

TYPE APPROVAL CERTIFICATE

This is to certify:**That the Sandwich Core Materials**with type designation(s)
Divinycell H60 MC

Issued to

DIAB International AB
Laholm, Sweden

is found to comply with

DNV GL class programme DNVGL-CP-0084 – Type approval – Sandwich core materials**Application :****Manufacturing of sandwich-structured composites.**Issued at **Hamburg** on **2017-10-24**This Certificate is valid until **2022-10-23**.DNV GL local station: **Gothenburg**Approval Engineer: **Guido Michalek**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.



Product description

- Closed cell and highly cross-linked PVC foam modified with polyamide-urea and a ductile linear vinyl polymer.

Approved variants

- H60 MC

Material Properties

Variant	Nominal Density (1)	Density Range (1)	Compr. Strength (2)	Compr. Modulus (2)	Shear Strength (3)	Shear Modulus (3)	Tensile Strength (4)	Heat Resistance (5)
H60 MC	53	48 - 61	1.15 (0.9)	93 (65)	0.76 (0.63)	21 (17)	>1.6	≤60

(1) Density according to ISO 845 in kg/m³

(2) Compressive properties according to ISO 844:2014, procedure B in MPa.

(3) Shear properties according to ISO 1922 in MPa.

(4) Flatwise tensile strength according to ASTM C297 with sandwich specimen covered with a polyester/glass respectively an epoxy/glass laminate.

(5) Heat resistance temperature according to DNVGL-CP-0084; Section 2 – 4.7 in °C.

All values are average values and verified by testing. The values within brackets are minimum values.

Limitation

The foam complies with the applicable requirements of DNV GL and is compatible to the laminating resin and/or adhesive. Any significant changes in design and / or quality of the material will render the approval invalid.

Type Approval documentation

- Technical Data Sheet
- Test Report issued by DIAB Laholm, based on tests witnessed by a DNV GL surveyor, dated on 2017-09-04.
- Quality assurance documentation.
- Workshop Inspection Report, issued by DNV GL Gothenburg, Sweden.

Assessed production site

DIAB AB
Norra Sofieroleden 8
312 32 Laholm
Sweden

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 manufacturer without a valid AoM a periodical assessment after 2.5 years and at renewal after 5 years is required.

Remarks

ASTM D 1621-73 procedure B and ISO 844:2014 procedure B work on the same technical principle and provide comparable test results.

ASTM C 273 and ISO 1922 work on the same technical principle and provide comparable test results.

END OF CERTIFICATE