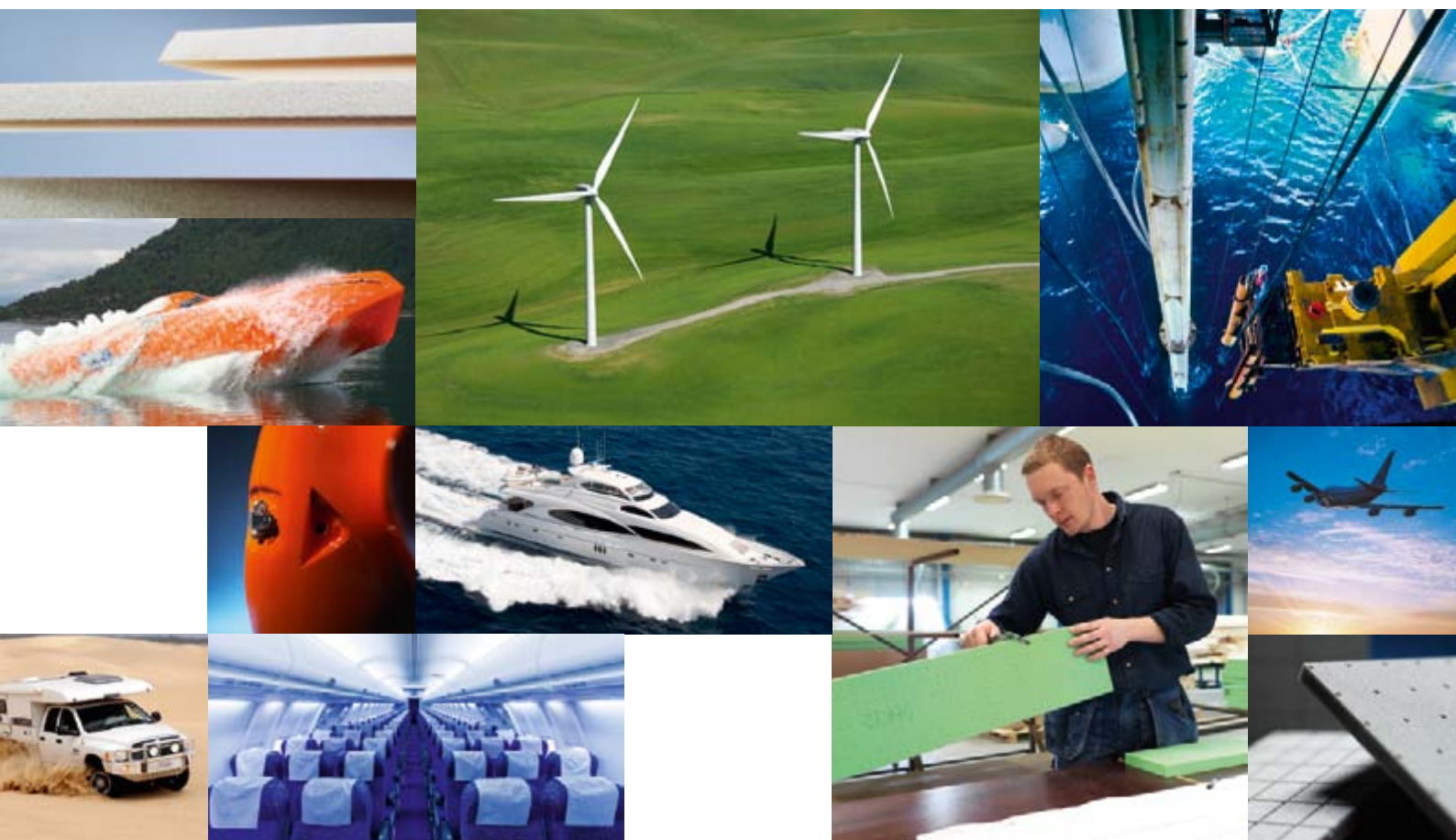


Making your products stronger, lighter and more competitive



**High-performance core materials
and sandwich composite solutions**

Making your products stronger, lighter and more competitive

High-performance core materials and sandwich composite solutions

At DIAB, our customers' needs are at the center of all we do. We like to think our deep understanding of your needs has given DIAB a unique position in the industry.

Naturally, our high-performing core materials, kits and finishing are the central pieces of our offering, but they are not the only things qualifying us as a leading provider of high-performance core materials and sandwich composite solutions.

In close collaboration with our customers, DIAB leads the industry in research and development of sandwich composite technology – a concept proven to create structures significantly stronger than those made from traditional materials such as steel, concrete, aluminum and wood.

Our competence in sandwich and core materials is second to none. Over the years, DIAB has acquired deep insight in composite technology as well as the needs

and requirements of our target segments. By working with DIAB, you get full access to years of experience.

To provide the highest possible value to our customers, we need to be where they are. Our global sales force ensures you have DIAB expertise close at hand, and our seven strategically-located operations units serve you fast with high precision. This structure makes us unique in the industry and provides solutions that keep our customers in the forefront of their industries – a set-up few others can match.

Combining a complete portfolio of high-performance core materials and cost-effective kits with a comprehensive range of engineering and process support services available from our offices and facilities around the world, DIAB makes your products stronger, lighter and more competitive.



The Technology Advantage

DIAB develops fit-for-purpose solutions and high-performing core materials – continuously researching and expanding the offering, which is already perhaps the widest portfolio of core materials and services in the world. Our leading position allows you to take advantage of the top industry research and development to improve your own products.

Competence Gained through Experience

DIAB has believably the highest competence level in the industry. Our decades of experience serving Wind, Marine, Transportation, Aerospace and Industry give us invaluable insight into their unique products and processes, enabling us to develop solutions adapted to their specific needs.

Worldwide Supply & Support

DIAB has a global manufacturing, sales and engineering presence. We follow our customers – and even anticipate their needs – positioning ourselves in locations to best support them. We currently have seven manufacturing sites in strategic locations around the world offering our full range of materials, plus local representation in 16 countries – ensuring security of supply, cost efficiency, flexibility and local support.

High-Performance Core Materials

DIAB serves a wide range of markets with diverse needs and challenges, including Wind, Marine, Aerospace, Transportation and Industry. With a complete range of products, numerous finishing options and kit operations in

combination with engineering services and expertise, DIAB presents presumably the widest and most valuable offering in the sandwich composite industry.

Proven Performance

DIAB has vast competence in manufacturing and applying core materials to sandwich structures. Our products and solutions have been used in a wide range of industries for decades and are all certified according to relevant industry standards. This excellent track record proves the quality and reliability of our materials and solutions, providing security and proof of performance few others can offer.

Expansion with Stability and Commitment

DIAB takes customer trust very seriously. As we stretch around the world, we are taking care to build a stable infrastructure focused on quality. Our goal is to deliver on our promises each and every time. Partnering with DIAB not only means you get access to our technically advanced offerings, but you also get all our expertise, experience, service, commitment and drive to see your business develop and grow.

DIAB has every important strategic capability qualifying us as a leading supplier of core materials and sandwich composite solutions for a variety of industries.

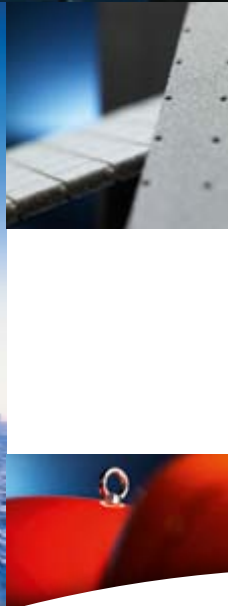


Discover how sandwich composite technology can put you ahead in your industry

With a complete range of products, numerous finishing options and kit operations in combination with engineering services and expertise, DIAB's sandwich cores and technology are used by leading companies in a wide variety of markets to achieve the most competitive low-weight, high-performance structures possible.



DIAB partnered with Skandinaviska Glassystem to develop this innovative, award-winning modular cladding system for the prestigious Horten building in Copenhagen.



Wind

Application development within the wind industry is driven by the need to decrease costs and increase efficiency to make wind energy a viable alternative to fossil fuels.

Using a holistic approach, combining design, manufacturing and quality with the right core materials, DIAB decreases the cost of energy from the wind in co-operation with our customers.

DIAB has been a leading sandwich core supplier to the wind energy industry since the mid-1980s. Today, approximately 200,000 DIAB cored blades are in service.

Marine

DIAB is the driver of sandwich technology in the Marine industry today. Sandwich cores are a necessity to be able to design and build high-performance Marine applications with innovative designs.

Pleasure craft, workboats, ferries, cruise ships and military vessels rely on DIAB sandwich cores to achieve new levels of performance in terms of speed, strength, comfort, reliability and longevity. Sandwich composites, with their excellent fatigue and slamming properties, are particularly ideal for rescue craft, coast guard vessels and other paramilitary craft that often operate in high-sea conditions.

Transportation

Whether used for structural parts or paneling, DIAB sandwich composite technology offers an ideal way to reduce weight in trains, trams, buses and trucks. The benefits of sandwich technology in transportation are obvious. Lighter designs result in decreased fuel consumption, higher payloads and longer range – all having a positive impact on the environment.

Aerospace

Application development within the aerospace industry is driven by the need to decrease the life cycle cost of applications as well as impact on the environment – all while satisfying the industry's strict quality requirements.

DIAB's sandwich composite solutions are based on a holistic approach that takes into account design, manufacturing and quality requirements within aerospace to optimize life cycle cost.

Furthermore, weight-saving sandwich composite solutions and high-performance, recyclable core materials decrease weight and fuel consumption and increase range and payload – decreasing environmental impact.

Industry

Thanks to the formability, light weight and corrosion-resistant features of sandwich cores, industrial use of DIAB sandwich composites involves everything from large buildings and holding tanks to furniture and sculpture.

Architects and engineers can now use sandwich composites for applications requiring high-strength, light-weight, durable solutions. Domes, bridges and claddings are just a few of the applications for which DIAB sandwich composite cores provide exceptional performance. The cores' ability to be produced in complex shapes as single components give architects full creative freedom.

Sandwich composites' unique characteristics, including strength-to-weight ratio, stiffness and formability, make them ideal for Liquefied Natural Gas (LNG) transport structures.

Within Industry, DIAB also serves Subsea applications from the surface down to a depth of 10,000 meters – providing strength, impact-resistance, buoyancy and insulation – decreasing lifetime cost for subsea applications.



Sandwich Composite Solutions

Products, services & competence that answer your every need

High-Performance Core Materials

DIAB has the right core solution to make your products stronger, lighter and more competitive.

We provide a complete range of high-performance core materials meeting specific needs in a variety of industries. With a wide selection of mechanical properties, material characteristics and densities, designers, engineers and fabricators can easily find the right core material for any application.

Divinycell Matrix

The Matrix Series is the latest addition to the Divinycell family and is our most iterated product. Following our concept of Focused Performance, Divinycell Matrix is a recyclable, structural, all-purpose grade delivering relevant mechanical properties at the lowest possible weight.

Divinycell H, HP

Divinycell H and HP are recyclable, structural, all-purpose grades with excellent strength-to-weight performance and a wide range of mechanical properties. Divinycell H is compatible with pre-pregs and wet resin systems. Divinycell HP is high-temperature resistant and suitable for most pre-pregs.

Divinycell P

Divinycell P is a recyclable, structural PET core material well-suited for land, transportation and construction applications. Divinycell P also has excellent fire, smoke and toxicity (FST) performance and is apt for high-temperature processes.

Divinycell F

Divinycell F is a recyclable/reprocessable PES (Polyether-sulfone) core specifically developed for aircraft interiors. Divinycell F is an excellent substitute for honeycombs and decreases the weight and cost of aircraft interiors.

Divinycell HT

Divinycell HT is a recyclable material suitable for structural designs in aircraft applications and is available with full production traceability. Divinycell HT is suitable for pre-pregs processing as well as wet resin systems and infusion.

Divinycell HCP, from sea level to 700 meters below sea level

Divinycell HCP is developed for various types of subsea applications and has very low buoyancy loss and water absorption under long-term loading conditions.

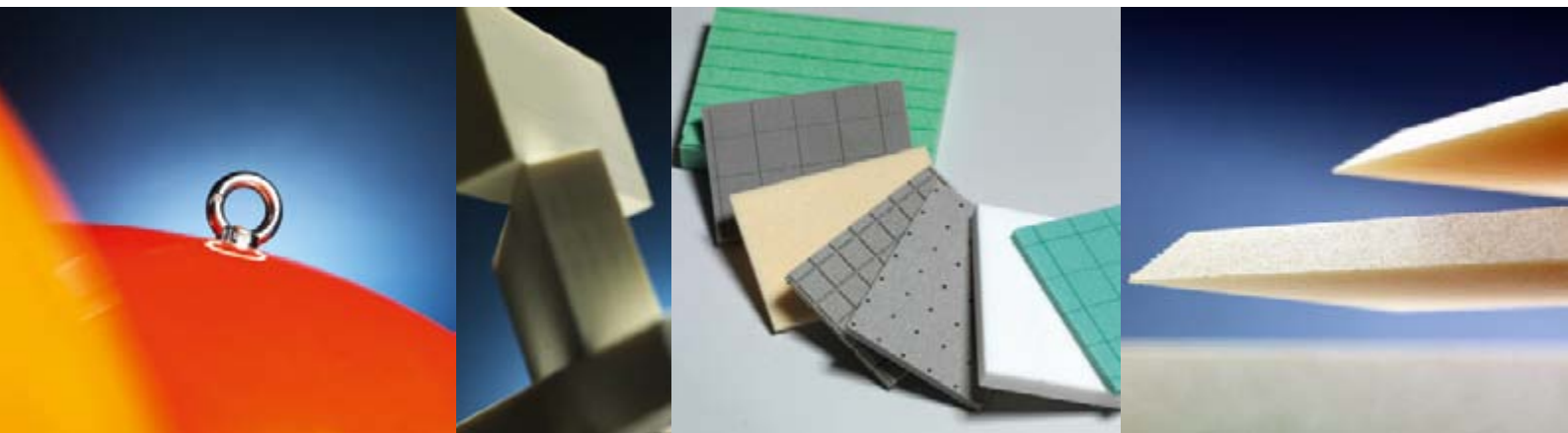
Syntactic Foams, from 700 to 10,000 meters below sea level

BMTI syntactic foams provide unique mechanical properties – including high compressive strength, high buoyancy per kilogram and low water absorption – making them ideal for a wide range of subsea applications requiring high performance and long lifetime.

ProBalsa

ProBalsa is an organic core material mainly suitable for wind blade production, providing high compressive strength. DIAB has its own balsa tree plantation and manages the entire process from beginning to end. Certain designs allow for 100% ProBalsa, or it can be mixed in hybrid kits consisting of both foam and ProBalsa.

Divinycell



– from form to finish

Value-Added Solutions & Competence

With our integrated range of solutions and services, DIAB serves in every facet of the composite design and manufacturing process, enabling our customers to develop high-performance, high-quality and cost-efficient applications. Our complete offering allows us to serve various needs and segments in an optimal way.

Kit manufacturing

To substantially increase efficiency, save cost and improve quality, all of DIAB's materials can be delivered in ready-made engineered kits or any 3D shape. DIAB's leading-edge expertise in kit manufacturing optimizes efficiency throughout the whole manufacturing cycle. With DIAB's unrivaled kit concept, each piece is pre-cut, shaped and formed as necessary and numbered to fit exactly into its designated place in the mold – eliminating the need for on-site shaping and cutting of flat sheets.

Complete range of finishing options

Selecting the correct finishing option in combination with the right kit can significantly improve cost, quality and efficiency. DIAB provides a wide number of finishing options including grid-scored, double-cut and grooved/perforated forms specially developed for the revolutionary DIAB Core Infusion™ process.

DIAB Technical Services

Technical Services makes sure our customers get the most out of their composite solution. Technical Services is an excellent speaking partner in terms of core, kits and finishing selection, assisting our customers in optimizing the full solution.

Composites Consulting Group

Composites Consulting Group, an independent DIAB Group company, provides world-class composite services to companies with a desire to make innovative products in composites. When working with Composites Consulting Group, companies realize the full value of designing with composites. Composites Consulting Group has extensive engineering and manufacturing experience from a wide range of industries. A broad understanding of customers' requirements enables Composites Consulting Group to provide a complete set of specialty composite technology services including design, engineering, testing, tooling, process optimization and training.



R&D that keeps you ahead of the game

With product development for where you are and where you are going

Innovation

At DIAB, we are constantly working to bring you every advantage – from long-term research in cutting-edge technology to continuous development and improvement of all our products and services. Our aim is to not only meet your needs now, but also anticipate and fulfill your needs for the future.

With dedicated research and development facilities, our commitment to R&D enables DIAB to present what we believe is the most complete range of products and services in the industry, providing solutions for a wide number of markets and applications.

You may already know of many innovations from DIAB. For example, we introduced Divinycell F (a core material specifically developed for aircraft interiors), pioneered the kit concept, developed the now widely-used Core Infusion Technology, and recently added the Matrix series, which significantly reduces weight with maintained strength – valuable to all industries.

Quality & Efficiency

Product quality and production efficiency are the watchwords at every DIAB manufacturing plant. DIAB is constantly striving to improve processes to reduce costs and improve quality. To that end, DIAB invests heavily in state-of-the-art production equipment and a skilled, dedicated workforce.

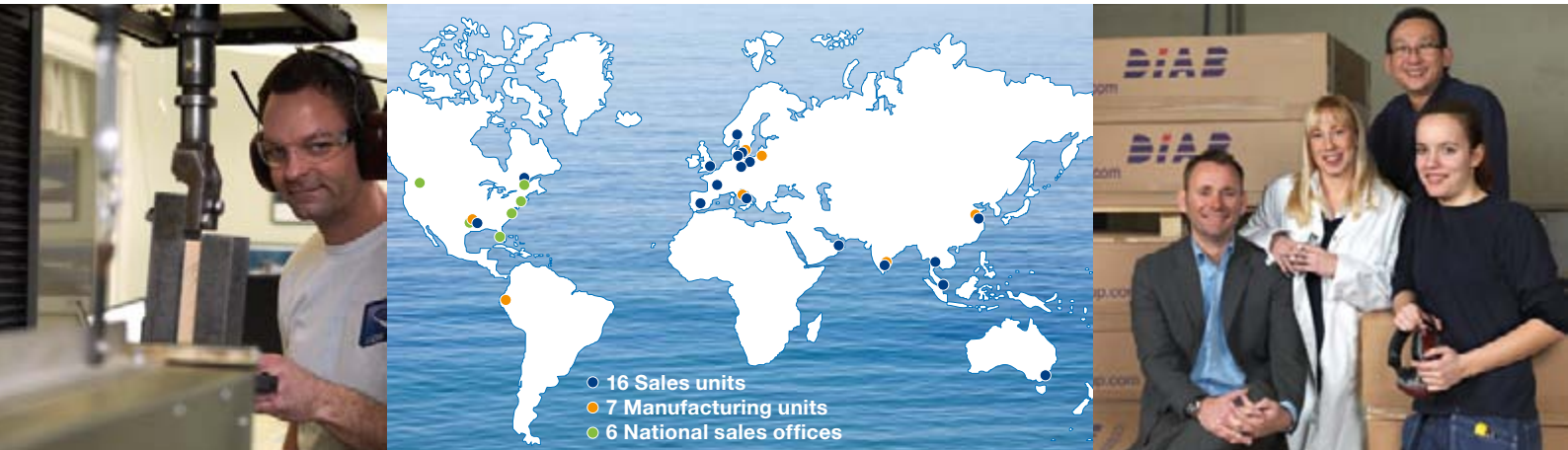
We continually train all employees to make certain the entire organization works under the same principles – vital to ensure continuity and high standards for all our customers around the world.

Environmental Responsibility

Embedded in DIAB's business philosophy is the belief that all products and services should have a positive environmental impact in the applications and processes in which they are used. With light, strong sandwich cores, our clients are able to build structures that yield both economical and environmental benefits such as lower fuel consumption, longer range, higher payload and more. We take the entire product life cycle into account in our research and development to ensure environmentally-friendly products that are reusable and recyclable.

We continually work to reduce environmental impact on both local and global environments across all our activities. All DIAB production plants work according to ISO 14001 and meet local, national and international standards regarding environmental issues.





And resources to support you around the world

We are on the spot, where you need us

Global presence. Local service.

It is our aim to be close to our customers so we can make a truly positive contribution to their operations. We have positioned ourselves to serve our customers locally while offering all the benefits of working with a global company, seeking to establish a presence in locations we know will best serve our customers both now and in the future.

To shorten our supply chain, DIAB currently has strategically-located manufacturing units in China, Ecuador, India, Italy, Lithuania, USA and Sweden. Each site offers our full range of materials to ensure security of supply, cost efficiency and flexibility.

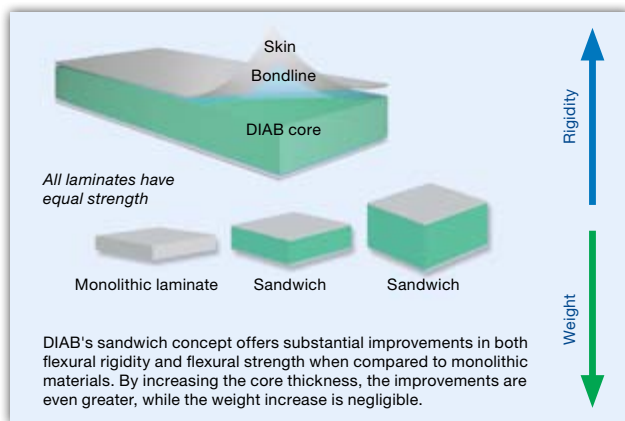
DIAB also has sales, engineering and customer support in 16 countries offering highly localized service and composite competence. To ensure full coverage, DIAB cooperates with agents and distributors in selected markets.





Boundless possibilities with sandwich composites

Sandwich composite materials' unique properties open endless opportunities for a variety of applications. Their strength, durability and impact resistance combined with total design flexibility and low weight offer big advantages over monolithic materials such as metal.



Generally, a sandwich consists of two high-strength skins or facings separated by a core material. The skins take up the bending stresses and give the structure a hard-wearing surface. DIAB's light-weight core material absorbs the shear stresses generated by loads, distributing them evenly over a larger area.

Light & Strong

Compared to monolithic composite laminates, aluminum or steel, sandwich composites significantly reduce weight and increase stiffness, while still maintaining strength. In fact, other materials can result in applications that weigh 2 to 10 times more than sandwich structures. Increasing

the thickness of the sandwich core yields even greater strength and rigidity – with no weight penalty – and also allows for reduced support structure, enabling further weight reductions.

Freedom of Design

Sandwich composites give designers and engineers tremendous freedom to adapt both form and function to their specific application needs. They can readily incorporate compound curves and accurately align outer skins to load paths, maximizing structural integrity and performance.

Improved Production, Performance and Productivity

The excellent strength-to-weight ratio of the sandwich concept serves many ends: higher speed, longer range, greater payload capacity, reduced power demand, and reduced environmental impact, to name a few.

DIAB sandwich composites also offer good dynamic strength, low water absorption and excellent insulation. They require minimum maintenance, and repairs are usually carried out easily without any loss of structural integrity.

Sandwich composite components are readily manufactured using low-cost tooling and a wide variety of processes, including hand and spray laminating, vacuum consolidation, press molding and resin infusion.

Why use sandwich composites?



For light, strong and stable structures



For freedom in design, form and function



For cost-effective structures throughout the entire life cycle

Making you more competitive

DIAB is a world-leading supplier of sandwich composite solutions that make our customers' products stronger, lighter and more competitive. Our extensive experience in providing sandwich composite solutions to customers has made DIAB a leading partner in the sandwich composite industry. DIAB's solutions combine high-performance core materials, value-added kits, engineering and process services.

**Core materials | Knowledge | Kits | Processing | Engineering |
Training | Global presence – local service**

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