

Industrial Solutions

The invisible lines that make wonders happen

Sealing • Absorption • Protection





About us DAFA Group

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

The early manufacture and assembly of bronze sealing strips has evolved into manufacture of products in foam, rubber and plastic materials for construction, industry and wind energy, such as gaskets, sealing tape, and sound and vibration damping solutions.

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.

The invisible lines that make wonders happen

Preface

DAFA is the ideal global partner to fulfil all your foam, rubber and plastic requirements.

We have supplied almost all industrial segments for decades, offering a wide range of sealing, absorption, and protection solutions.

Our aim is to become your preferred supplier and always to deliver a customized solution rather than just sell a specific technology.

Furthermore, DAFA's global supply chain means that we can deliver wherever you want in the world and at competitive prices.

Our network of international sales and technical advisors are ready to meet you and investigate how we can help you to sharpen your company's competitive edge.



Steen Bødtker

Group CEO DAFA

Global footprint

DAFA Deutschland GmbH

Germany

DAFA US Inc

USA

Worldwide presence shapes our global footprint

DAFA operates across Europe, Asia and the United States, allowing us to efficiently take care of customers' local and global requirements.

Our dedicated and experienced teams in consultancy, development, production, logistics and service are available to offer support across time zones. Wherever you are, we are always close to you.

Our engineers will assist you in finding the optimal solution for your application using the latest state-of-the-art technology and knowledge in the field. You can also rely on DAFA to test your application at our in-house test center, ensuring that your solution meets your particular requirements and international standards.

With high-tech production and warehouse facilities worldwide, cost-efficient processes thoughout the entire supply chain are guaranteed.

Additionally, our technicians and account managers across several countries provide global agreements, making sure that you have one point of contact in your daily interactions with DAFA.



Close to the markets close to you



Innovative solutions based upon solid experience

Innovative solutions that seal, absorb and protect

Our core competences can be summarized in three words: sealing, absorption and protection.

These attributes characterize our entire range of quality products and solutions.

We are proud to serve some of the most demanding customers in a variety of industries to whom DAFA has been a trusted partner for decades.

Our customers have their own particular needs, but share common requirements for credible compliance with standards, excellent functionality and reliable durability.

Products and solutions for several industries and segments

Whatever company or industry you represent, DAFA is always ready to listen to the sealing, absorption or protection challenge you are facing.





















The right material for your application

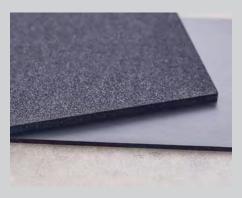
DAFA offers a wide range of materials based on foam, rubber and plastics, including:

- polyethylene foam
- polyurethane foam
- bonded foam
- solid rubber
- cellular rubber
- tapes/adhesives
- FIPFG PUR/silicone
- a number of nonwovens
- PVC foam

Draw on our extensive insights into the various options, safe in the knowledge that our advice is based on many years of practical experience in the use of these materials for a diverse array of applications.

We also collaborate with leading suppliers of raw materials, who provide us with knowledge, data and test results on the properties of the given materials, to help us find exactly the right solution for you.







New challenges lead to new accomplishments

Perfect production framework

DAFA creates quality products in ultra-modern facilities using state-of-the-art machinery. This ensures that DAFA provides competitive solutions that are appealing to industrial manufacturers. Our flexibility allows us to adapt capacity according to current market and customer demands.

We continuously expand our high-tech production machinery, so that we are always ready to meet our customers' increasing demands for quality, efficiency, and documentation.

Quality in focus

Quality is an integral part of DAFA's core values, the way we work and think. All our administrative and manufacturing processes reflect this, ensuring that ongoing improvements are made in quality loops - including training, development, and prevention.

We define the framework for innovative solutions and quality requirements through close dialogue with our customers.

DAFA's management system is certified to ISO 9001:2015. This means that our company undertakes to provide uniform, reliable quality in our processes and products which are continuously being improved for the benefit of customers and suppliers alike.



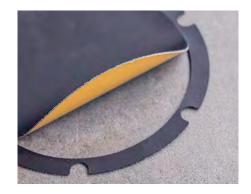
Water jet

A water jet makes it possible to cut any material with pure, pressurized water. The water is pressed through a nozzle at a pressure of up to 3000 bars.

The ability to vary the cutting angle and put the water rapidly on and off creates endless design possibilities – two of many examples are conical holes and small micro-joints. Furthermore, cutting in multiple layers and with up to five nozzles simultaneously makes this method cost-effective.

Advantages:

- Possible to deliver pre-cut plates, where finished parts are held in place only by a micro-joint for easy handling
- Cost-effective especially in cases that does not require a specific surface finish
- No customized tools are required (CAM-programing)
- Both foam and rubber, in several thicknesses and with or without adhesives, can be machined (up to 220 mm)*





* Other thicknesses and/or materials upon request

Milling

5-axis machining and milling for complex workpieces – from prototypes to batch production.

DAFA's 5-axis milling machine makes it possible to produce workpieces in a single operation, using a single raw material. This means that there is no manual handling until the piece is finished. A top-quality finish is achieved through this efficient production method, so it is a highly competitive option.

The method is ideal for segments where there is a need to produce very large, highly complex or multidimensional pieces.

The high level of precision and flexibility allows DAFA to perform complex tasks and meet strict requirements for tolerance, surface finish, quality and speed.

Advantages:

- Pieces up to 4.8 x 1.8 x 1.1 meters in size can be produced
- Production and development of prototypes and batch production
- High precision
- Top quality and finish
- 5-axis multi-machining
- Advanced CNC milling machinery







Whatever the industry it's all about the sealing

FIPFG

FIPFG is the abbreviation for 'Formed In Place Foam Gaskets' and describes the process whereby liquid PUR is precisely applied to a component and expands and adheres to form the desired gasket.

The solutions are characterized by advanced technological precision and high-repetition accuracy. They are durable and retain their shape, matched to the specific component – even those with complex dimensions.

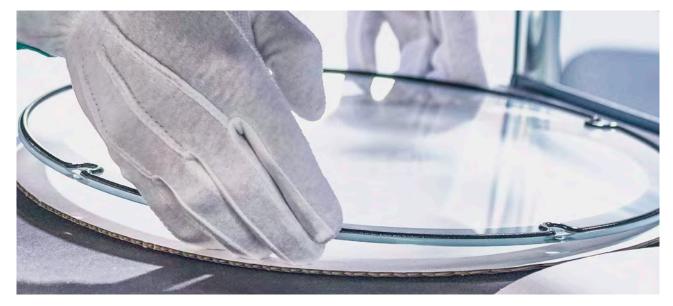
The method makes it possible to produce gaskets and make them adhere to a component in a fully automatic application process, meaning no manual handling is needed.

Advantages:

- Different foam types
- High IP protection levels achievable
- UL 50 E*
- UL 94*
- ISO 846 (VDI 6022)*
- Weather resistance
- Fast curing
- Repeatability < 0.15mm (ISO 9283)
- Pretreatment and priming in-line
- Individual assemblies possible







* Upon request



Adhesives, lamination & coating

Lamination is the process of bonding two materials together with adhesive. Coating is the process of applying adhesive with a silicone liner to a raw material – typically, rubber, foam, fabric, foils and tissue*.

The adhesives used for both coating and lamination are pressure-sensitive and are applied under pressure and heat.

In many cases this process is performed prior to water jet cutting, spooling, die cutting or other operations.

The materials are also delivered to the customer directly afterwards, in which case it can be delivered as stacked sheets or in rolls.

Advantages:

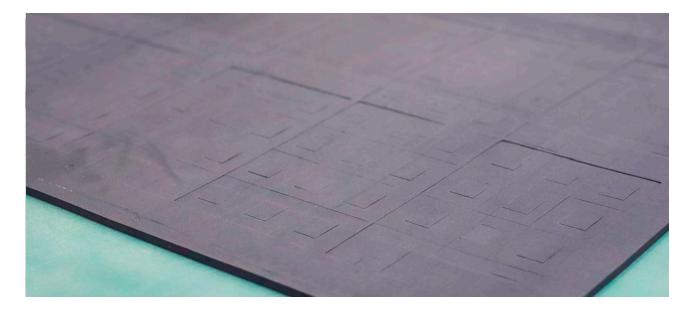
- Possible to apply adhesive in strips and if needed with different adhesive properties
- Possible to combine two or more different raw materials with different features
- DAFA has many years of experience of adhesion, peel, tack, shear and removability





* Other thicknesses and/or materials upon request





Die cutting

Die cutting is the process of pressing a die cutter through a material to shape the material into the desired form. The cutting blade is formed in a customized shape and a high-pressure force of up to several hundred tons is used to press the cutting blade through the material.

DAFA offers different types and sizes of die cutting machinery, including Receding Head Presses, Rotating Receding Head Presses and Beam Presses. In addition, DAFA has a wealth of technical know-how about materials, die cutters and presses to ensure the most optimal solution – for instance, removing scrap material in-line to maximize the use of the raw material.

Advantages:

- A high degree of precision and repeatability
- High production rate especially at high quantities
- Typically thinner materials in both foam and solid rubber, both with or without adhesive
- Up to 100mm foam and 10mm solid rubber is possible with standard die cutters*
- Both small and large parts can be produced up to 750 x 1560mm. The parts can be simple rondels and squares as well as complex shaped parts





Whatever the industry it's all about the sealing



Kiss cutting

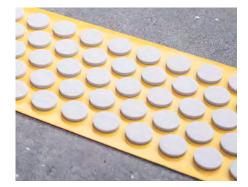
Kiss cutting is a variation of die cutting. The material is not cut all the way through when kiss cutting – typically, a material with adhesive is cut, but the adhesive liner of silicone paper is not. The knife is only 'kissing' the liner. This makes it possible to deliver rolls of self-adhering parts, where it is easy for the end user to handle and remove the parts.

Kiss cutting can be used to fold a flat piece of material into a three-dimensional packaging solution, for example, foam packaging to keep electronic hardware in place in cardboard boxes during transportation.

Advantages:

- Self-adhering parts can be supplied on rolls for easy handling
- A high degree of precision and repeatability
- High production rate especially at high quantities





Spooling

Spooling technology makes it possible to wind up many hundred meters of material in different thicknesses and widths, which is a big advantage in automated productions or where the end user needs endless materials.

The material is cut into the desired width using sharp blades or pressure rollers and is wound up on up to 12 axels at a time making it very cost-effective.

Foam materials up to 10mm thickness, with or without adhesive, can be cut a to a minimum width of 4mm. Furthermore, different types of foils, fabric and nonwovens can be cut and wound up on spools at the desired width and diameter.

Advantages:

- Very long spools allow automation of the application process and eliminate frequent production line downtime
- Small number of tape joints means less production waste









Discovering solutions through collaboration

Strong Research & Development

DAFA's Research & Development department is highly focused on product development and optimization in close collaboration with our customers.

We have years of know-how and experience, and we always base our solutions and advice on the latest technology and knowledge in the field.

In close cooperation with the production team, our team of engineers strives to find the best possible solution for your application, whether that means upgrading existing solutions or developing new ones.

DAFA's Research and Development department can be your partner in all facets of sealing, absorption and protection applications, such as:

- New product research, including determining product specifications, production costs, technologies and production time line
- New product development, from proposal to prototype to series production
- Existing product updates, including optimization of material usage
- Conducting 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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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. Applies to: DAFA A/S, DAFA Sverige AB, DAFA Deutchland GmbH, DAFA Sealing Technology (Tianjin) Co., Ltd., DAFA US II



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