### NIDAPLAST WINNING ASSET : ACOUSTIC ABSORPTION

Damping loss factor (η) 25 mm core material / 3mm plywood skin PU glued.



Level of vibration (RMS) on the partitions of a power boat depending on the function of the rotation speeds of the engine.



The damping loss factor of nidaplasts@8 is substantially higher than other traditional materials. The viscoelastic character of the polypropylene used in our **honeycombs structure** makes **nidaplast** the right material for absorbing the vibrations from your boat. It helps reducing vibrations and contributes to acoustic comfort of the whole structure. Nidaplast honeycombs have a capacity of absorption higher than wood. Even if the wood would be strengthened by a viscoelastic damping sheet, **nidaplast remains the best choice** in terms of acoustic performances. This **reduces the sound level** generated by the vibrations of the engine and the movements, which are propagated throughout the structure.

## NIDAPLAST SERVICES

Nidaplast team remains at your disposal to respond to your needs and to address any technical question you may have:



→ Our engineers are highly experienced in using nidaplast products in traditional industrial techniques: hand lay-up, spray-up, RTM, infusion... They will work closely with your design and production teams for manufacturing the first prototypes in order to optimise your production costs and thus adapt our products to your requirement.

→ Thanks to its 25 years of experience,

Thanks to its 2b years of experience, nidaplast composites can help you to pre-size your composite panels Nidakits. Our engineers will help you to produce the right structures using analytical or digital methods.

The information contained herein may be used as a guide for the use of the product but must not be considered as a guarantee for correct installation Furthermore, the application, use and / or processing of the products are beyond our control, and consequently the installer and / or user and /or the

performance laboratory in order to make mechanical tests on its products. Our team will help you with your choice of materials and will work with you to check the mechanical resistances. This laboratory is constantly carrying out **quality control** for nidaplast products in accordance with the company's ISO 9000 and ISO 14001 certification.







processor shall be fully responsible for this work

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The honeycombs core for lighter structures

# **BOAT BUILDING**

ROT-

PROOF

SHAPING

**RESILIENT** 

🙈 SHOCK

ACOUSTIC

ABSORBER

#### \_\_\_\_ an **Etex** group 🐓 company\_\_\_

THERMAL

INSULATOR

FFFFCTIVE

plaquette NAUTISME C5.indd 1-2

# NIDAPLAST IN THE HEART OF STRUCTURAL SANDWICH PANELS



Nidaplast composites is the inventor of the extruded polypropylene honeycombs. Used as a core in daily applications, this material enables the production of lightweight and high performance sandwich structures.

For 25 years, these sandwich structures are used mainly for the **production of large parts.** Thanks to **the mechanical features** of the honeycombs core, our products are found in various sectors : Boat Building, Transport, Building, Wind Turbine, Sports and Leisure, Industrial Goods and Lightweight stone.

From design to delivery, nidaplast composites adapts its services to meet your requirements. In order to be able to follow and ensure the success of your projects, our team of Engineers and Technicians will provide you with the best technicaleconomic solutions for the structural applications. Its commitment and technical prowess make nidaplast composites the ideal partner for driving projects in the field of boat building.

Depending on the use and the constraints applied to the finished panel, **several finishings** are possible : association of honeycombs core with polyester , aluminium or wooden skins. It is also possible to put **local reinforcements or inserts** before the stratification of the panel for affixing parts to it

## ADVANTAGES OF HONEYCOMBS FOR BOAT BUILDING

#### The best technical-economic choice 🧄

NIDAPLAST CORES FOR SANDWICH PANEL ARE WIDELY RECOGNISED FOR THEIR MECHANICAL QUALITIES AND THEIR ECONOMIC ADVANTAGES:



The Nidaplast cores offer all the benefits of a sandwich structural panel and are adapted to the different processes wich are used (contact, projection, infusion, RTM, gluing).

# NIDAPLAST RANGE AND PROCESSES



Rigidity