



**▼ MOESCHTER
GROUP**

**YOUR PARTNER FOR INNOVATIVE
HIGH-PERFORMANCE MATERIALS
AND APPLICATIONS**

Although our business areas enjoy great autonomy, we are united by a common goal: the desire to find a solution to every industrial challenge.

Georgios Kabitoglou, General Manager



WELCOME TO THE MOESCHTER GROUP

YOUR PARTNER FOR INNOVATIVE HIGH-PERFORMANCE MATERIALS AND APPLICATIONS

The MOESCHTER Group was founded in 1993 by the Möschter family to bring together the existing company DOTHERM and the planned enterprise DOCERAM under a single parent company. The Dortmund-based corporate group is made up of four independent business units: DOTHERM, ISOCOS, DOCERAM and DOCERAM Medical Ceramics. Backed by our extensive knowledge and expertise acquired during more than two decades of hands-on engineering experience, we develop high-quality semi-finished products, parts and components.

Nowadays, the company supplies products and solutions made from high-performance ceramics, dental ceramics and engineering plastics to customers from a wide variety of industries all over the world. The MOESCHTER Group is strongly committed to engineering and has its own research and development department. The development of individual solutions for our customers is an important part of our daily work.

DOTHERM Industrial Insulations – thermal insulation with customised solutions for industrial applications

The history of our corporate group began in 1992 with DOTHERM. Starting out as a small team of just 5 members, we focused on

products and applications to provide thermal insulation in tools, machines and plants. Growing demand coupled with the desire for greater efficiency and reliable solutions created promising conditions for us.

DOCERAM Industrial Solutions – precision born of passion

DOCERAM is the second pillar of our corporate group. It was founded in 1994 to open up the possibilities of high-performance ceramics, which were then just emerging, for industrial applications.

DOCERAM Medical Ceramics – premium zirconium oxide for highly aesthetic dentures

Engineering ceramics and their industrial production and machining is a core competence of DOCERAM GmbH. In the third company in our Group, DOCERAM Medical Ceramics, we draw on this expertise and use it for medical technology applications.

DOCERAM Medical Ceramics develops and produces dental zirconium oxide milling blanks as well as accessories for dental technology under the trade name Nacera®. This group of materials is the result of our own research and has been successfully established on the dental market since 2005.

Since 2019, **ISOCOS GmbH & Co. KG** has been owned by DOTHERM GmbH & Co. KG and is therefore also part of the MOESCHTER Group.

- FEBRUARY 1992 Founding of DOTHERM GmbH & Co. KG
- NOVEMBER 1993 Founding of MOESCHTER Group GmbH
- JUNE 1994 Founding of DOCERAM GmbH
- SEPTEMBER 2005 Founding of DOCERAM Medical Ceramics GmbH
- AUGUST 2011 Commissioning of the in-house teaching workshop
- NOVEMBER 2015 Founding of Nacera US Inc.
- DECEMBER 2016 Hannover Finanz comes on board as a majority shareholder
- DECEMBER 2017 Construction of the MOESCHTER Group technical centre
- SEPTEMBER 2019 Acquisition of ISOCOS GmbH & Co. KG



We drive change together with conviction. Inspired by a sense of enthusiasm, our actions are swift, solution-oriented and reliable.

THE MOESCHTER GROUP VALUES

WE ALL MUST RISE TO THE CHALLENGE. EACH OF US PLAYS A PART.

Quality is the foundation of our partnership - at many different levels. Nowadays, every modern company is exposed to myriad influences that impact its development, orientation and objectives. Naturally, every organization strives to secure its economic success and to react creatively to the changes in its environment. The MOESCHTER Group is no different.

In doing so, we focus on quality as the foundation of the work with our partners. The respect we show to others, our determination to drive ideas and projects forward with enthusiasm and curiosity, and the care we take in engaging with people and materials in a conscientious and reliable manner – these make up our strengths and our innovative capacity. After all, our good reputation and corporate culture are based on how each of us behaves and how we act collectively as the MOESCHTER Group.

Our mission is to act swiftly to find solutions but to remain reliable both internally and externally. Appreciation, responsibility, team spirit, courage and trust - Together, we shape our future based on these five values.

Be they colleagues, customers or suppliers: We **appreciate** other cultures and treat them courteously and with respect in every setting and with every type of task.

We have a **responsibility** to our customers, suppliers and employees, but not least also to our environment. While continuously promoting and expanding the social level, we are developing our own environmentally relevant concepts, for example, on the topic of ecological profit and researching sustainable materials.

As team players, we stand by one another and for one another with loyalty. We share relevant information and discuss problems openly and honestly. That is because our **team spirit** enables us to work effectively and take sound decisions.

We have a vested interest in ensuring that we and our customers achieve objectives quickly, efficiently and cost-effectively. Curiosity and the **courage** to initiate change are the driving forces that enable us to break new ground, develop materials and products and optimise processes – delivering innovative solutions not only for our customers but also for us.

Our cooperation is based on **trust**, which is why we allow every employee to make independent decisions in his/her sphere of responsibility and to play a proactive role in business processes.

EXPERTISE AT ALL LEVELS

YOUR CHALLENGES

The challenges that arise in the production processes of different industries are extremely diverse. Our technicians and engineers are specialised in identifying the nuances of every challenge and incorporating them into the solutions offered.

With modern production plants, we support our customers with everything from application advice through to series production. We reduce machine downtimes as well as servicing costs through practical component design and by providing technical advice during the production process.

We are also your contact for additional challenges:

- Process reliability
- Extended service life
- Process optimisation
- Cost/time savings

YOUR APPLICATIONS

Increasingly exacting production techniques are driving ever-higher quality requirements for intermediate materials and end products. Since every minute of manufacturing time is precious, the focus is on higher-quality and longer-lasting components. At the MOESCHTER Group, there are teams of technicians and engineers who are thoroughly familiar with the process technologies and applications in particular industries:

- Handling technology
- Wear-protection technology
- Forming technology
- Dosing technology
- Insulation technology
- Joining technology
- Test technology

OUR SOLUTIONS

The MOESCHTER Group was founded with the goal of manufacturing user-friendly products from high-performance materials. As engineering specialists, manufacturers and partners to leading automotive manufacturers, the subsidiaries DOTHERM, ISOCOS and DOCERAM currently manufacture and supply precision components based on high-

performance ceramics and engineering plastics as well as non-material-specific assemblies made of steel, ceramics and plastics. Over the course of two decades, a portfolio has been created that covers a broad requirement profile for various industrial areas of use. Our components and appliances are used primarily in plant and mechanical engineering, as well as in production and process engineering.

OUR MATERIALS

The properties of an end product can vary even if the base material used is identical. The core competence of the MOESCHTER Group is therefore to ensure reliable management of all phases of the manufacturing process for components and parts made from high-performance ceramics and engineering plastics.

High-performance ceramic, also called engineering ceramic, is a material that – in contrast to decorative ceramic – has been optimised for technical applications. It is characterised by special properties, mainly with regard to heat resistance, mechanical stability and dimensional stability.

On the whole, engineering plastics are becoming increasingly important for industrial use. They are popular not only because of their good mechanical properties and relatively low density, but also on account of their chemical resistance.

DO THERM
ADVANCED INDUSTRIAL INSULATIONS

ISOCOS
QUALITY. EXPERTISE. SERVICE.

ADVANCED INDUSTRIAL INSULATIONS

ELECTRICAL AND THERMAL INSULATING COMPONENTS UP TO A TEMPERATURE OF 1,100°C

DOTHERM and ISOCOS are both electrical and thermal insulation products made of high-performance plastics, fibre-plastic composites and state-of-the-art high-tech materials. We supply standard and custom-made parts for various industries using materials with characteristics optimised for the respective applications. In the process, we work primarily with thermosetting semi-finished products, but also with our in-house developments, for example, in the field of sliding materials.

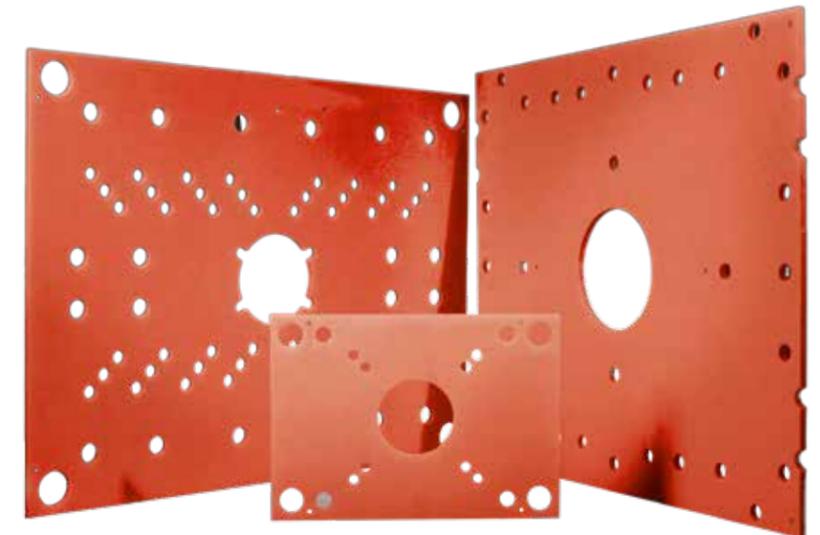
Nowadays, we operate a well-equipped warehouse with all standard and many custom high-temperature materials. We process these with automated, high-precision machines and can deliver semi-finished products, standard articles or custom-made parts within short lead times. We cover the important temperature ranges from 150 °C to 1,100 °C. We mainly supply products that are used for toolmaking and mould-making, the wood-based materials industry in the area of press insulation, the glass industry and for mechanical and plant engineering.

DOTHERM and ISOCOS components for electric and thermal insulation are popular due to their high quality, rapid availability and wide choice of materials. And despite the industrial nature of our production processes, the personal commitment to meeting our customers' needs comes first for us.

The modernisation of industry requires more and more customised products, smaller quantities and shorter delivery times. Naturally, this also applies to our materials, semi-finished products and custom-made parts. To cater for as many requirements and to react as fast as

possible, we therefore stock commonly used and special materials and substances in our extensive warehouse.

This means that it usually takes only a few days from order to delivery, even for individual drawing parts - standard components from our catalogue can often be ready for shipping in a matter of hours.



Sample solutions:

Guide gibs, all-inclusive insulation concepts, heat insulation boards

Standard materials:

Fibre composites (e.g.: cosTherm), high-performance plastics (e.g.: Eltimid), high-temperature materials (e.g.: Dotherm 1000)

Industries:

Glass industry, wood-based materials industry, mechanical engineering, toolmaking and mould-making

ADVANCED CERAMIC SOLUTIONS

ENGINEERING AND PRODUCTION OF HIGH-PERFORMANCE CERAMIC COMPONENTS

DOCERAM focuses its development on industrial ceramic material with outstanding properties as an alternative to metal and specialises in high-performance ceramics used in the automotive sector, amongst others. Low-wear components with service lives that significantly outperform conventional metallic materials increase process reliability and minimise risks in production.

Today, we are a world leader with our solutions for welding technology in car manufacturing among other things. We are also strongly positioned in the market for ceramic components for general mechanical engineering, sheet metal processing, forming technology, the food industry and electrical engineering. DOCERAM products are innovative solutions that are based on wide-ranging expertise in the production and processing of industrial ceramic materials and are manufactured in Germany according to the state of the art.

Most of the industrial ceramic materials we produce are machined as what are called green bodies using the "near-net-shape forming" process. To do this, we have developed processes that enable the geometry of a component to be created with exceptional precision before

sintering even takes place. This cuts costs and results in attractively priced components that require minimal hard machining with diamond tools.

At the heart of our production process are 5-axis machining centres for fully automated machining of ceramic components. They are equipped with a changer for up to 100 tools and with palletiser systems for automatic component changes. This therefore allows for complex, costly geometries as well as all-ceramic hard machining using diamond-tipped tools.

Sample solutions:

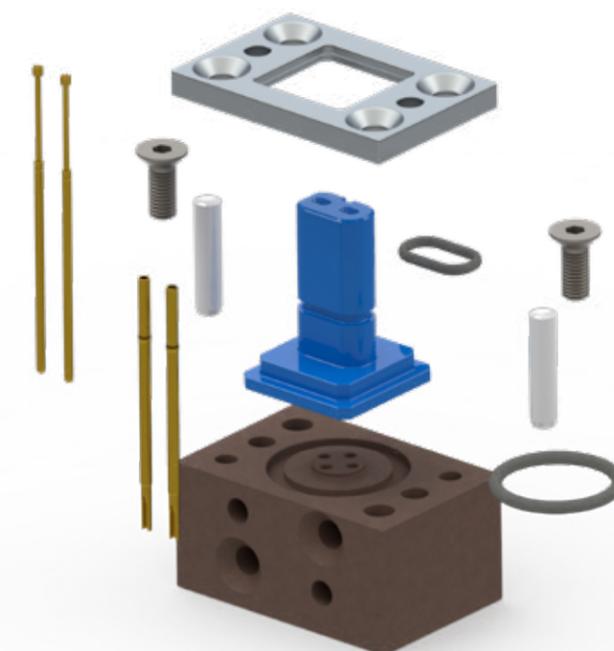
Grippers, positioning and centring pins, welding devices, plug-in connections, forming rollers, valves

Standard materials:

Aluminium oxide, EvoCera, silicon nitride (e.g.: Volcera), zirconium oxide (e.g.: Cerazur)

Industries:

Automotive, chemical and medical engineering, electrical engineering and test technology, mechanical engineering, food industry and others





ADVANCED DENTAL SOLUTIONS

DEVELOPMENT AND PRODUCTION OF NACERA® ZIRCONIUM OXIDE AND ACCESSORIES FOR DENTAL TECHNOLOGY

DOCERAM Medical Ceramics GmbH was founded as a spin-off of DOCERAM GmbH, which has more than two decades of experience with the diverse possibilities of industrial ceramic applications. The extremely challenging area of dental and medical products has been managed as a separate business since 2005 and specialises in the specific technical requirements for the approval of medical technology applications. DOCERAM Medical Ceramics therefore operates as an independent specialist provider of high-quality bio-compatible zirconium oxide components to our customers and other interested parties.

The Nacera® brand offers dental technicians a zirconium oxide material combining high bending strength and optimum aesthetics. To enable the zircon machining process to be completed in the laboratory, we supply high-quality Nacera® process optimisation products and other accessories for finalising full monolithic restorations.

Creating dentures of high aesthetic appeal from zirconium oxide involves several technical manufacturing steps from preparing the raw material all the way to the dental milling blank. Production takes place



at our plant in Germany. Our fully automated dry and isostatic presses enable us to achieve an extremely consistent structure combined with maximum density, as required for large-span restorations, for instance.

Modern warehouse logistics ensure rapid availability of small as well as large purchase volumes. Since the entire production chain is located in-house, we can scale the quantity of parts produced to meet requirements and ensure prompt delivery of guaranteed quality for large orders.

Our zirconium oxide materials guarantee maximum precision (first fit). Together with the products for in-process inspection, they minimise material losses and downtimes with the dental technician and the user. Milling centres and dental laboratories around the world are impressed.



Sample solutions and materials:

3D zirconium oxide with infinitely variable transparency graduation (Nacera® Pearl Natural), pre-coloured zirconium oxide (single- and multi-coloured) for monolithic restorations (Nacera® Pearl Shaded, Nacera® Pearl Multi-Shade and others), white zirconium oxide as a framework material (Nacera® Shell), products for in-process inspection (Nacera® Calibrate, Nacera® Clean, Nacera® Inspection), accessories for finalising full monolithic restorations (Nacera® Liquids)

Industries:

Dental milling centres, dental laboratories, dentists with an adjacent laboratory, dental distributors

The logo consists of a small grey inverted triangle pointing downwards, positioned to the left of the company name. The company name is written in a bold, sans-serif font, with 'MOESCHTER' on the top line and 'GROUP' on the bottom line.

MOESCHTER GROUP

MOESCHTER Group GmbH
Hesslingsweg 65–69
44309 Dortmund (Germany)
T: +49 231 92 50 00-0
info@moeschter-group.com
www.moeschter-group.com

©MOESCHTER Group GmbH
All rights reserved. Reprints, copies and translations are only permitted with our written consent. MOESCHTER Group GmbH is constantly working on the further development of all products. Technical modifications are possible at any time due to product and model modifications as well as further developments. Information, illustrations, descriptions and dimensions in this brochure are subject to technical changes. No liability is accepted for printing errors and mistakes.