

Foam, rubber and adhesive solutions that seal, absorb and protect

About us

DAFA is a family-owned corporation founded in 1939 by Børge Norby.

We are specialists in development and production of foam, rubber and adhesive solutions such as gaskets, sealing tape and sound insulation. Our products benefit customers in construction, manufacturing and the wind turbine industry.

After establishment and acquisition of subsidiaries abroad, the DAFA Group now has more than 350 employees across three continents and eight countries, with production in Denmark, Italy, Poland and China. DAFA's headquarters are located in Aarhus, Denmark.

Mission: DAFA offers sustainable, long-lasting solutions which seal, absorb and protect. Our goal is for our customers to experience added value by collaborating with DAFA.

Worldwide presence

DAFA has extensive experience in the wind turbine industry. We have close, long-standing business relationships with most of the largest wind turbine manufacturers worldwide.

At the same time, we are an active part of a network of external suppliers to the wind turbine industry. We are involved in Wind Denmark, the Danish Wind Export Association (DWEA), BundesverbandWindEnergie (BWE), American Wind Energy Association (AWEA) and Danish Export Association Wind China.





DAFA wind

Improving functions and applications in the wind turbine industry



DAFA's foam and rubber solutions offer significant benefits for the design and strength of the blades, making them last longer.

() Nacelle

DAFA's nacelle solutions are many and varied. These solutions help structures and electronic components in the nacelle withstand stress, perform better and thus last longer.

(] Tower

DAFA's solutions for tower structures improve safety to avoid accidents and make maintenance easier. This benefits the operating costs and increases the durability and service life of the tower.

(Transportation

DAFA's transportation solutions are carefully designed to help wind turbine components move safely from A to B.



A long-time partner in the wind turbine industry

DAFA has taken part in the wind energy adventure from the very beginning. For about 30 years, we have provided wind turbine manufacturers and their suppliers with top quality foam and rubber solutions that seal, absorb and protect. In fact, DAFA is now part of **100,000 operating wind turbines** globally - onshore and offshore.

Today, the wind turbine industry is as vibrant as ever. We invest heavily in R&D in order to develop the innovative products demanded by the leading players in the sector. Our solutions are designed to **improve the competitive edge** of our customers, as we aim for superiority with respect to quality, performance, delivery and levelized cost of energy. The DAFA program covers all parts of the wind turbine. We deliver customized and off-the-shelf solutions for all applications and design delivery plans to fit your production processes. In short, as your total solution provider we help you procure in the leanest possible manner.

We grew up with the pioneering Danish wind industry, but today we collaborate with a wide variety of international OEMs and suppliers. If you see the benefit of working with **the most experienced and wide-ranging supplier** in the field, we would love to hear from you and discuss how we can contribute to your business.

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Lars Jensen Global Wind Power Director





Multiple materials, close interaction

When different materials meet, creating a seal to prevent penetration of water, salt, sand and dust is even more demanding. Special gaskets for fiberglass and steel structures provide the seal required, despite great shear stress.

Advantages

- Flexible products absorbing tolerances
- Adhere to both steel and fiberglass
- Quick and easy mounting
- Materials ensure long service and durability



This solution is also suitable for towers



DAFA Soft, DAFA Cell, cellular rubber profiles, self-adhesive profiles and EPDM profiles are some of the product types used as gaskets in fiberglass and steel structures.

DAFA Sound creates harmony between wind turbines and people

Noise from wind turbines can be a real nuisance to neighbors, and effective sound damping is essential.

DAFA Sound is a complete industrial sound damping concept designed and developed to combine sound absorption, sound insulation and structural sound damping - in one or more varieties.

- DAFA Sound ABS™ for sound absorption based on fire retardant PUR foam
- DAFA Sound ISO[™] for sound insulation based on high-density PUR foam

- DAFA Sound Blocker™ heavy-duty foils based on EPDM rubber, cardboard or bitumen
- DAFA Sound Combi™ combines products with different characteristics, e.g. bitumen
- and PUR foam



Sound absorption to reduce the reflection of airborne sound.



Sound insulation to insulate or screen off the source of the sound from its environment.



Structural sound damping to prevent the transfer of vibrations.



DAFA RotaSeal® increases productivity

DAFA solutions are the best choice for keeping the rotating parts of the nacelle free of salt, sand, water and dust, or when stringent requirements have to be met for sealing the nacelle and hub.

Advantages

- Durable and easily replaceable products
- Absorption and equalization of tolerances
- Reduced penetration of cold, heat, sound, dust, water and salt
- Using DAFA RotaSeal optimizes the uptime for the wind turbine, preventing water, sand, salt and other particles from entering critical parts such as electronics and hydraulics
- DAFA RotaSeal is designed for fast and efficient mounting, both horizontally and vertically
- DAFA RotaSeal materials are tested up against common hydraulic and gear oils, antifreeze fluids and greases according to DIN 53504

- DAFA RotaSeal is tested for abrasion properties according to DIN ISO 4649
- DAFA RotaSeal is designed for a wide range of constructions and adapts to tolerances in the given application
- Clamping profiles are produced with stainless steel EN 1.4301
- DAFA RotaSeal solutions are designed with a focus on low friction and abrasion
- DAFA RotaSeal solutions fit fiberglass, steel and aluminum flanges and plates
- DAFA RotaSeal is tested for wear according to ASTM G99
- Fast delivery



Download the product sheet on our website











This solution is also suitable for towers and blades

DAFA RotaSeal solutions are designed for optimal long-life sealing solutions for rotating parts in wind turbines.

Durable solutions for a long service life

Requirements for sealing doors, hatches and skylights mainly address the need to keep out pouring rain.

The solution consists of products which:

- Equalize tolerances
- Ensure easy mounting
- Ensure a long service life and durability



Doors and skylights are sealed using cellular and rubber profiles that can be supplied as rings to ensure a sealed joint. For hatches, self-adhesive sealing strips are used in various elastic materials.



Sealing solutions can be delivered in a compact and practical format (upper), to be easily unfolded and mounted on-site (lower).





Sealing of large surfaces - right at the top

The roof hatch of the nacelle has large surfaces with large tolerances, which must be sealed and capable of diverting water. The design and the choice of materials are handled individually, corresponding to your specific requirements.

Advantages

- Solutions based on proven and tested technology
- Robust, durable materials, capable of absorbing large tolerances and movements
- Greater durability and a longer service life





EPDM cellular rubber gaskets are particularly suitable for large roof hatches.

When sharp edges must be soft and round

Sharp edges can make for a particularly unpleasant encounter for maintenance workers. Sharp edges can also can also ruin leads and cables, causing damage over time.

Advantages

- Are easy to replace and can be retrofitted
- Reduce repair and maintenance costs
- Contribute to a safer working environment



To protect sharp edges, DAFA supplies customized edge profiles with or without steel inserts.

This solution is also suitable

for towers and blades





Reliable molding process with sealed joints

Complete sealing solutions for molding of fiberglass elements. The goal is to optimize and streamline the production process by reducing and facilitating the work processes. This results in operational reliability and a uniform molding process to ensure the high quality of the final products.

Advantages

- Reliable sealing
- Temperature resistant
- Resistant to the materials used for the molding processes





- This solution is also suitable for blades
- Butyl and silicone profiles for sealing in composite molding processes.





Vibration damping

The challenge is to dampen vibrations and prevent them from spreading to and straining the vital parts and structures of the nacelle.

Advantages

- Reduces vibrations
- Fewer production shutdowns and increased operational reliability
- Reduced maintenance costs
- Greater durability and a longer service life



l his solution is also suitable for towers

Cable and pipe solutions

When cables, leads and pipes have to penetrate walls, floors and other structures, effective sealing products are required - for construction and maintenance alike.

Advantages

- No special tools, sealing, glue or grouting required
- Temperature resistant at mounting
- Can be designed to comply with IP sealing requirements
- Easy to replace and can be retrofitted
- Reduced repair and maintenance costs
- Flexible, universal seal



This solution is also suitable for towers and blades











Cable and pipe seals are universal and fit many different sizes.





Sealed joints and a safe working environment

Reliable solutions for facilitating service and maintenance processes.

Advantages

- Maximum sealing with customized strips
- Minimized risk in mounting and dismantling
- Quick, easy and efficient mounting in the production hall or on-site
- No waste of precious time for hardening, as with joint sealant
- Elastic sealing strips that withstand extreme movements
- Greater durability, long service life and a better working environment
- Expanding sealing strips for structures with large tolerances



Easy removal and fitting of doors, hatches and panels using self-adhesive strips, expanding DAFA Flex sealing strips and rubber profiles for sealing between components.





Formed in place foam gaskets (FIPFG)

FIPFG is the solution when you need perfectly fitted foam gaskets for your components. FIPFG is a direct application of liquid PUR to a component, after which the substance expands and adheres to form the desired gasket.

With our FIPFG technology the gaskets are applied directly to components in a one-stop cycle and with CNC-controlled precision. The result is a top-quality, uniform seal, excellent finish and efficient production, all of which make the method highly competitive.

Advantages

- Direct application of foam gaskets to components
- CNC-controlled precision
- Efficient application process
- Highly durable, retains the shape and technical properties







Molded parts - customized for individual applications

Our molded parts are customized for individual applications - for all industry segments. They satisfy requirements for sealing functions, flexibility, damping, durability and resistance to chemicals all at once.

Advantages

- Technical rubber types
- Unique properties
- Flexible series runs
- Available in small and large sizes
- From simple to complex parts
- Focused development process
- Qualified advice

DAFA develops and delivers customized molded components in both small and large sizes. Depending on the complexity of the component and its design, we develop and produce a customer-specific tool that is perfectly adapted to the individual application of one of the following production methods:

- Compression molding
- Transfer molding
- Injection molding
- Vulcanized corners





This solution is also suitable for towers, blades and transportation

A sound basis with a wide range of raw materials

Developing and producing molded parts demands access to a wide range of raw materials.

The varying properties of the raw materials form the basis for combinations that create unique and individual components perfectly customized to the individual task.

- NR rubber
- EPDM rubber
- Silicone rubber
- EPDM sponge rubber
- CR rubber
- PUR rubber
- NBR rubber
- TPE







The process of molding fiberglass elements must proceed efficiently and with maximum safety. Our sealing profiles in silicone and other production auxiliaries contribute to optimizing the production process.

Advantages

- Reliable and uniform molding process to ensure high quality
- Improves efficiency by reducing and facilitating work processes
- Products with excellent adhesive properties
- Temperature-resistant products
- Resistant to the materials used in the molding processes



This solution is also suitable for nacelles



Butyl and silicone profiles for sealing in molding processes.

De-icing and anti-icing systems

In some cold areas, de-icing and anti-icing systems are necessary for large blades to ensure optimum electricity production.

DAFA's various insulation materials can be used to insulate the blade construction or ducts for the transportation of hot air.

Advantages

- Light-weight insulation materials
- Flexible materials
- Resistant to temperature extremes
- Customized solutions
- Various densities and flame-retardant materials



Insulation materials for de-icing and anti-icing systems.









Tower

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Ensuring that the tower door is impervious to rain, dust and sand is crucial. A simple, customized sealing profile with or without joints seals the door and facilitates an easy mounting – both when establishing the seal and during maintenance.

Advantages

- Supplied in running meters or rings to avoid joints
- Quick and efficient mounting
- Easy to retrofit
- Absorbs tolerances and movements
- Superior durability and exceptional service life



This solution is also suitable for nacelles



EPDM cellular rubber profile with steel or plastic insert for sealing tower doors.

Preventing leaks

The solution serves both as a seal and as a damper on the platforms. The solution comprises sealing strips to dampen vibrations and equalize tolerances to prevent water and oil from running down inside the tower.

Advantages

- Quick and efficient mounting
- Easy to retrofit
- Absorbs tolerances and movements
- Superior durability and exceptional service life

Secure platforms with sealing solutions

The challenge is to seal the platforms in order to prevent loose objects, tools or equipment from having free passage. This prevents injuries to personnel. In addition, the seal provides a neat finish against the side of the tower.

Advantages

- Quick and efficient mounting
- Easy to retrofit
- Absorbs tolerances and movements
- For small or large gaps
- Flexible materials and solutions
- Foam platform sealing profiles can be supplied in flame-retardant material

DAFA Cell cellular rubber is suitable for sealing platform joints.











Rubber and foam profiles are used to seal the gap between the tower and the platform.







Clever solution for safely sealed tower sections

A seal is required when tower sections are joined. Joint sealant can be awkward to work with and takes a long time to cure. Cracks - and thus leaks - may appear later. The solution consists of rubber profiles or self-adhesive and flexible sealing strips.

Advantages

- Retains flexibility and elasticity
- Quick and easy mounting with no hardening time
- Weather-resistant joint solution

Cable Separator

As the nacelle yaws on the tower, friction, sharp platform edges and "wear and tear" may cause dangerous damage to the power cables. The DAFA Cable Separator solves the problem by spreading and securing the cables inside a fixture.

Advantages

- A safe and cost-efficient solution
- Can be customized
- Flexible and elastic material



The Cable Separator can be made to fit any size of turbine and cable.



Transportation

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DAFA CargoSafe for protection during transport

Transporting large towers weighing many tons requires a safe, protective underlay capable of distributing the pressure of the load. DAFA CargoSafe is a reliable solution.

Advantages

- No deterioration and reuseable with its functionality intact
- Large load-bearing capacity and slip resistance
- Long service life due to weather resistance
- Safe transportation without damage or repairs
- Easy to handle
- High friction



Skidproof mats, DAFA CargoSafe for protection during transportation.

DAFA Universal Tip Protector

Protecting the fragile blade tips during handling and transportation is crucial.

DAFA Universal Tip Protector prevents damage, ensures increased visibility and protects against personal injuries when people are in the vicinity of the blades.

Advantages

- Optimal protection during transportation, handling and on-site storage of blades
- Prevents costly delays due to damage and repairs
- Universal solutions that fit all blade types
- Increased visibility night and day
- A safer working environment
- Easy mounting, no tool costs





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DAFA Universal Tip Protector is a unique one-size-fits-all solution.



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Convenient tip marking for greater visibility during transportation.

Adjustable

Optional add-on purchases: DAFA Strap Fix can be used to fix the strap in place, reduce load from the strap and attach lighting equipment to the DAFA Tip Protector.

DAFA Blade Protection Kit

Universal solution that adapts to various blade dimensions. DAFA Blade Protection Kit offers protection and visibility to the blade tip, trailing and leading edge during storage and transportation.

The products in DAFA Blade Protection Kit can be used together or separately, depending on your need for protection and visibility.

Advantages

- Protection during storage and transportation
- Visibility and increased safety
- Universal fit
- Optimized for short installation time







DAFA Trailing Edge Reflector

DAFA Leading Edge Reflector





DAFA Universal Tip Protector K20

Safe protection of the trailing and leading edges and surface

The solutions are primarily intended to protect and secure the trailing and edge and surface of the blade when it is attached using transportation straps etc.

Advantages

- Fewer repairs
- Flexible fit
- Bright signal colors for increased safety
- Easy mounting and handling
- Long service life and durability



Modular Transport Pad

This pad system is developed for heavy- duty transportation. The pads are mechanically fastened, which saves time during installation.

Advantages

- Time-saving mechanical fastening
- Modular universal system
- Solid PUR/steel pad
- Higher coefficient of friction
- Gray non-marking material
- Customized dimensions upon request





Universal and flexible solutions for protection of trailing edge and surface.





The transport pads yield optimal protection of the load.

Transportation protection and safe storage

The blades must arrive safely on-site and should be stored properly. DAFA CargoPro foam, rubber and plastic solutions keep the blades intact.

Advantages

- No deterioration and can be reused with functionality intac
- Large load-bearing capacity
- Weather resistant, with a long service life
- Safe transportation without damage or repairs
- Easy to handle
- High friction







DAFA CargoPro clamp solution.



DAFA CargoPro cradle for storage.



DAFA CargoPro cradle for transportation.



Innovation, the lifeblood of DAFA

We keep the same high pace as the wind turbine industry. Technology progresses almost exponentially and we are constantly working to develop tomorrow's solutions and processes.

Our R&D department is run by a dedicated team of engineers brimming with ideas on how to upgrade existing concepts and design new ones. Their experience and technological insight are unrivaled, enabling us to bring best-in-class offerings to the market.

Our R&D specialists are ready to partner up with you on all questions about sealing, absorption and protection applications, such as:

- New product research, including determining product specifications, production costs, technologies and production timeline
- New product development, from proposal and prototype to series production
- Existing product updates, including optimization of material usage
- Tests, experiments and quality verifications, including documentation required by the customer, such as PPAP
- Innovation, research and analysis of products to maintain competitiveness
- Ensuring a high level of consistency throughout the supply chain



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The invisible lines that make wonders happen

At DAFA we are experts in specialized products and total solutions that seal, absorb and protect.

With constant innovation, uncompromising product quality and close collaboration with our partners, we contribute to successful projects in industries where attention to detail is the difference between success and failure.

Our experience covers three quarters of a century with a strong commitment to principles of sustainability in business decisions that create long-term value for our stakeholders.

Our global supply chain means we deliver to any location efficiently on competitive conditions.





 * Applies to: DAFA A/S, DAFA Sverige AB, DAFA Deutchland GmbH, DAFA Sealing Technology (Tianjin) Co., Ltd., DAFA US Inc., DAFA Polska sp. z o.o.

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