



Statement of Approval

Approval No. **WP 1010005 HH**

The material described below complies with the applicable requirements as given in the Rules and Regulations of Germanischer Lloyd. On this basis the material is

approved as **Sandwich Core Material**

for the construction of components provided that the recommendations for use as specified by the producer are observed.

Type **NidaFusion SXO**

Description **Fibre reinforced closed cell foam**

Producer **Nida-Core Corp.
541 NW Interpark Place
Port St.Lucie, FL 34986
United States of America**

Normative Reference **Rules for Classification and Construction,
II - Material and Welding Technology
Part 2 Non-Metallic Materials**

This document consists of this page and a one-page annex which is integral part of the approval.

This Statement of Approval is valid until 2010-06-30.

Hamburg, 2010-03-19

Germanischer Lloyd


Michael Kühnel


i. A.
Guido Michalek

Statement of Approval



ANNEX

Approval No. WP 1010005 HH

Date: 2010-03-19

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Reference Technical specifications deposited at Germanischer Lloyd Head Office.

Assessed Documents - Technical Data Sheet
- Test Report No. L 208 108-1 issued by Pôle de Plasturgie de L'est, dated 2009-08-20.

Fields of Application Construction of FRP sandwich laminates of components, at the condition that the resins comply with the applicable requirements of the Germanischer Lloyd and are compatible to the core material.

Approved Variants NidaFusion SXO up to 25mm thickness-

The following manufacturer's specified minimum values (msmv) have been verified by testing:

Properties	Test Method	Test Results	Units
Density, dry foam	ISO 845	34,7	kg/m ³
Compressive strength	ISO 844	2,4	MPa
Compressive modulus	ISO 844	141	MPa
Shear strength 0°	ISO 1922	0,45	MPa
Shear modulus 0°	ISO 1922	32,5	MPa
Shear strength 45°	ISO 1922	0,85	MPa
Shear modulus 45°	ISO 1922	43,1	MPa
Shear strength 90°	ISO 1922	0,41	MPa
Shear modulus 90°	ISO 1922	30,3	MPa

The test results base on following test specimen preparation:

Core:

NidaFusion SXO 25 mm thick, Stepp 20 mm, PU-foam, triangulations 3x1200 tex following 0°, +120°, -120°, integrated skin 450 g/m² continuous strand mat

Skin:

NCF ±45°, 600 g/m², 1 layer each side

Resin:

Vinylester, Derakane 470-36S, 240 cp

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

End of Annex

Germanischer Lloyd