


# FROM MATERIALS TO FUNCTION.



WITH OUR COMPONENTS AND MATERIALS, WE HELP  
OUR CUSTOMERS BUILD BETTER MACHINES.

**MORE EFFICIENT, MORE ROBUST, FASTER, SAFER,  
MORE RELIABLE, MORE SUSTAINABLE.**



# HELLO, WE ARE MURTFELDT.

And you are in exactly the right place with us. If you are looking for a high-performance partner for engineering materials and components made from engineering materials that help make machines and applications even better. By better, we mean faster, more efficient, more robust, more durable, or more sustainable.

We are the experts who bring more than 200 engineering materials with all their properties into function. With more than 700 employees and four manufacturing technologies, at six locations.



# CONTENT

<b>MURTFELDT .....</b>	<b>06</b>
Specialist for technical solutions in technical materials	06
MURTFELDT – more than the sum of its companies	08
Our core competencies	10
We understand your industry	12

<b>01</b>	
<b>Manufacturing .....</b>	<b>14</b>
Introduction	14
Machining	18
Additive manufacturing	20
Composite lightweight construction	22
Hybrid manufacturing	24

<b>02</b>	
<b>Individual components and solutions .....</b>	<b>26</b>

<b>03</b>	
<b>Materials .....</b>	<b>34</b>
Introduction	34
Overview materials	36
Our laboratory services	38
Food-safe materials	39
Original "S" green®	40
Original "S"® group	42
Technical materials	45
High-performance materials	48
Standard materials	50
Formats and colors	51

<b>04</b>	
<b>Originals .....</b>	<b>52</b>
Introduction	52
Profiles, guides, slide rails	54
Clamping systems	56
Conveyor screws	58
Product turners	60

# SPECIALIST FOR TECHNICAL SOLUTIONS IN TECHNICAL MATERIALS



"Our path: We value past experience and use the present to shape the future. As a company, we trust in the future because we drive it, because we want to be part of innovative and genuine solutions. And because we know that all of this will be in good hands with the next generation."

– Detlev Höhner, Managing Director & Family Entrepreneur, 3rd generation

## For generations.

As a family-owned company in its fourth generation, we have a special and personal responsibility for over 70 years – for our employees, our customers, and the future of mechanical engineering.

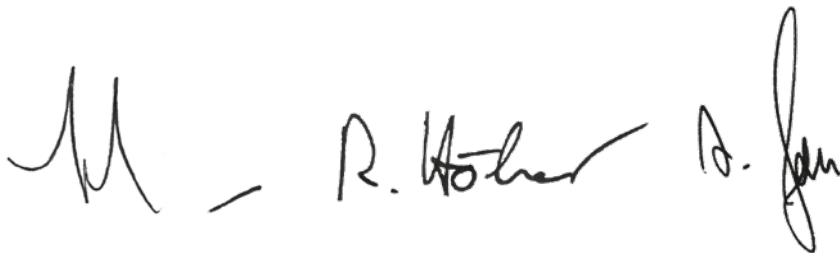
We combine established tradition with the courage to innovate and, with passion, reliability, and pioneering spirit, develop tailor-made material solutions. Our aspiration is not only to be a technological leader, but also to make a sustainable contribution to the efficiency, durability, and environmental compatibility of modern machines.

Our society faces major challenges both globally and locally – an aging population, climate change, the energy and mobility transition, resource scarcity, and more.

We firmly believe in the relevance of mechanical and plant engineering to meet these challenges in the long term. Our customers manufacture machines, plants, and products, for example for the food, pharmaceutical, energy, or semiconductor industries. There, they work every day actively on the challenges of the future. For all of us and for future generations.

With our components and materials, we help our customers build better machines. More efficient, more robust, more repairable, faster, safer, more reliable, more sustainable. To conserve vital resources such as energy, material, or time and to protect the quality of the end products. In this way, we make our contribution to a livable society and future.

**Better machines for a better world.**



Detlev Höhner  
Managing Director &  
family entrepreneur  
3rd Generation

Robert Höhner  
Managing Director &  
family entrepreneur  
4th Generation

Andreas Balla  
Managing Director

# MURTFELDT – MORE THAN THE SUM OF ITS PARTS.

**700+**

highly specialized employees – from application-oriented consulting and planning through design to laboratory and production

**4**

manufacturing technologies for solutions without compromise in cost, performance, weight, or geometry

**200+**

materials for every application – from rough to high-end, with the right properties, qualities, and compliances

**6**

locations in Europe: Germany, the Netherlands, Czech Republic

**70**

years  
in the market

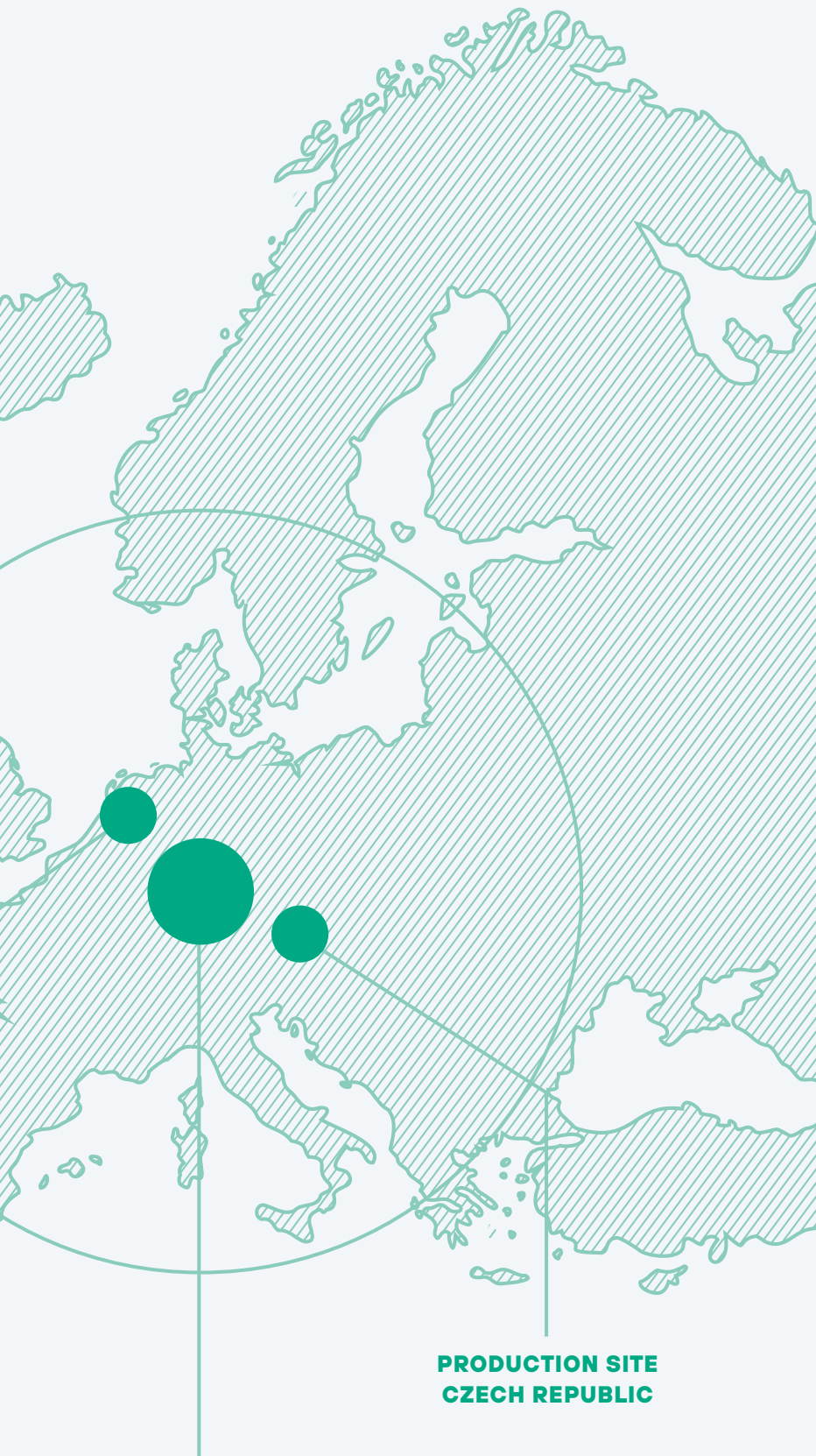
**4.**

generation family business with personal responsibility for employees, customers, and partners

**THREE  
EU COUNTRIES AS  
PRODUCTION SITES**



**LOCATION  
NETHERLANDS**



**FOUR PRODUCTION  
SITES IN GERMANY**

**PRODUCTION SITE  
CZECH REPUBLIC**

**The world's largest partner  
network for customized  
solutions made from  
engineering and high-  
performance materials.**

Belgium  
Brazil  
China  
Denmark  
Germany  
Estonia  
Finland  
France  
Greece  
India  
Israel  
Italy  
Japan  
Latvia  
Lithuania  
Netherlands  
Norway  
Austria  
Poland  
Portugal  
Sweden  
Switzerland  
Slovakia  
Spain  
Czech Republic  
Ukraine  
Hungary  
United States  
United Kingdom

# FOUR CORE COMPETENCIES – ONE COMMITMENT: HIGH PERFORMANCE IN TECHNICAL MATERIALS

We are proud of our role as a highly specialized supplier and do everything to ensure our customers feel secure with us. Precise, efficient, and highly reliable in meeting deadlines. Smooth processes and competent, personal points of contact.

We do not push ourselves to the forefront; instead, we do everything to position our customers for success. We think along and ahead. We provide helpful suggestions, help our customers save costs, or jointly find the perfect technical solution.

**We are suppliers out of conviction and with passion.**

## COMPONENTS MANUFACTURING

Wide range of manufacturing capabilities from prototype to series: machined, printed, with composite technology, or combined.

> **Page 14**

## CUSTOM SOLUTIONS

Together with our customers, we create innovative material solutions—tailored precisely to their requirements.

> **Page 26**

## MATERIALS

### **Semi-finished products & cuttings**

Concentrated material expertise through in-house production and laboratory services for the highest material quality and compliance.

> **Page 34**

## ORIGINALS

### **Configurable Products**

The best of 70 years of experience in mechanical engineering: guides, clamping systems, turners, screws.

> **Page 52**

# WE UNDERSTAND YOUR INDUSTRY – AND DELIVER THE RIGHT SOLUTION.

## **YOUR INDUSTRY NOT LISTED?**

This is only a small selection  
of our service portfolio.

**Contact us!**



In almost every industry, industrial materials are used.

**Thanks to precise manufacturing through machining, additive manufacturing, and composites, followed by post-processing, we realize individual components in close coordination with you.**

They meet the highest requirements and are suitable for use in the food processing industry, in the pharmaceutical and medical technology sectors, in aerospace, and many other areas.

Whether Tour de France or outer space, MURTFELDT products have been there.



**Our solutions –  
as individual as  
your industry**



## **FOOD**

Components for safe, efficient, and fast food processing

## **BEVERAGES**

Components for smooth beverage bottling under the highest hygienic standards

## **MEDICAL TECHNOLOGY**

Material solutions for precision, hygiene, and innovative material requirements

## **PHARMA**

Components for sensitive environments to minimize particle emissions

## **MOBILITY**

LABS-compliant materials and lightweight solutions for future-ready mobility

## **AEROSPACE**

Resistant to extreme temperature differences with minimal weight and high strength

## **RAW MATERIALS & CONSTRUCTION**

Wear resistance, impact toughness, and chemical resistance in conveyor systems and construction machinery

## **SPORT & LEISURE**

Innovative material solutions for extraordinary experiences, from high-performance sports to recreational fun

# HAVE COMPONENTS MANUFACTURED

# 01

**Unique in their performance** thanks to a high-end machinery park and people with application, functional, and manufacturing knowledge that is one of a kind.

**Your component is fully designed  
and you are looking for the  
fastest way into production?**

**WE CAN.**

## **Our manufacturing processes**



### **MACHINING**

Our modern machinery park includes more than 45 high-performance machines for the machining of various components.



### **ADDITIVE MANUFACTURING**

With this, we create solutions that surpass conventional limits – for design freedom and resource conservation.



### **COMPOSITE LIGHTWEIGHT CONSTRUCTION**

With composite technology, we shape the lightness of tomorrow – strong, efficient, forward-looking.



### **COMBINED PROCESSES**

By fusing materials and technologies, the possibilities multiply for a new generation of components.



## YOUR ADVANTAGES

- ⊕ Europe's largest high-end material processing for the most efficient machining and 3D printing
- ⊕ Reliably calculated based on numerous, verified production plans
- ⊕ High reliability and adherence to delivery dates
- ⊕ Maximum flexibility for individual requirements, if needed
- ⊕ Process stability for repeat parts
- ⊕ 100% from a single source, 100% made by MURTFELDT

„We guarantee our customers absolute continuity. Even when components are reordered after years.“

– Deniz Sen, Plant Management Dortmund



## From Prototype to Large Series

### HAVE PROTOTYPES MANUFACTURED

Demand-oriented prototypes, as close as possible to series production. From design validation to performing the most realistic tests possible.

### HAVE SMALL SERIES MANUFACTURED

Our extremely powerful machinery park enables the production of small series with the highest quality and speed.

### HAVE CUSTOM PARTS MANUFACTURED FROM DRAWINGS

We manufacture individual CNC-milled and turned parts exactly according to your specifications (from 1 piece).

### HAVE LARGE SERIES MANUFACTURED

We have one of the most powerful production facilities for drawing-based parts in Europe, resulting in a unique delivery performance.

### REPRODUCE WITHOUT DRAWINGS

Would you like to reproduce a component for which no drawing exists? Using the latest measurement methods, we can measure components and create a basis for reproduction.

### HAVE ASSEMBLIES MANUFACTURED

From finishing to part labeling, threaded inserts, and the assembly of complete units – we deliver what you need.



## MACHINING

# MODERN PRODUCTION FACILITIES FOR VARIETY & HIGH PRECISION

**Whether sawing, milling, turning, profiling, drilling, vibratory finishing, welding, or tempering – our machines and equipment offer a wide range of processing possibilities.**

**Even the smallest quantities or single parts can be produced cost-effectively. We place particular emphasis on processing suitable for materials. Research and practice at MURTFELDT are therefore in constant dialogue.**



**Europe's most powerful  
machining center.  
Everything is possible  
with this: Overview  
of our machinery park**

- 34** CNC milling machines
- 9** CNC lathes
- 5** CNC cycle lathes
- 5** conventional lathes
- 4** coordinate drilling machines
- 6** profiling machines
- 7** table milling machines
- 4** panel saws
- 4** circular saws
- 2** four-side planers
- 3** thickness planers
- 1** rotor planer
- 3** band saws
- 6** pillar drills
- 1** laser marking station
- 1** deep-hole drilling machine
- 1** EDM machine
- 3** metal chop saws
- 2** keyway broaching machines
- 2** drill-saw combinations



# ADDITIVE MANUFACTURING

## INDUSTRIAL 3D PRINTING. BETTER WITH MURTFELDT.

Additive manufacturing sets new standards in production: complex geometries, individual designs, and maximum flexibility become reality – completely without tooling costs or long lead times. Whether prototype or small series: industrial 3D printing produces precise, durable, and resource-efficient components that meet the highest demands.

### FROM PROTOTYPE TO SERIES PRODUCTION

Whether complex geometries, individual solutions, or integrated functions – our wide range of technologies sets new standards in efficiency, precision, and design freedom. With the latest additive processes and numerous post-processing options, we not only push the boundaries of manufacturing but also shape the future of sustainable and resource-efficient production.



#### APPLICATION EXAMPLE

### New dimensions in 3D printing

We cover the full spectrum: from precise tiny components with minimal tolerances to life-sized performance parts. Current example: 13 additively manufactured components for a helicopter.

## PERFORMANCE MATERIALS

Materials with added value: from heat-resistant to highly loadable or special surfaces – our materials meet the highest industrial requirements.

## DESIGN FLEXIBILITY

Additive manufacturing creates new freedoms: complex structures, individual designs, and tailor-made solutions – completely without tools.

## SPEED

Additive manufacturing reduces development and production times and enables rapid implementation from prototypes to small series.

## RESOURCE EFFICIENCY

Resource-efficient and effective: 3D printing minimizes material waste and reduces costs—even for small quantities.

## COST EFFICIENCY

Additive manufacturing saves expensive molds and tooling costs, enabling economical production—from prototypes to small series.



## OVER 70 YEARS OF TECHNICAL MATERIALS EXPERTISE. NOW ADVANCED IN 3D PRINTING.

For over 70 years, we have been experts in technical materials – this experience forms the basis of our commitment to reliable, high-quality solutions. With our innovative 3D printing offering, we transfer this know-how into the future and open up the latest manufacturing technologies.

Our 3D competence center in Tübingen is the central point for industrial additive manufacturing. Here we combine classic industrial expertise with the possibilities of 3D printing – from prototype to series. Our approach is characterized by holistic

solutions: we consider additive manufacturing as well as post-processing options and hybrid component concepts. Through the close integration of design, production, and machining, synergies are created from which our customers benefit.

## DO YOU HAVE A CHALLENGE AND ARE LOOKING FOR A SOLUTION?

Our design team develops individual concepts together with you – practical, precise, and tailored to your requirements. We combine engineering and production and thus benefit from the synergies of both worlds. From the idea to the finished product – entirely aligned with your needs and wishes.

## FAST. SIMPLE. DIGITAL.

**Is your construction & drawing ready?**

Simply upload your CAD data, select material and process – and receive your individual offer in real time. Whether prototype or functional component: Benefit from state-of-the-art technology and over 70 years of plastics expertise.



[murtfeldt.de/shop/configurator/3D](https://murtfeldt.de/shop/configurator/3D)





# COMPOSITE LIGHTWEIGHT CONSTRUCTION

## WE SET NEW STANDARDS IN LIGHTWEIGHT CONSTRUCTION

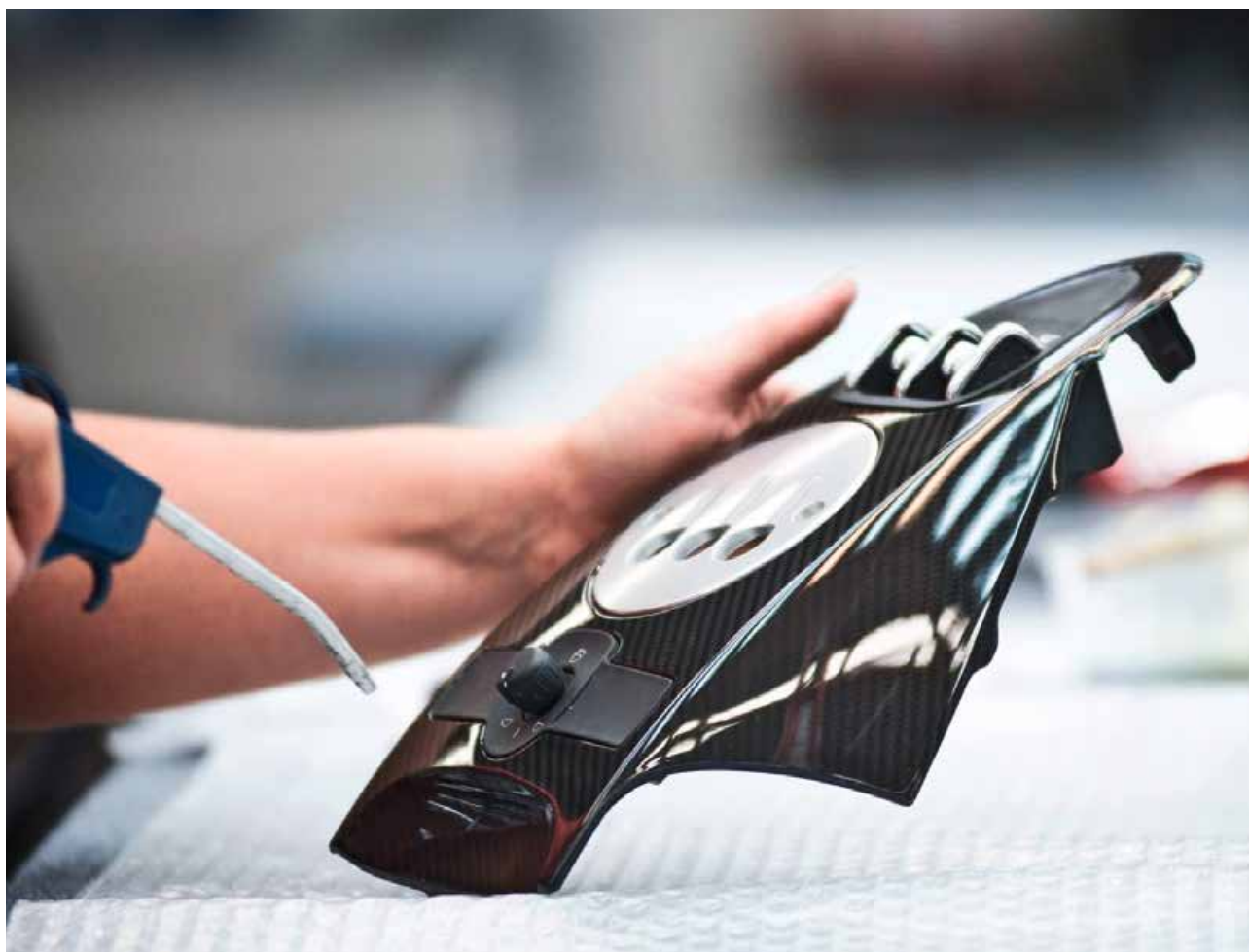
They combine exceptional strength with minimal weight and enable the implementation of innovative designs. Whether in aerospace, automotive engineering, or industry – composites stand for efficiency, sustainability, and highest performance. MURTFELDT Composites develops and processes composites made of carbon, aramid, and glass fibers into high-quality and technically sophisticated products. With our diverse processing techniques, as well as extensive material knowledge and application expertise, we offer tailored solutions for customer-specific requirements.

## PERFECT MATERIAL COMBINATION IS THE KEY

Composite materials consist of two main components: the fibers, which are responsible for mechanical strength and stiffness, and the matrix, which embeds, protects, and evenly distributes the loads on the fibers.

## INDUSTRIES

Our high-quality solutions and components made from composite materials are used in innovative industrial sectors: aerospace, industrial applications, medical technology, sports equipment, and more.



## FIBERS USED

Their secret to success lies in the combination of high specific strength, low weight, and excellent resistance to environmental influences. The selection of the right fiber plays a decisive role, as it largely determines the mechanical, thermal, and chemical properties of the composite material.

## MATRIX MATERIALS

The choice of matrix material significantly influences the properties of the composite, including temperature resistance, chemical resistance, processability, and mechanical load capacity.



## APPLICATION EXAMPLE

### Breakthrough in medical technology through uncompromising geometry and enhanced image quality

With state-of-the-art technology and construction components, the nu:view computed tomography device achieves unprecedented image quality, revolutionizing the early detection of breast cancer.

## KEY ADVANTAGES AT A GLANCE



### HIGH STRENGTH AT LOW WEIGHT

Maximum performance with minimal material use, ideal for lightweight applications.



### CUSTOMIZABLE PROPERTIES

Mechanical, thermal, and chemical properties can be precisely adjusted to requirements through targeted combinations of fibers and matrix materials.



### CORROSION RESISTANCE

Excellent resistance to environmental influences and chemicals, extending the service life of components.



### DESIGN FREEDOM

Enables the realization of complex geometries and innovative designs that would be difficult to achieve with traditional materials.



# HYBRID MANUFACTURING

Through the fusion of materials and technologies, the possibilities in developing a new generation of components are multiplied. We are convinced that a better world needs better machines. That is why we are constantly searching with our customers for new potentials—after joint developments that advance us together.

Hybrid components are a key to unlocking new possibilities. They combine the advantages of different materials and manufacturing processes into components that were neither conceivable nor producible in the past.

## WE THINK ALONG. AND AHEAD.

With the introduction of technical materials, we revolutionized mechanical engineering. With the fusion of materials and technologies into hybrid components, we continue this story.





# CREATING SOMETHING NEW. RETHINKING THINGS FROM A FUNCTIONAL PERSPECTIVE.

And continuously pushing  
the boundaries of what is  
technically possible.

## APPLICATION EXAMPLE

### **3D Printing meets Machining – new gripper for tire testing systems**

Through the hybrid design, we at MURTFELDT combine the advantages of both technologies. This creates a gripper for a tire testing system that surpasses conventional solutions through its lightweight design and precision.

# RETHINKING COMPONENTS TOGETHER

# 02

**Material solutions that can do more:** We shape progress in mechanical engineering with innovation and experience. Discover how we create real added value with state-of-the-art technology and deep industry understanding.

**Do you have an idea for a project  
and are looking for the perfect  
material and manufacturing solution?**

**WE CAN DO THAT.**

**THINKING AHEAD, THINKING  
ALONG, TAKING RESPONSIBILITY**

We accompany you from the first idea to the finished solution. Whether challenge, vision, or problem: we listen carefully, analyze thoroughly, and develop tailor-made material solutions together with you that work not only today but also tomorrow.

**NEED SPECIAL CONSULTATION?  
WE'RE HAPPY TO HELP!**

Special requirements are not an obstacle for us, but the starting point for innovation. Whether it's extreme temperatures, aggressive media, high friction, or limited installation space – we love technical challenges and develop solutions that work.

**OUR PROMISE: THINKING LONG-  
TERM, CONSULTING SUSTAINABLY**

As a family business in its fourth generation, we think beyond individual projects. Our consulting approach focuses not only on your current needs but also on your future development, aiming for a partnership built on trust, quality, and a genuine passion for technology.

**With technical material know-how from over 70 years of experience and a deep understanding of your processes, we realize tailor-made results that work.**

### **AT THE PULSE OF TIME**

In MURTFELDT's more than 60-year history, it has repeatedly been shown that our success is the result of attentive observation of the markets. In the beginning, products were needed everywhere, such as new materials or innovative chain tensioning systems; today, a different trend is emerging. Companies are increasingly specializing, offering individual products and using special equipment and machinery for this purpose. This individual orientation is now crucial for every company to be successful in the market in the long term.

### **SHAPING INDIVIDUAL COMPONENTS TOGETHER**

A key focus at MURTFELDT is individualized production.

**We manufacture a large number of customized components every day. The basis of our production are drawings or digital drawing data, which we receive from the customer or create in cooperation with the customer.**

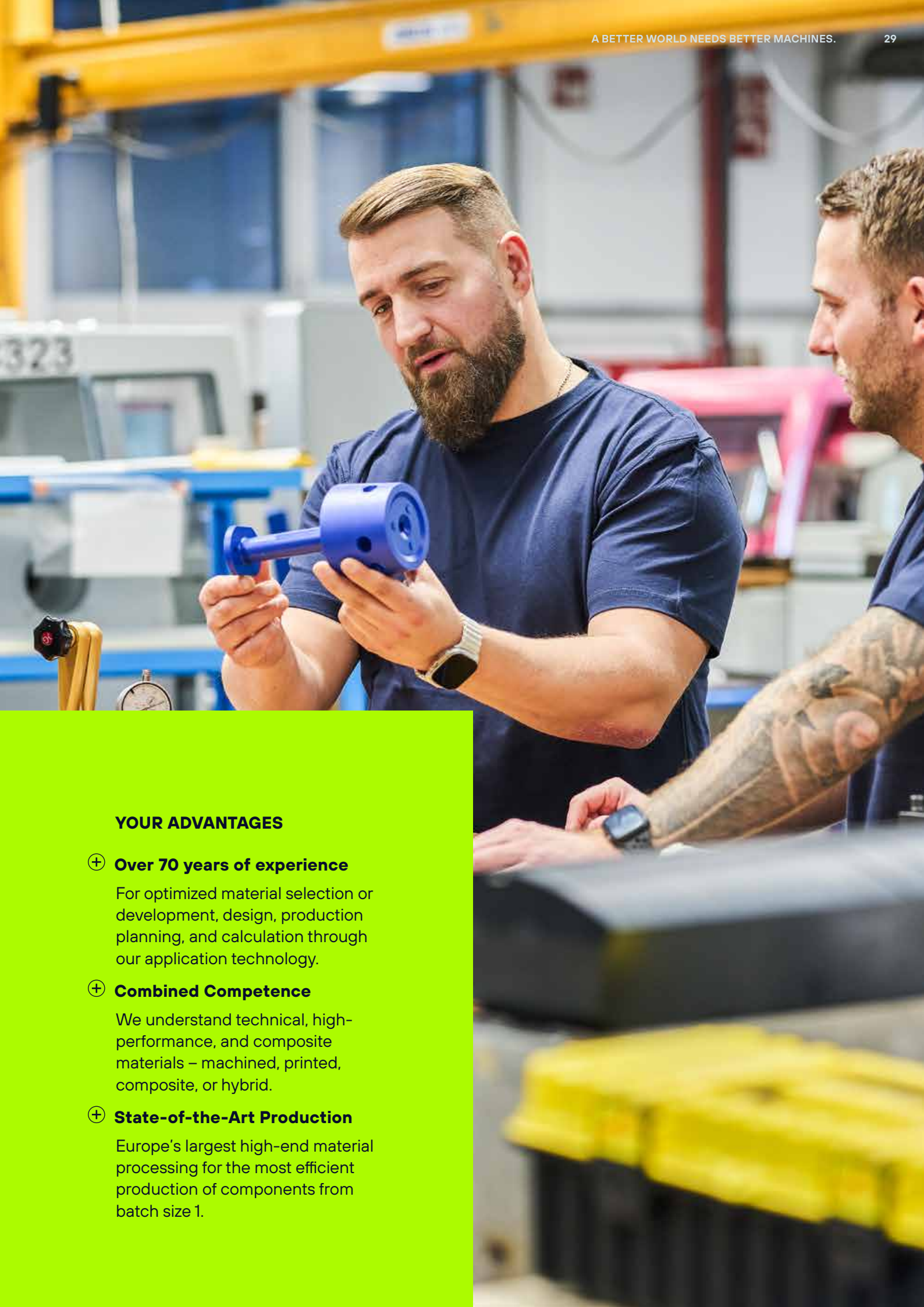
Our application technicians and engineers are available for consultation. If machine elements are too complex or the real situation cannot be easily illustrated by phone or email, our application consultants are also happy to come to you in person for concrete data collection.

### **MACHINED OR VIA 3D PRINTING**

In addition to our comprehensive machining capabilities, we also offer production via so-called 3D printing. The range of parts to be manufactured is wide and extends from a component for a small series, functional model, or spare part to a visual or load-bearing prototype made of material. MURTFELDT checks the product to be manufactured, also regarding the production process. Whether production is ultimately offered via 3D printing or machining is determined by the most cost-effective production for the customer.

### **INNOVATIVE AND INDUSTRY-SPECIFIC**

Our offering is aimed at almost every industry where high-quality industrial materials are used. The spectrum ranges from the food and packaging industry to automation technology and medical technology. The limit of what is possible is defined not by the application, but by today's technology.



## YOUR ADVANTAGES

### ⊕ **Over 70 years of experience**

For optimized material selection or development, design, production planning, and calculation through our application technology.

### ⊕ **Combined Competence**

We understand technical, high-performance, and composite materials – machined, printed, composite, or hybrid.

### ⊕ **State-of-the-Art Production**

Europe's largest high-end material processing for the most efficient production of components from batch size 1.

# THE BEST SOLUTIONS ARE CREATED THROUGH COLLABORATION

That is why we rely on genuine partnership instead of standard solutions. Together with our customers, we develop tailor-made material solutions that are precisely tailored to their requirements and challenges – practical, innovative, and always on equal footing.

## 05 Validation & Series Maturity

**Reliable quality up to market launch** – We accompany you to series production and ensure smooth production processes.

**WHICH  
CHALLENGES  
CAN WE  
SOLVE  
TOGETHER?**

## 04 Prototyping & Testing

**Experience your idea in practice** – With state-of-the-art manufacturing processes, we realize prototypes for functional and material testing.

## 01 Requirement Analysis & Consulting

**Your needs in focus** – In an initial discussion, we analyze your requirements and goals. Through close collaboration, we identify potentials and clarify technical as well as economic conditions.

- FOOD COMPLIANCE
- DETECTABILITY  
(METAL, VISIBLE, X-RAY)
- BETTER SLIDING BEHAVIOR
- REDUCED WEAR
- CHEMICAL RESISTANCE
- DIMENSIONAL STABILITY

## 02 Material Selection & Technology Consulting

**The right material for your application** – Whether high-performance materials, composite materials, or innovative 3D printing materials: we support you in selecting the optimal material and technology.

## 03 Design & Development

**From idea to technical implementation** – Our designers and engineers translate your requirements into well-thought-out designs, focusing on efficiency, durability, and sustainability.



„In a world where requirements are becoming more complex and solutions more individual, we rely on what makes us strong as a family-owned company: genuine closeness, long-term thinking, and deep technical understanding. Our consulting approach is more than just a service – it is a promise.”

– Björn Menneke, Head of Application Engineering



## HOW OUR CONSULTING ENSURES YOUR SUCCESS

### INDIVIDUAL INSTEAD OF OFF-THE-SHELF

No solution is the same as another – that is why we take the time to understand your specific requirements. Whether complex components, challenging environmental conditions, or the highest demands on hygiene, wear, or lightweight design: we provide solution- and application-oriented consulting.

### PROACTIVE & PARTNERSHIP-ORIENTED

We do not just want to deliver, but to help shape solutions. In close coordination with your teams, we further develop ideas, suggest alternatives, and always keep feasibility and efficiency in mind.

### TECHNICAL KNOW-HOW MEETS INDUSTRY UNDERSTANDING

Our specialists combine decades of experience with deep industry knowledge – from mechanical engineering to food technology to aerospace. This way, we think not only in materials, but in complete systems.

### INTERDISCIPLINARY AND NETWORKED

At our company, design, manufacturing, material development, and sales work hand in hand. This is how holistic solutions are created—economical, functional, and innovative.

# OUR MATERIALS THAT MAKE EVERYTHING POSSIBLE.

# 03

**Semi-finished products, cut-to-size parts,  
and round bars:** Peak performance is our promise.

**Are you looking for a material with particularly high load-bearing capacity, for special environmental conditions, extreme temperatures, or chemical resistance?**

**WE HAVE IT ALL.**



**OVER 200 DIFFERENT MATERIALS**

PE, PA, POM, PET, PVDF, PTFE, PEEK, composite materials



**FROM 1MM TO 10 M**

Sheets and round bars – individually cut



**24H EXPRESS SERVICE**

for our broad standard portfolio

**WE FIND THE RIGHT MATERIAL FOR EVERY APPLICATION**

We find the right material for every application. Whether high load-bearing capacity, special environmental conditions, extreme temperatures, chemical resistance, or compliance – with our 70 years of material competence and excellence, we find the material that sustainably optimizes your application.

**WE RELY ON MODERN PROCESSES FOR HIGHEST PRODUCT QUALITY**

With state-of-the-art manufacturing processes and innovative technologies, we ensure products of the highest quality level. Precise control, advanced testing methods, and continuous optimization ensure that every component meets our strict standards.

**WE ENSURE A UNIQUE CIRCULAR SYSTEM**

As a family-owned company, sustainable processes are deeply rooted in our thinking and actions. With our holistic approach, we create a closed loop for sustainable material usage. From selecting resource-saving materials through production to recycling, we optimize every step.

**With our profound material expertise, we offer you precise and efficient solutions tailored to the specific requirements of your applications.**

#### **01 ORIGINAL "S"<sup>®</sup> GROUP**

The material group developed by MURTFELDT was created based on the proven original material "S"<sup>®</sup> green<sup>®</sup>. The materials, consisting of high-quality UHMW polyethylene, are characterized by specifically adapted properties for different areas of application.

**> Page 42**

#### **02 TECHNICAL MATERIALS**

Every industry, every application places specific demands on machines and systems. Even in the smallest components, their quality manifests itself, and thus the result of the later production and processing process. Our technical materials are characterized above all by good sliding properties and high wear resistance – a guarantee for long service life and low maintenance intensity of your systems.

**> Page 45**

#### **03 HIGH-PERFOR- MANCE MATERIALS**

Our high-performance materials are designed for extraordinary requirements and high loads. As a result of the consistent further development of our technical materials, they are characterized by exceptional chemical, mechanical, and thermal resistance and load-bearing capacity, even under dynamic stress.

**> Page 48**

#### **04 STANDARD MATERIALS**

Standard materials form the solid foundation in MURTFELDT's portfolio. They impress with an attractive price-performance ratio, good processability, and versatile applications across different industries. Whether for simple technical applications or cost-effective series solutions – standard materials provide the right foundation.

**> Page 50**



### OUR SERVICE

- ⊕ Individual cut-to-size sheets and round bars
- ⊕ Tailor-made components
- ⊕ High stock levels of semi-finished dimensions
- ⊕ Short delivery times thanks to generous storage capacities

### SUCCESS FACTORS OF OUR MATERIALS

- ⊕ Excellent sliding properties
- ⊕ High wear resistance
- ⊕ High mechanical and chemical load-bearing capacity
- ⊕ Long service life



# OUR LABORATORY SERVICES

# WE PUT OUR MATERIALS TO THE TEST.

## OUR TESTING TECHNIQUES AT A GLANCE

### DENSITY DETERMINATION

Measurement of the density of a material

### NOTCH IMPACT TEST

Determination of a material's toughness

### BALL INDENTATION HARDNESS

Determination of hardness on materials

### SHORE HARDNESS TEST

Measures the penetration depth of a test body under a defined force

### ELECTRICAL RESISTANCE

For protection against electrostatic discharge

### COEFFICIENT OF FRICTION MEASUREMENT

Determination of the coefficient of friction

### WEAR RESISTANCE (SAND-SLURRY TEST)

Testing abrasion resistance

### TENSILE TESTING

Determination of mechanical properties under tensile load (yield strength, elongation at break, modulus of elasticity)

### MICROSCOPE

Assessment of molded parts regarding processing and stress.

### OTHER METHODS

FTIR spectroscopy, metal detection, ultrasonic measurement, melt index, laboratory press



Whatever you need or want to know about a material, we find it out. From comprehensive tests to specific examinations – we guarantee precision, reliability, and uncompromising quality for your applications. For results you can rely on.

Our materials are tested for performance in a wide range of scenarios: To meet the specific requirements of our customers, we conduct not only standard ISO tests but also individual tests. Our goal is to determine the performance properties of our materials – from hardness testing and coefficient of friction measurement to infrared spectroscopy – precisely and reliably at all times. This ensures that our materials meet the expectations we set for durability and quality.



## EU COMPLIANCE

Mandatory under Regulation (EU) № 10/2011: All ingredients must comply with the Union list. Specific and global migration are tested on the finished product by independent, accredited laboratories. Complete traceability is guaranteed.

## FDA COMPLIANCE

In the USA, the Food and Drug Administration (FDA) confirms safety under 21 CFR. Every ingredient is evaluated and approved according to the positive list.

## THE DECLARATION OF CONFORMITY

Every material product intended for food contact is accompanied by a written declaration. This ensures identification, traceability, and complete information on materials, degradation products, and areas of use.

## TRACEABILITY

All materials can be traced throughout the entire supply and processing chain. Certificates with information on manufacturer, date, and production process ensure transparency and control.

## GOOD MANUFACTURING PRACTICE (GMP)

According to Regulation (EC) № 2023/2006, anchored in (EC) № 1935/2004: Production takes place within a quality-assured system. ISO standards are complemented by GMP guidelines – for safe, reliable, and traceable products.

# FOOD-SAFE MATERIALS [FS]

## REGULATION (EC) NO. 1935/2004

Since 2004, regulates materials that come into contact with food. Still valid today. Key statement: Raw materials and objects may only release substances into food under normal conditions in quantities that do not endanger consumer health.

## REGULATION (EU) NO. 10/2011

Valid since May 1, 2011, and part of Regulation (EC) № 1935/2004. Key contents: positive list for monomers, substance list for additives, migration procedures with limit values and purity specifications, declarations of conformity, batch traceability, and production according to Regulation (EC) № 2023/2006 (Good Manufacturing Practice).



**BECAUSE NOTHING  
IS AS GOOD AS THE  
ORIGINAL.**



In 1958, in Dortmund, a material was created  
that revolutionized the industry.

## **Our trademark: Original "S"<sup>®</sup> green<sup>®</sup>**

**Proven a thousand times, attempted  
to be copied hundreds of times:  
Original "S"<sup>®</sup> green<sup>®</sup> stands as a  
synonym for a material with excellent  
sliding properties, high wear  
resistance, and long service life.  
Perfect for all applications in which  
things are in motion.**

# 01 ORIGINAL "S"® GROUP

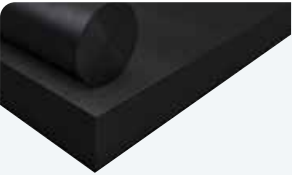






**Original "S"® green®/natural/coloured | [FS]®**  
production based on PE-UHMW TG 1.2

**PROPERTIES**

- ⊕ Good anti-adhesion properties
- ⊕ Excellent gliding properties
- ⊕ Very good wear resistance

**Original "S"® black AST | [FS]®**  
production based on PE-UHMW TG 1.2

**PROPERTIES**

- ⊕ Excellent gliding properties
- ⊕ High wear resistance
- ⊕ Statically dissipative





**Original "S"® traffic blue | [FS]®**  
production based on PE-UHMW TG 1.2

**PROPERTIES**

- ⊕ Good anti-adhesion properties
- ⊕ Excellent gliding properties
- ⊕ High wear resistance

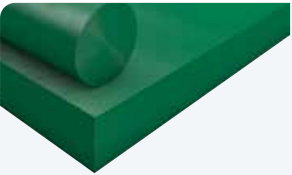






**Original "S"® plus+® white ESD | [FS]®**  
production based on PE-UHMW

**PROPERTIES**

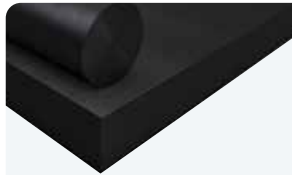


- ⊕ Good sliding properties
- ⊕ High wear resistance
- ⊕ Statically dissipative

**"S" newCycle® green**  
production based on PE-UHMW

**PROPERTIES**

- ⊕ Good wear resistance
- ⊕ Excellent gliding properties
- ⊕ Economical environmentally friendly

**"S" newCycle® black AST**  
production based on PE-UHMW

**PROPERTIES**

- ⊕ Excellent gliding properties
- ⊕ Statically dissipative
- ⊕ Economical environmentally friendly





**Original "S"® plus+® ESD black | [FS]®**  
production based on PE-UHMW TG 1.2

**PROPERTIES**

- ⊕ Electrically conductive
- ⊕ Excellent gliding properties
- ⊕ High wear resistance





**Original "S"® plus+® LowFriction | [FS]®**  
production based on PE-UHMW TG 1.1

**PROPERTIES**

- ⊕ No stick-slip-effect
- ⊕ Optimal sliding properties
- ⊕ Very high wear resistance





**Original "S"® plus+® LowFriction ESD | [FS]®**  
production based on PE-UHMW TG 1.1

**PROPERTIES**

- ⊕ Electrically conductive
- ⊕ No stick-slip-effect
- ⊕ Optimal sliding properties

01



 **over 97%** of our PE at the MURTFELDT site is recycled.

## SPECIAL LINING MATERIALS



### Dialen®MR opal green

Ultra high molecular polyethylene (UHMW-PE) according to ISO 15527, sheet group 1.1

#### PROPERTIES

- ⊕ Good anti-adhesion properties
- ⊕ Good shock and impact absorption
- ⊕ Very high wear resistance



### Dialen®MR black AST

Ultra high molecular polyethylene (UHMW-PE) according to ISO 15527, sheet group 1.1

#### PROPERTIES

- ⊕ Good anti-adhesion properties
- ⊕ Statically dissipative
- ⊕ UV resistant



### Dialen®MR natural

Ultra high molecular polyethylene (UHMW-PE) according to ISO 15527, sheet group 1.1

#### PROPERTIES

- ⊕ Good anti-adhesion properties
- ⊕ Good shock and impact absorption
- ⊕ Very high wear resistance

# 01 ORIGINAL "S"® GROUP





**Original "S"plus+® LowFrictionP ESD**  
production based on PE-UHMW TG 1.1

**PROPERTIES**

- ⊕ Electrically conductive
- ⊕ No stick-slip-effect
- ⊕ Optimal sliding properties





**Original "S"® 8000 anthracite**  
production based on PE-UHMW TG 1.1

**PROPERTIES**

- ⊕ Good sliding properties
- ⊕ Very high wear resistance
- ⊕ Self-lubricating






**Original "S"plus+® AntiMicrobial [FS]®**  
production based on PE-UHMW TG 1.2

**PROPERTIES**

- ⊕ Antimicrobial
- ⊕ Good anti-adhesion properties
- ⊕ High wear resistance






**Original "S"plus+® FoodProtect [FS]®**  
production based on PE-UHMW TG 1.1

**PROPERTIES**

- ⊕ Good anti-adhesion properties
- ⊕ High wear resistance
- ⊕ X-Ray and metal-detectable







**Original "S"plus+® GlassBeads | [FS]®**  
production based on PE-UHMW TG 1.1

**PROPERTIES**

- ⊕ Filled with micro glass beads
- ⊕ Very good sliding properties
- ⊕ Very high wear resistance







**Original "S"plus+® HeatStabilised | [FS]®**  
production based on PE-UHMW TG 1.1

**PROPERTIES**

- ⊕ Excellent gliding properties
- ⊕ Very high wear resistance
- ⊕ Heat stabilized










**Muralen® natural | [FS]®**  
production based on PE-HMW TG 2.1

**PROPERTIES**

- ⊕ Good anti-adhesion properties
- ⊕ Good sliding properties
- ⊕ Good cut resistance

**Muralen® black AST | [FS]®**  
production based on PE-HMW TG 2.1

**PROPERTIES**

- ⊕ Good anti-adhesion properties
- ⊕ Good sliding properties
- ⊕ Statically dissipative







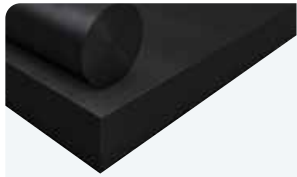
**Muralen® plus+ AntiMicrobial | [FS]®**  
production based on PE-HMW TG 2.1

**PROPERTIES**

- ⊕ Antimicrobial
- ⊕ Good anti-adhesion properties
- ⊕ Good cut resistance

## 02 TECHNICAL MATERIALS

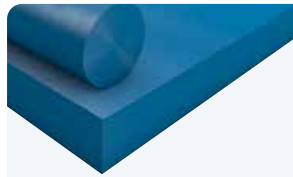
## 02



**Murlubric® black**  
production based on PA6 C

### PROPERTIES

- ⊕ High dynamic load-bearing capacity
- ⊕ Low residual stress
- ⊕ Excellent gliding properties



**Murlubric® blue [FS]®**  
production based on PA6 C

### PROPERTIES

- ⊕ High dynamic load-bearing capacity
- ⊕ Low residual stress
- ⊕ Excellent gliding properties



**Murylon® B natural | [FS]®**  
production based on PA6

### PROPERTIES

- ⊕ Low cold flow characteristics
- ⊕ Good impact strength
- ⊕ Very good toughness



**Murylon® B black**  
production based on PA6

### PROPERTIES

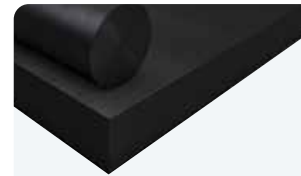
- ⊕ Low cold flow characteristics
- ⊕ Good impact strength
- ⊕ Very good toughness



**Murylon® A natural | [FS]®**  
production based on PA66

### PROPERTIES

- ⊕ Good fatigue strength
- ⊕ Good creep and compressive strength
- ⊕ Good wear resistance



**Murylon® A black**  
production based on PA66

### PROPERTIES

- ⊕ Good fatigue strength
- ⊕ Good creep and compressive strength
- ⊕ Good wear resistance



**Murylon® A GF30 black**  
production based on PA66

### PROPERTIES

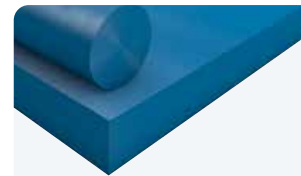
- ⊕ Low cold flow characteristics
- ⊕ Good dimensional stability
- ⊕ Good creep and compressive strength



**Murylon® 6 Cast natural | [FS]®**  
production based on PA6 C

### PROPERTIES

- ⊕ Low residual stress
- ⊕ Good fatigue strength
- ⊕ Good impact strength

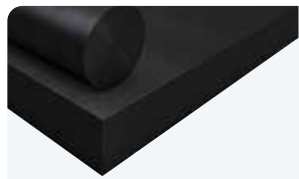


**Murylon® 6 Cast blue [FS]®**  
production based on PA6 C

### PROPERTIES

- ⊕ Low residual stress
- ⊕ Good fatigue strength
- ⊕ Good impact strength

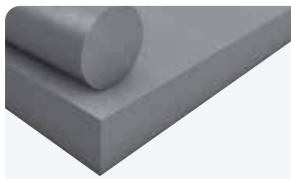
## 02 TECHNICAL MATERIALS



**Murylon® 6 Cast black**  
production based on PA6 C

### PROPERTIES

- ⊕ Low residual stress
- ⊕ Low cold flow characteristics
- ⊕ Good fatigue strength



**Murylon® 6 Cast HL**  
production based on PA6 C

### PROPERTIES

- ⊕ High dynamic load-bearing capacity
- ⊕ Low residual stress
- ⊕ Good fatigue strength



**Murdopol® natural | [FS]®**  
production based on PA12 C

### PROPERTIES

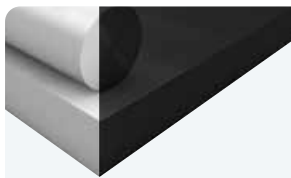
- ⊕ Low residual stress
- ⊕ Good damping and vibration behaviour
- ⊕ Lowest water absorption of all polyamides



**Murdopol® with steel core**  
production based on PA12 C

### PROPERTIES

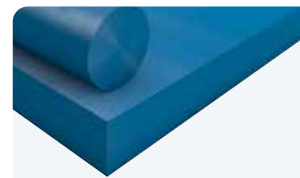
- ⊕ Low residual stress
- ⊕ Good damping and vibration behaviour
- ⊕ Includes encased steel core



**Murytal® C natural/black | [FS]®**  
production based on POM-C

### PROPERTIES

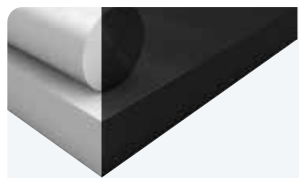
- ⊕ Good resistance to chemicals
- ⊕ Good resistance to hydrolysis
- ⊕ Good ability to regain its form



**Murytal® C blue [FS]®**  
production based on POM-C

### PROPERTIES

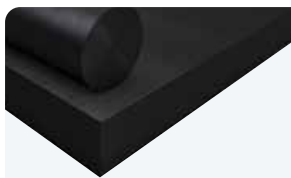
- ⊕ Good resistance to chemicals
- ⊕ Good resistance to hydrolysis
- ⊕ Good ability to regain its form



**Murytal® H natural/black**  
production based on POM-H

### PROPERTIES

- ⊕ Electrically isolating
- ⊕ Good resistance to chemicals
- ⊕ Good resistance to hydrolysis



**Murytal® ESD black**  
production based on POM-C

### PROPERTIES

- ⊕ Electrically conductive
- ⊕ Good resistance to chemicals
- ⊕ Good resistance to hydrolysis

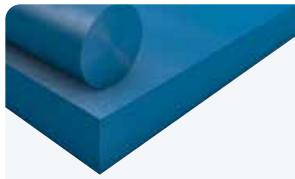


**Murylat® natural | [FS]®**  
production based on PET

### PROPERTIES

- ⊕ Electrically isolating
- ⊕ Good dimensional stability
- ⊕ Good creep and compressive strength

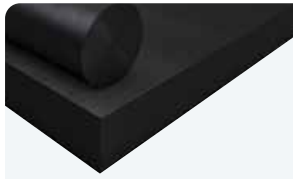
## 02

**Murylat® blue [FS]®**

production based on PET

**PROPERTIES**

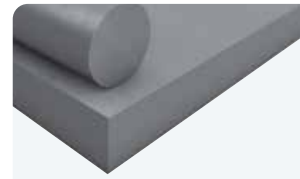
- ⊕ Electrically isolating
- ⊕ Good dimensional stability
- ⊕ Good creep and compressive strength

**Murylat® black | [FS]®**

production based on PET

**PROPERTIES**

- ⊕ Electrically isolating
- ⊕ Good dimensional stability
- ⊕ Good creep and compressive strength

**Murylat® SP light-grey | [FS]®**

production based on PET

**PROPERTIES**

- ⊕ High dynamic load-bearing capacity
- ⊕ Good dimensional stability
- ⊕ Very good wear resistance

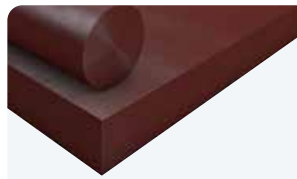
Are you looking for the right material for your application?

**GO TO THE SHOP:**

- + Individual prices & customer discounts
- + Display of live availability and delivery times
- + Efficient management of order status/documents and history

[murtfeldt.de/en-GB/Shop/materials/](https://murtfeldt.de/en-GB/Shop/materials/)


## 03 HIGH-PERFORMANCE MATERIALS



**Murylon® HighTemp red-brown**  
production based on PA46

### PROPERTIES

- ⊕ Good creep and compressive strength
- ⊕ Good resistance to thermal aging
- ⊕ High wear resistance



**Murinyl® natural | [FS]®**  
production based on PVDF

### PROPERTIES

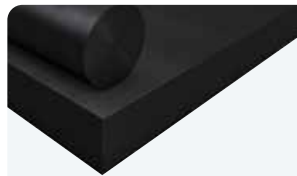
- ⊕ Good resistance to chemicals
- ⊕ Good creep and compressive strength
- ⊕ UV resistant



**Murflor® natural | [FS]®**  
production based on PTFE

### PROPERTIES

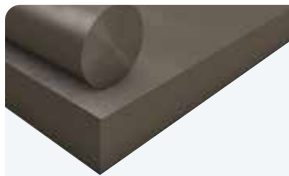
- ⊕ No stick-slip-effect
- ⊕ Optimal sliding properties
- ⊕ Excellent non-stick properties



**Murflor® + Carbon 25% black**  
production based on PTFE

### PROPERTIES

- ⊕ Electrically conductive
- ⊕ Low stick-slip-effect
- ⊕ High wear resistance



**Murflor® + Bronze 60%**  
production based on PTFE

### PROPERTIES

- ⊕ Low stick-slip-effect
- ⊕ Good creep and compressive strength
- ⊕ High wear resistance



**Murflor® + glass 25% | [FS]®**  
production based on PTFE

### PROPERTIES

- ⊕ Low cold flow characteristics
- ⊕ Good creep and compressive strength
- ⊕ High wear resistance



**Murpec® natural | [FS]®**  
production based on PEEK

### PROPERTIES

- ⊕ Electrically isolating
- ⊕ Low expansion coefficient
- ⊕ High wear resistance



**Murpec® black | [FS]®**  
production based on PEEK

### PROPERTIES

- ⊕ Low expansion coefficient
- ⊕ Good resistance to energy radiation
- ⊕ High wear resistance



**Murpec® SP black**  
production based on PEEK

### PROPERTIES

- ⊕ Good resistance to chemicals
- ⊕ Good resistance to heating steam
- ⊕ Very high wear resistance

03



**Murinit® SP blue [FS]®**  
production based on PPS

**PROPERTIES**

- ⊕ Good dimensional stability
- ⊕ Good creep and compressive strength
- ⊕ Very good sliding properties

## 04 STANDARD MATERIALS

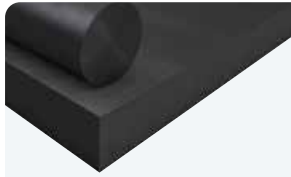


### Murdotec®1000 green/natural/traffic blue

Ultra high molecular polyethylene (UHMW-PE) according to ISO 15527, sheet group 1.2

#### PROPERTIES

- ⊕ Good anti-adhesion properties
- ⊕ Excellent gliding properties
- ⊕ High wear resistance



### Murdotec®1000 black AST

Ultra high molecular polyethylene (UHMW-PE) according to ISO 15527, sheet group 1.2

#### PROPERTIES

- ⊕ Excellent gliding properties
- ⊕ Statically dissipative
- ⊕ Economical environmentally friendly

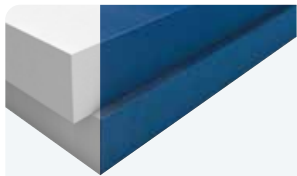


### Murdotec®500 black AST

High molecular polyethylene (PE-HMW) according to ISO 15527, sheet group 2.1

#### PROPERTIES

- ⊕ Good anti-adhesion properties
- ⊕ Very good sliding properties
- ⊕ Statically dissipative

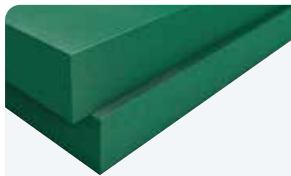


### Murdotec®500 natural/traffic blue

High molecular polyethylene (PE-HMW) according to ISO 15527, sheet group 2.1

#### PROPERTIES

- ⊕ Good anti-adhesion properties
- ⊕ Good cut resistance
- ⊕ Very good sliding properties



### Murdotec®1000 U green

Ultra high molecular polyethylene (UHMW-PE)

#### PROPERTIES

- ⊕ Excellent gliding properties
- ⊕ Very good wear resistance
- ⊕ Economical environmentally friendly



### Murdotec®1000 U black AST

Ultra high molecular polyethylene (UHMW-PE)

#### PROPERTIES

- ⊕ Excellent gliding properties
- ⊕ Statically dissipative
- ⊕ Economical environmentally friendly



### Murdotec®1000 U black-multicoloured

Ultra high molecular polyethylene (UHMW-PE)

#### PROPERTIES

- ⊕ Excellent gliding properties
- ⊕ Very good wear resistance
- ⊕ Economical environmentally friendly

# HERE'S THE WAY TO THE SHOP:

[murtfeldt.de/en-GB/Shop/](https://murtfeldt.de/en-GB/Shop/)



# FORMATS AND COLORS

## COLOUR SELECTION

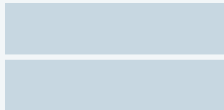
RAL 9017 Traffic black	RAL 9016 Traffic white	RAL 9002 Grey white	RAL 8012 Red brown	RAL 7045 Telegrey 1	RAL 7037 Dust grey	RAL 7035 Light grey
RAL 7032 Pebble grey	RAL 7024 Graphite grey	RAL 6026 Opal green	RAL 6024 Traffic green	RAL 6019 White green	RAL 5024 Pastel blue	RAL 5021 Water blue
RAL 5017 Traffic blue	RAL 5015 Sky blue	RAL 5014 Pigeon blue	RAL 5013 Cobalt blue	RAL 5009 Azure blue	RAL 5005 Signal blue	RAL 5002 Ultramarine blue
RAL 4007 Purple violet	RAL 4002 Red violet	RAL 3020 Traffic red	RAL 3003 Ruby red	RAL 2008 Light red-orange	RAL 1023 Traffic yellow	RAL 1021 Rapeseed yellow

## SHEET FORMATS

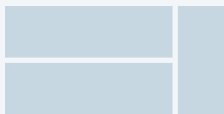
### Thickness: 8 – 140 mm



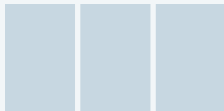
4080 × 2005 mm



4080 × 1005 mm



3060 × 1005 mm  
2005 × 1020 mm



2005 × 1335 mm

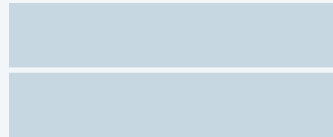


2005 × 1020 mm

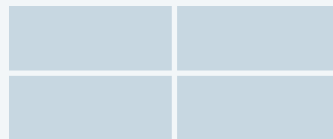
### Thickness: 8 – 80 mm



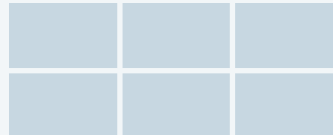
6100 × 2505 mm



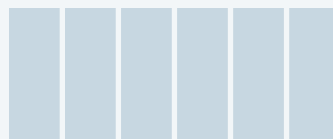
6100 × 1250 mm



3060 × 1250 mm



2005 × 1250 mm



2505 × 1010 mm

Thickness tolerance: +0/+0.4 mm · Further sheet thicknesses on request.

## ROUND RODS

Ø Diameter mm	Turned	Extruded*
10	•	
15	•	
20	•	•
25	•	•
30	•	•
35	•	•
40	•	•
45	•	•
50	•	•
60	•	•
70	•	•
80	•	•
90	•	•
100	•	•
110	•	•
120	•	•
130	•	•
140	•	•
150	•	•
160	•	•
170	•	
180	•	•
190	•	
200	•	•

# ORIGINALS – THE BEST FROM 70 YEARS OF MECHANICAL ENGINEERING

# 04

Manufactured from high-quality  
MURTFELDT materials – for reliable and  
efficient solutions at the highest level.

**With the sliding guides, clamping systems, product turners, and screws from the inventor and market leader, you secure real advantages in machine operation: Our solutions ensure noticeably smoother processes, increase process reliability, and enhance the service life and energy efficiency of your systems.**

## **Our Originals**

### **CHAIN, BELT, AND SLIDING GUIDES**

MURTFELDT chain and belt guides and sliding rails protect your chains and belts. At the same time, they guarantee optimal running properties and highest wear resistance.

### **TENSIONING SYSTEMS**

MURTFELDT tensioning systems reliably keep chains and belts under tension and thus promote their service life.

### **CONVEYOR SCREWS**

With composite technology, we shape the lightness of tomorrow – strong, efficient, forward-looking.

### **PRODUCT TURNERS**

Through the fusion of materials and technologies, possibilities are multiplied for a new generation of components.

# CHAIN, BELT AND SLIDING GUIDES

Where friction occurs, wear follows. Especially where metallic materials are in use. For example, when chains run on metal guides, regular lubrication is unavoidable. The aim is to achieve low-noise, smooth operation and long-term functionality. MURTFELDT chain and belt guides and sliding rails protect your chains and belts. At the same time, they guarantee optimal running properties and highest wear resistance.



The proven materials ORIGINAL "S"® and "S"newCycle® as a more cost-effective alternative offer ideal material properties and optimal conditions for use as guides and sliding rails for roller chains and round link chains as well as belts.

## STOCK AND CUSTOM MANUFACTURING

Our warehouse offers you a comprehensive range of guides for roller chains according to European and American design as per DIN ISO 606 and round link chains according to DIN 766 and DIN 764. In addition, we manufacture cost-effective and reliable special guides and sliding strips according to your specifications – even in the smallest quantities.



### OVERVIEW CHAIN, BELT AND SLIDING GUIDES



Standard chain guides and sliding profiles for roller chains



Chain guides and sliding guides for round link chains



Riemenführungen und Gleitprofile



Profiles for conveying and transportation



Steel C profiles

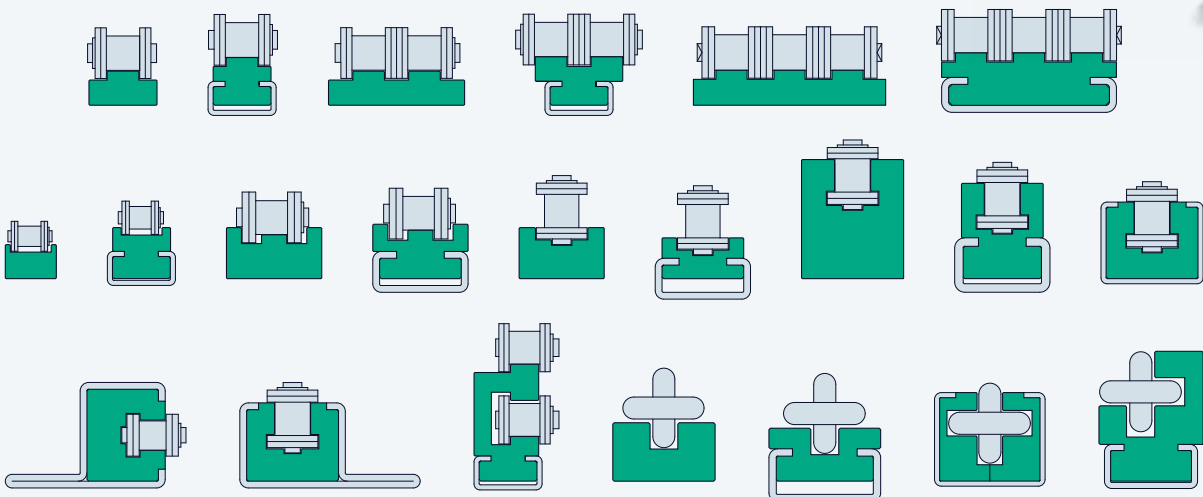


## ADVANTAGES OF MURTFELDT CHAIN, BELT AND SLIDING GUIDES

- + High wear resistance
- + Very good sliding properties
- + Extreme impact and break resistance even in severe cold
- + High chemical resistance
- + Vibration-damping
- + No moisture absorption
- + No corrosion
- + Approved for food contact (EU and FDA)



## OVERVIEW CHAIN GUIDES



# TENSIONING SYSTEMS

From a wide variety of different tensioning systems, we are able to meet almost every requirement quickly and precisely. If you require an individual solution for mechanical and plant engineering, our consulting service is always available to you without obligation.

## WIDE RANGE – EXTENSIVE STOCK

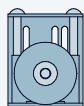
Chains and belts are crucial wear parts in many systems and machines. Constantly in motion, the loads here are particularly high. Belts require pretensioning – chain links elongate and cause increasingly uneven running. MURTFELDT tensioning systems reliably keep chains and belts under tension and thus promote their service life. In conveyor and drive technology, our chain tensioners and belt tensioners have proven themselves worldwide over decades of use. This experience enables us to advise you optimally and always offer you the best possible solution.



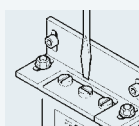
### OVERVIEW OF TENSIONING SYSTEMS



**Chain tensioner for roller chains**

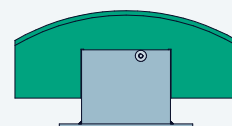
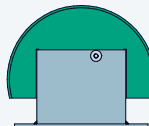
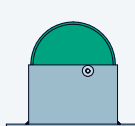
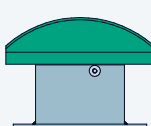
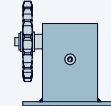
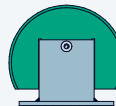
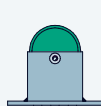
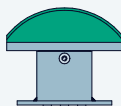


**Automatic belt tensioner**

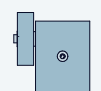
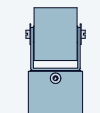


**Accessories for tensioning systems**

### OVERVIEW OF SPANNBOX®-TYPES



**Chain tensioning systems**



**Belt tensioner**

## ADVANTAGES IN DRIVE AND CONVEYING TECHNOLOGY

- + Smooth chain running
- + Reduction of wear on chain links and sprockets
- + Reduction of operating noise
- + Automatic readjustment
- + Compensation of chain and belt elongation
- + Use as chain and belt monitor in combination with an inductive switch
- + Redirection of chain and belt drives
- + Small design size
- + Easy installation of all chain and belt tensioners
- + Quick and safe detection of adjustment needs through optical control indicator
- + Preventive maintenance through integrated sensor monitoring systems. Tension boxes thereby act as chain and belt monitors. Optionally equipped with mechanical limit switches or non-contact inductive switches.

**MURTFELDT tensioning systems reliably keep chains and belts under tension and thus promote their service life.**



Discover our

**MURTFELDT  
SHOP:**

[murtfeldt.de/en-GB/Shop/](https://murtfeldt.de/en-GB/Shop/)



3 clicks to  
your product

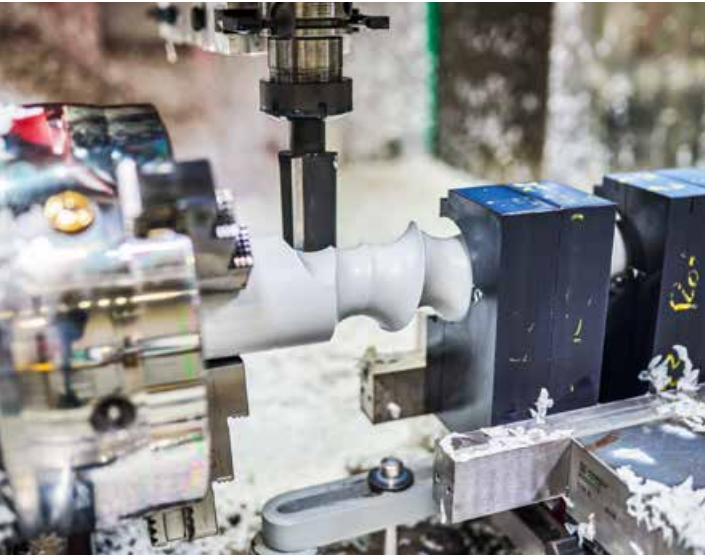


24-hour  
express service



100% Made  
in Germany

# CONVEYOR SCREWS



Tailor-made transport and conveyor screws from MURTFELDT stand as representatives for the wide variety of construction components that are individually manufactured for the needs of their users – and are distinguished not by high costs, but by exceptionally high quality.

We offer a broad spectrum of individually designed conveyor screws made of material – from separating and grouping screws to 1-into-2 strand screws or 2-into-1 strand screws up to dosing and turning grouping screws. All of them transport goods continuously, quickly, and gently, precisely adapted to your application.

## APPLICATIONS OF CONVEYOR SCREWS

The applications of screws are diverse. In almost all areas where unit goods are produced, processed, and packaged, they are an important component of the production process. Just like product turners, screws play an important role in emptying, cleaning, filling, measuring and testing, printing, and many other work steps.

## MATERIAL SCREWS COMPARED TO METAL CONSTRUCTIONS

- + Less operating noise
- + Significantly lower weight
- + Lower centrifugal forces
- + High impact and abrasion resistance
- + High notch impact toughness
- + Excellent sliding behavior
- + High surface quality, which is important for the protection of products
- + Longer service life
- + 100% reproducibility of the manufactured screws

**UP TO 2.50 M**  
length possible

**UP TO 400 MM**  
maximum outer diameter

**100 %**  
Individually engineered



MURTFELDT manufactures individually made screws with drive properties. These not only transport goods but also drive other screws thanks to external gearing. MURTFELDT produces left- and right-handed screw elements.

Thanks to a new screw milling machine, MURTFELDT is able to manufacture screws up to 2.50 meters. The six-axis machining center with travel paths  $X = 4000$  mm,  $Y = 800$  mm, and  $Z = 800$  mm also has a special axis setup for the production of double-supported parts up to a diameter of 400 mm with a length of up to 2500 mm. In addition, there is special equipment for the production of the most complex screws. The new system is connected to special CAM software, which is necessary for the manufacture of individual screws.

## DOWNLOAD DESIGN QUESTIONNAIRE

for the individual production  
of conveyor screws



Further information  
on this topic at  
[murtfeldt.de/en-GB/  
Products-Applications/  
Conveying/](https://murtfeldt.de/en-GB/Products-Applications/Conveying/)

# PRODUCT TURNERS

Our individually manufactured turners bring your products into the required orientation during the production process and achieve the highest degree of individuality and flexibility for the design of the production system. We do not produce product turners in series, but develop and design them in close coordination with you. It does not matter whether glasses, cans, cups, bottles, molded products, or folding boxes are to be turned. The format of the objects to be turned – whether bulbous, oval, square, or asymmetrical – determines the size of the turner and the design of the inner contour.

## VERSATILE APPLICATIONS

In almost all areas where unit goods are produced, processed, and packaged, they are an important component of the production process. Product turners play an important role in emptying, filling, cleaning, mixing, sealing, testing, printing, and many other work steps. Our design develops any rotation angle between 0 and 360 degrees with left- or right-hand rotation.

## UNIQUE DESIGN

MURTFELDT usually manufactures block and screw turners on 5-axis CNC machines. The technical materials and high-performance materials used for this have been known for decades for their quality. Machining is used as the production process, as this achieves particularly smooth and friction-free surfaces. These enable gentle handling of the products to be turned.



## DOWNLOAD DESIGN QUESTIONNAIRE



Further information  
on this topic at  
[murtfeldt.de/en-GB/  
Products-Applications/  
Turning/](https://murtfeldt.de/en-GB/Products-Applications/Turning/)



## FLEXIBLE MOUNTING OPTIONS

The product turners offer a wide range of variations for installation in order to integrate optimally into your production line. They can be mounted horizontally on a continuous conveyor belt or between two conveyor belts. For non-accumulable products, we recommend installation on a slope to ensure precise alignment for reliable further processing. The angles required for installation can be obtained directly from us.

## TWO-PART DESIGN

A two-part product turner offers numerous advantages over multi-part constructions – especially in areas with high requirements for hygiene and efficiency, such as the food or pharmaceutical industry. The reduced design with only two components results in significantly fewer joints and transitions where dirt or bacteria could accumulate. This makes cleaning considerably easier and ensures an overall more hygienic solution.

## PROPERTIES AND BENEFITS

### Seamless inner contours

- ⊕ Minimal back pressure
- ⊕ Optimal flow without blockages

### Hygiene + design

- ⊕ Two-component design
- ⊕ Easy cleaning thanks to removable top section
- ⊕ Hygienic stainless-steel fasteners

### Custom design

- ⊕ Tool-free, fast format change
- ⊕ Suitable for multiple product formats
- ⊕ All rotation angles and directions possible

### Custom material selection

- ⊕ Materials with special properties, e.g. food-safe
- ⊕ Highest surface quality
- ⊕ Minimal sliding friction
- ⊕ Long service life





**BETTER  
MACHINES  
FOR A BETTER  
WORLD.**



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