

TYPE APPROVAL CERTIFICATE

This is to certify:**That the Epoxy Systems**

with type designation(s)
HP-3000GL

Issued to

HP-Textiles GmbH
Schapen, Germany

is found to comply with
DNV GL class programme DNVGL-CP-0089 – Type approval – Epoxy resin systems

Application :

Laminating resin for construction of laminates made of fibre reinforced plastics (FRP)

This Certificate is valid until **2021-08-31**.

Issued at **Hamburg** on **2016-09-15**


DNV GL local station: **Essen**

Approval Engineer: **Joachim Rehbein**

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.



Job Id: **262.1-023615-1**
Certificate No: **TAK00000FD**

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Product description

Two Component Epoxy Resin System HP-E3000GL

Approved variants

Following hardener are approved:

- HP-E15GL
- HP-E200GL
- HP-E300GL

Production site

HP-Textiles GmbH
Otto-Hahn-Straße 22
48480 Schapen
Germany

If not listed here a valid Approval of Manufacturer has to be available for all production sites which want to supply material covered by this Approval Certificate.

Application/Limitation

Applicable for the construction of FRP - laminates, on condition that fibre reinforcements, adhesives and core materials comply with the applicable requirements of DNV GL and are compatible to the resin. Any significant changes in design and / or quality of the material will render the approval invalid.

Type Approval documentation

Tests carried out

- Test Reports issued by Kunststoff Institut Lüdenscheid:
 - L 12.1365-2 19. Juli 2012
 - L 11.1651-1 16. April 2012
 - L 12.1080 11. Juni 2012
- Analyse – overview LIMS E3000GL Harz, dated 2016-08-23

Periodical assessment

A production site with a valid Approval of Manufacturer (AoM) certificate for material in question is exempted from the obligation concerning retention and renewal assessments. For a manufacturer without a valid AoM certificate, periodical assessments after 2.5 years (retention) and after 5 years (renewal) are required.

END OF CERTIFICATE