical assessments is to verify that the conditions stipulated for the certification are in compliance with the Type Approval documentation and that no alterations are made to the product design or choice of materials.

Periodical assessments will be carried out bi-yearly(Certificate Retention) and at renewal after 5 years (Certificate Renewal).

When possible, this assessments may be harmonised with normal surveys for product certification and / or other surveys and audits carried out.

END OF CERTIFICATE

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