

Focused Performance

Divinycell® MatrixX



Focused Performance

As a world leader in sandwich composite solutions, DIAB answers its customers' constant strive to deliver stronger, lighter and more competitive products. The Matrix Series is the latest addition to the Divinycell family and our most iterated product. Based on our in-depth understanding of our customers' needs and requirements, Matrix delivers relevant mechanical properties at the lowest possible weight, enabling our customers to decrease the weight of their applications as well as increase their competitiveness.

Matrix Series is an all-purpose grade with a comprehensive set of material characteristics valuable to a wide range of industries including Wind and Marine, making our customers' products stronger, lighter and more competitive.



High performance

DIAB continuously develops the performance of our products through customer partnerships, R&D and efficient manufacturing process. Thanks to this, the Divinycell Matrix series gives you excellent mechanical properties per weight.

The benefits of high performance at lower weight are many: lower fuel consumption, higher application efficiency, decreased environmental impact and decreased lifetime cost. Each of these is essential to any company offering applications that employ sandwich composite designs.

Right performance

Designers are able to optimize their designs based on the Matrix Focused Performance philosophy. Based on our deep customer insight, the Matrix range provides relevant mechanical properties based on customer needs at the lowest possible weight. For example, Matrix 7-7 meets the exact DNV requirements for decks and also complies with a wide range of wind blade specifications – staying true to what Focused Performance means to you.

Optimized performance

The Matrix series complements DIAB's Divinycell H range perfectly and probably makes it the most comprehensive all-purpose grade range available in the industry. The wide range of mechanical properties enables designers to optimize their applications by selecting the most precise core materials for their needs – resulting in decreased weight and increased competitiveness.

And sustainable, too

The environmental impact of an application is highly related to two main criteria. The lifetime of the product and the weight. Matrix core materials' excellent performance over time in combination with excellent strength-to-weight performance not only provide durability and long life to applications, but also decreases the weight. These characteristics, along with being recyclable and reusable, make the Matrix Series a good environmental selection.

Integration

Matrix Series is well integrated in the full DIAB offering and is available in a wide range of finishing option and kits. Matrix series is provided throughout the DIAB supply chain and is supported by DIAB Technical Services as well as Composites Consulting Group.

Matrix

Material Characteristics

High strength-to-weight ratio

High strength-to-weight ratio is one of the main criteria for a sandwich material and, through continuous development work, is what Matrix provides: Excellent properties with low weight.

Exceptional peel strength

Matrix's material composition, mechanical properties and cell structure enables excellent chemical and mechanical adhesion properties.

Compatibility

Matrix is compatible with all main resin types.

High thermal stability

Matrix's good heat resistance makes it a valuable material selection also at elevated temperatures.

Low resin uptake

Due to small cell size and a closed cell structure, Matrix provides low resin absorption.

Good insulation properties

Matrix's composition gives it excellent thermal and insulating properties.

Easy to process

Matrix materials are very easy to machine and process into any shape or form, and can be used without the need of special consideration or machinery. For more information and technical datasheets visit www.diabgroup.com.



DIAB – a strategic partner

DIAB is a world-leading supplier of sandwich composite solutions and high performance core materials. When you work with us, you partner with a company with global presence that ensures secure supply as well as local service and support. A company committed to continuous product innovation and development that keeps both us and you in the vanguard of sandwich composite technology. Simply, DIAB's strategic capabilities qualify us as a leading supplier of core materials and sandwich composite solutions for your industry.

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