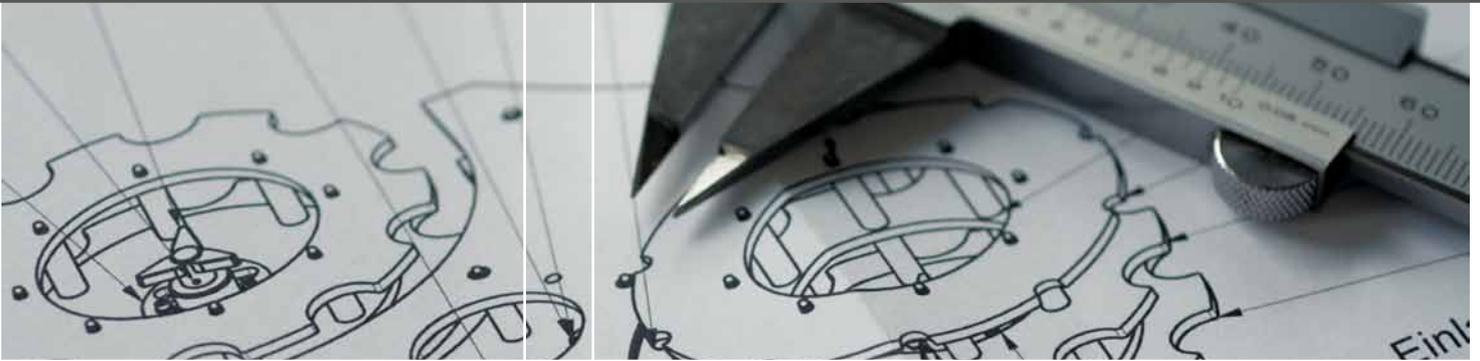


# INDIVIDUAL SOLUTIONS



# INDIVIDUAL SOLUTIONS

**Different need not be expensive**

## Leading the way

In almost 60 years of Murtfeldt's history, we have repeatedly seen that our success is a result of carefully watching the markets and their requirements. Whereas our company initially produced products for which there was a general demand, like new plastics or innovative chain tensioning systems, today we are seeing a new trend. Increasingly, companies are specialising to creating niche markets, offering custom products and using specific equipment and machinery for this. This orientation towards custom products is crucial for any business that wants to remain a successful player on the market in the long term.

## Designing individual finished parts together

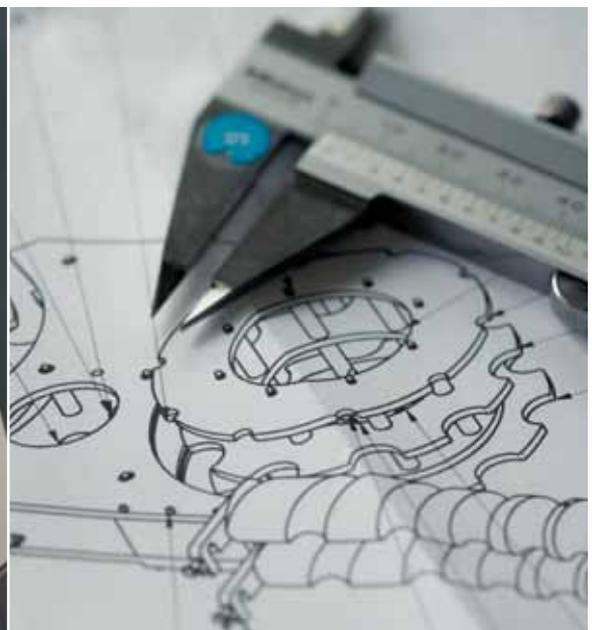
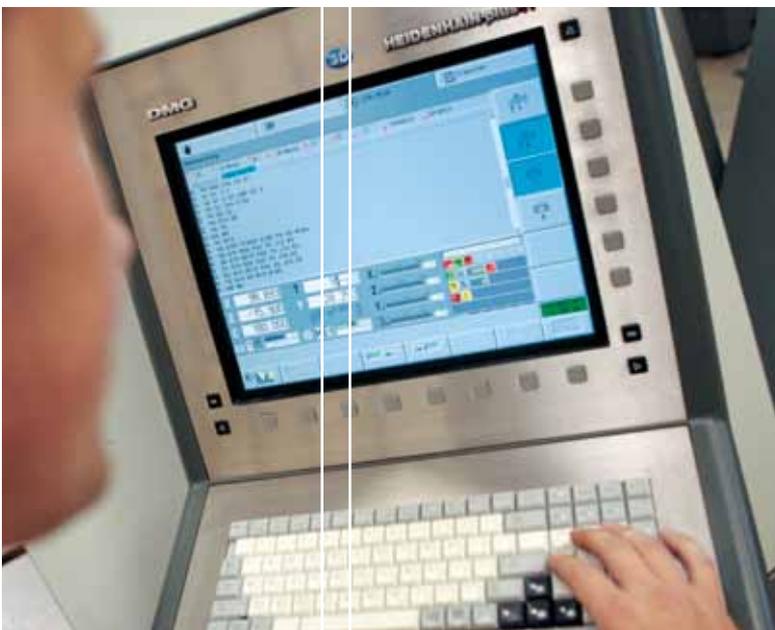
A key focus at Murtfeldt is on custom manufacture. There is an increasing demand every day for assembly components produced to drawings or digital drawing data, however, our customers do not always have drawings or data. Here, once again, we are there for you: our seven-member team of application engineers is available free for advice. Together with our specialists, you can process files at the same time via an online meeting (Netviewer) to arrive at an optimum result. If machine elements are too complex or if it is difficult to sketch the actual situation on the phone or by e-mail, then our application engineers will call in to your office to obtain the specific data.

## Innovative and sector-specific

Our products are aimed at practically any sector that uses high-quality industrial plastics, ranging from the food and packaging sectors to automation technology and medical technology. The possibilities are limited only by today's technology – not by the application.

### The benefits for you

- Parts manufactured in line with your own specification
- Even small batches can be produced at economical prices
- Parts produced from drawings or samples – which either you or we have provided
- Free of charge advice on the material selection, material-appropriate design and, above all, relating to the use of our plastics



### State-of-the-art production facilities

Whether for cutting, milling, turning, profiling, drilling, vibratory grinding, welding or tempering – our machines and systems are state-of-the-art and offer a wide range of machining options.

We can even produce the smallest batch sizes or individual parts at cost-effective prices. We focus, above all, on plastic-appropriate processing. There is therefore an ongoing dialogue at Murtfeldt between Research and Production.

### Here is an example: Traverse paths of our conventional and CNC milling cutters:

X-axis: up to 4000 mm

Y-axis: up to 2200 mm

Z-axis: up to 800 mm



### Our machinery at a glance

- 17 CNC milling stations
- 3 CNC universal milling machines
- 8 NC universal milling machines
- 7 CNC lathes
- 2 cyclic lathes
- 6 L and Z lathes
- 8 coordinate drilling machines
- 7 automatic profiling machines
- 7 table undercutters
- 4 panel dividing systems
- 5 format circular saws
- 2 four-sided planing machines
- 3 planers
- 1 rotary planer



## INDIVIDUAL SOLUTIONS – PLASTIC CONVEYOR SCREWS

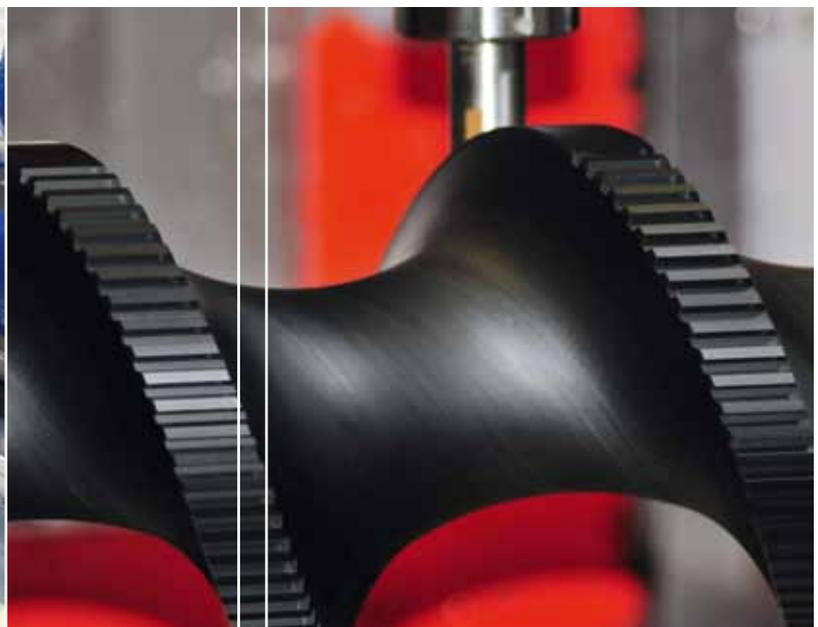
Murtfeldt tailor-made conveyor screws are used in place of many construction parts, custom-manufactured to meet their users' needs – and stand out, not on account of their high cost, but rather because of their outstanding quality.

Murtfeldt offers a wide production range of individual conveyor screws. They all transport goods constantly, quickly, and gently. Murtfeldt has now expanded its range of conveyor screws with individually manufactured screws with drive properties. In addition to conveying goods, these screws use external toothing to drive other screws.

Murtfeldt currently produces clockwise and anticlockwise screw elements with a diameter of between 18 and 300 mm. The maximum total part length is 1500 mm.

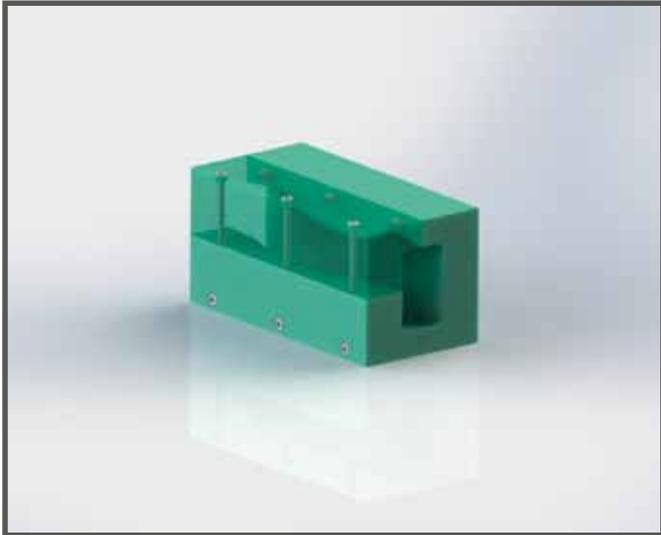
### The benefits of plastic screws in comparison with metal screws

- less operating noise
  - considerably lower weight
  - easy to clean
  - low centrifugal forces
  - high resistance to impact and abrasion
  - high impact toughness
  - excellent glide behaviour
  - high surface quality (important for protecting products)
  - long lifetime
- And do not forget: Murtfeldt Kunststoffe offers 100% reproducibility of its produced screws.



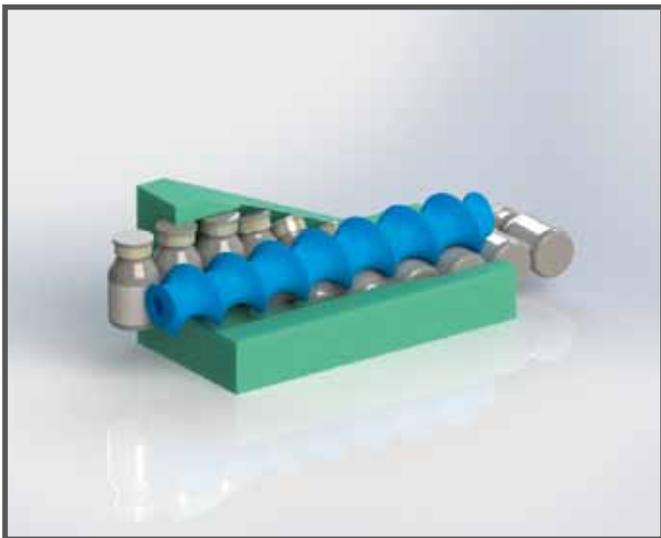


## PRODUCT TURNERS



Murtfeldt Plastics develops and produces a wide range of product turners designed to meet customers' specific individual requirements. Whether turning equipment for cans, bottles, glasses, cups, boxes or crates: there are no limits to our manufacturing expertise.

There are many reasons for choosing our product turners. It is possible to work with minimal accumulation pressure, thanks to the exceptional sliding properties of our machined plastics. Products can be conveyed ultra-quietly, thanks to joint-free guide shape and the multi-component design of our product turners makes them simple to dismantle for cleaning purposes.



Irrespective of the industry, Murtfeldt manufactures product turners with any turning angle that can be used in virtually any production and manufacturing stage:

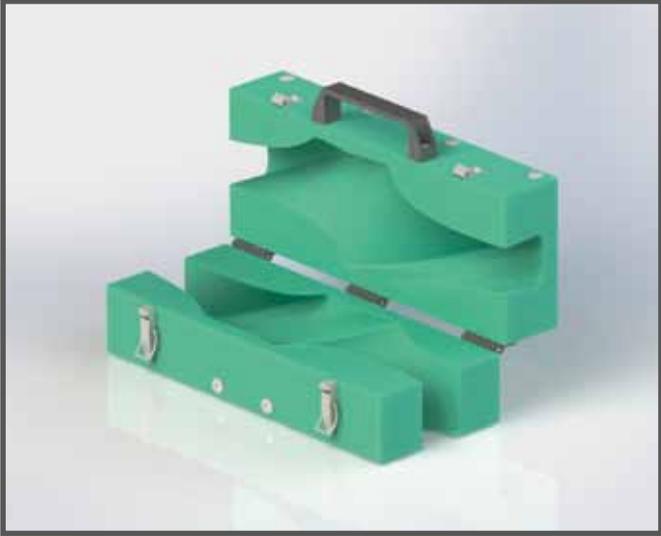
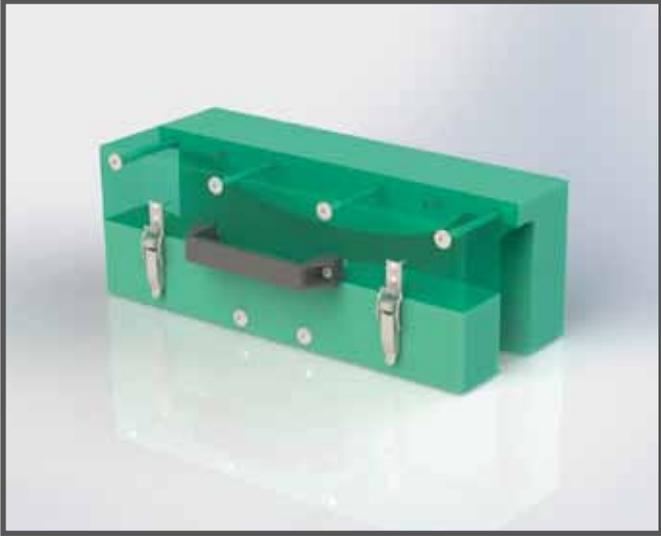
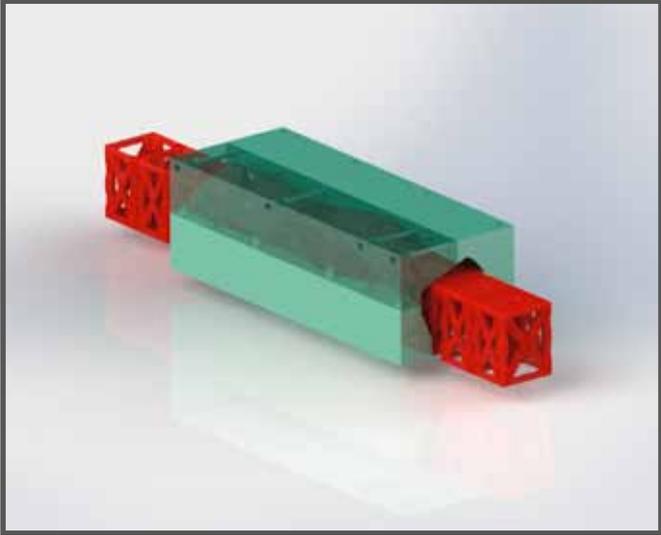
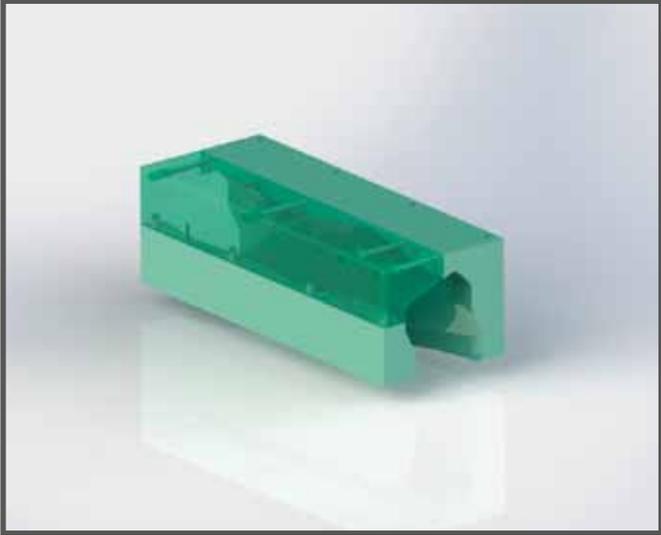
- for alignment before or after filling or packaging,
- for pre-filling cleaning
- before and after labelling



There are also extensive variations when it comes to fitting the product turners:

- on an existing conveyor
- between two conveyors
- for zero accumulation pressure fitting with an inclined angle (turning products by gravity, for instance, with sensitive products)

PRODUCT TURNERS



## FORMAT SETS

Murtfeldt offers the same assistance when it comes to the production of format sets as it does for the production of screws. Regardless of whether it is a design for a new product or for the production of spare parts – Murtfeldt will be on hand with practical help and advice right down the line.

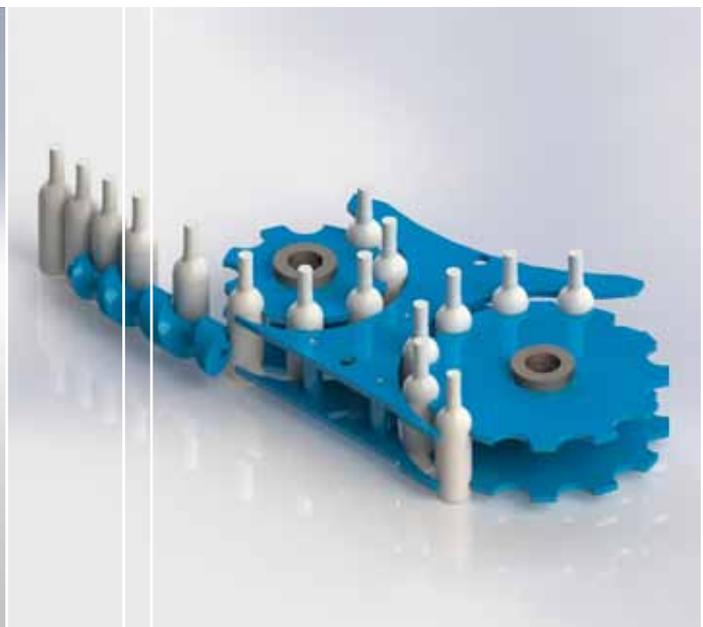
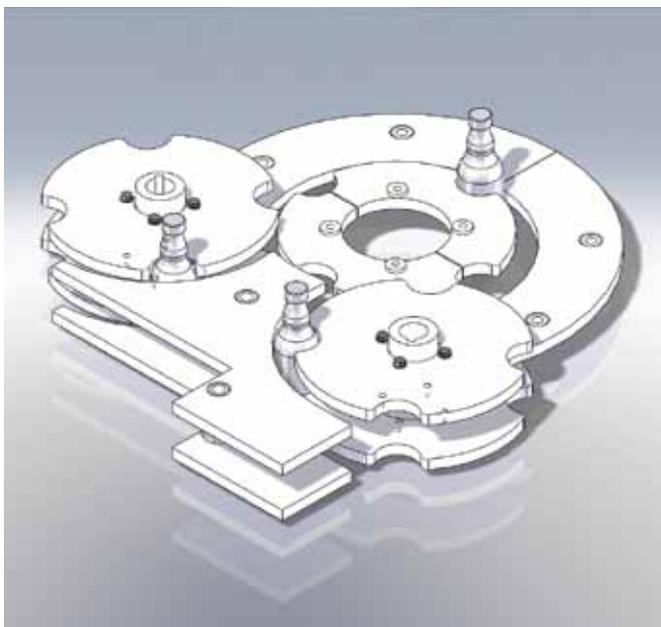
Murtfeldt manufactures the widest range of sizes of complete format sets to customers' specifications for filling systems in the food sector, beverage and pharmaceutical industries. Murtfeldt format sets consist of conveying screws, conveyor star wheels and sliding return channel components.

Conveyor screws are coordinated precisely to the respective bottle shape and proportions, as described on the previous page. Conveyor star wheels can be manufactured complete, in 2 parts or in segments for very large systems. The shape and dimensions of sliding return channel components are produced to meet the specific needs of particular projects, with replacement slide rails on request.

Whether one-off or series production – Murtfeldt develops the optimum solution even for your industry! Set us the challenge!

### 5 steps to your requisite product

1. Free, non-binding advice by our experienced application engineers – at our premises or yours, if required.
2. Acceptance of your CAD data, drawings or samples.
3. We check the templates provided, produce the construction drawing, draft a proposal and develop the best possible solution in consultation with yourselves.
4. We produce your format set, applying the highest quality standards with regard to material composition, manufacturing and inspection.
5. Delivery of your new format set following a short production phase and strict quality control.



## QUALITY MANAGEMENT

**Gaining your trust through DIN ISO 9001:2008 Quality management – and by this we do not just mean strict production-related quality assurance. At Murtfeldt, quality management means much more, including the personal responsibility of every employee in every division of the company.**

This ensures that every product manufactured by Murtfeldt, is inspected for correct construction before it is shipped. It is not just our quality assurance employees who are responsible for the properness of plastic, quantity, dimensions and tolerances. In addition, each and every workpiece undergoes dual inspection under the “two-man rule” before shipment.

In the context of self-monitoring their own work, every worker within a manufacturing centre is responsible for performing quality control as soon as he has completed an order-related process. Both he and the supervision colleague confirm with their signatures that the construction has been performed correctly.

With extremely technically sophisticated products, quality assurance employees can also perform a complete final inspection with documentation at the customer’s request. This is based on a QA system, certified year after year – most recently in 2012 – in accordance with DIN ISO 9001. This QA system guarantees our customers consistent qualified and optimised care and service – from all people and all departments.

Whether at the consultation or ordering stage, whether from internal sales or field sales, whether in the joint development of new designs with our application engineers or the handling of complaints: our employees have all been perfectly trained in accordance with DIN ISO specifications and rely on proven procedures in terms of their care. Ongoing training courses keep them up to date and yet there is always room for personal touches in our dealings with each other. Our QA team therefore always takes into account customer requirements in their process descriptions. For your behalf and on our behalf.

