

COMPANY PORTFOLIO



PROTECTIVE
SAFETY
COMPONENTS



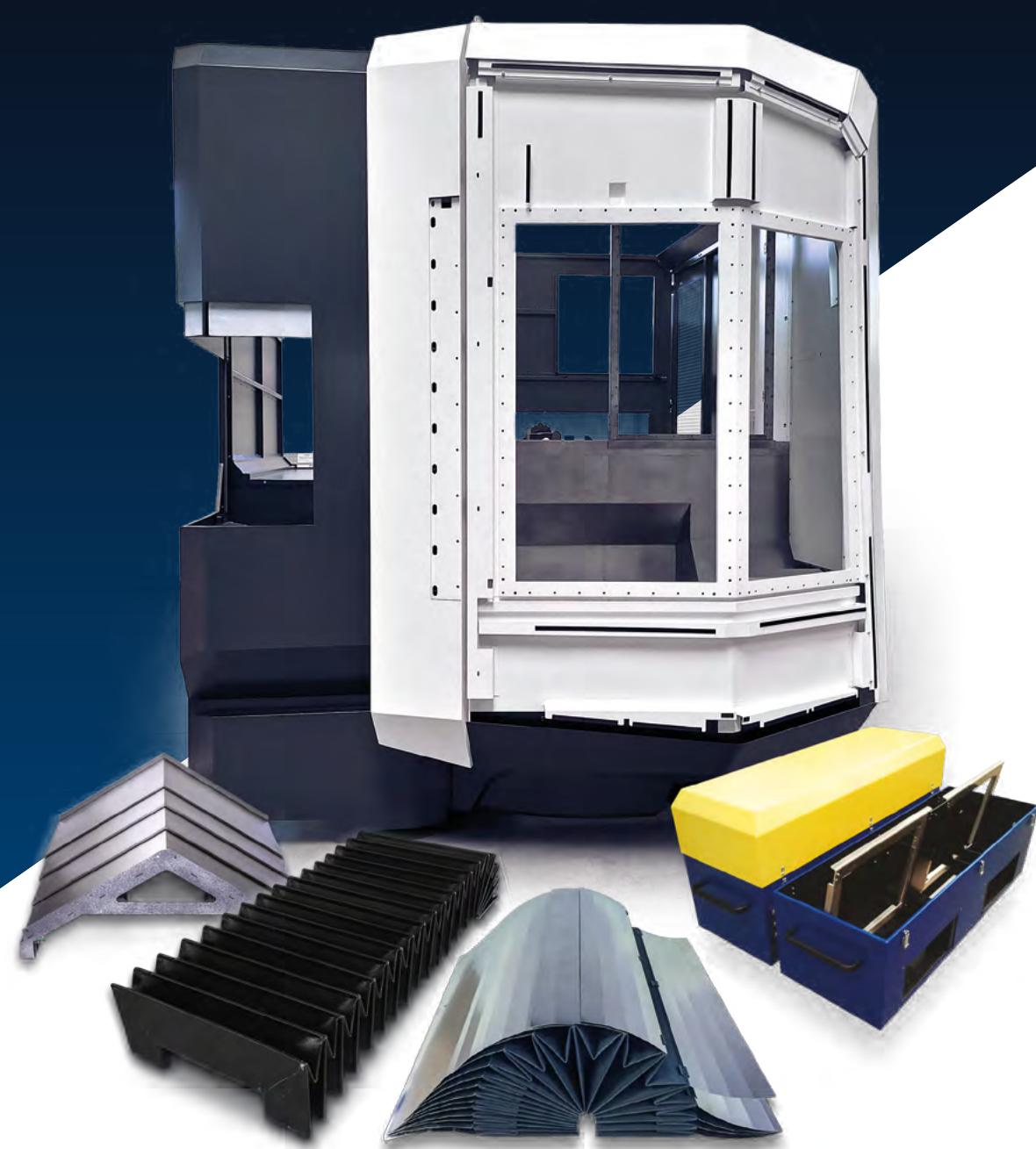
CUSTOM
ENGINEERING
PRODUCTION



OWN
PRODUCTS



ASSEMBLY
AND SERVICE



HESTEGO

member of **ITS Group**

ABOUT THE COMPANY



Portfolio

- Telescopic Covers
- External Machine and Equipment Enclosures
- Folded Protective Bellows
- Sheet Metal Components
- Mechanical Parts and Assembly Units
- Machine Guideway Wipers
- Safety Protective Glass

Custom Production

- Sheet Metal Cutting on CNC Machines
- Metal Fabrication
- Sheet Metal Bending
- Welding
- Powder Coating

Services

- Own Design and Development of Machine Enclosures
- Technical Feasibility Studies
- Final Assembly of Parts
- On-Site Installation of Enclosures

Areas of Cooperation

- Engineering
- Waste Management
- Electrical Industry
- Woodworking Industry
- Automotive
- Energy
- 3D Printing and Printing Industry

Member of **ITS Group**
Legal Form: **Joint Stock Company**
Founded: **1995**
Number of Employees: **250**
Production Area: **12 550 m²**
Company Headquarters: **Vyškov, CZ**
Branch Office: **Stuttgart, DE**



Certifications

- ISO 9001
- ISO 14001
- ISO 3834-2
- ISO 15085-2

TECHNOLOGIES

AUTOMATION

Sheet Cutting on CNC Laser and Punching Centers

- Advanced Punching, Forming, and Laser Cutting Technology (Combi and Fiber Laser)
- Punching Force: 300 kN
- Maximum Formats: $4,000 \times 2,000$ mm and $4,000 \times 1,500$ mm



Sheet Metal Bending on Press Brakes

- Pressing force up to 2,400 kN
- Bending length up to 4,300 mm



Robotic Bending

- Maximum Part Weight: 7 kg
- Maximum Part Size: 300×600 mm
- Precision Positioning



Robotic Welding

- Maximum Part Size: $2,000 \times 600 \times 400$ mm
- Maximum Weldment Weight: 200 kg
- Welding Methods: MIG, MAG
- Materials Welded: Steel, Stainless Steel, Aluminum



Robotic Grinding

- Maximum Part Size: $2,000 \times 600 \times 400$ mm
- Maximum Weight: 200 kg

Welding and Metal Fabrication

- Manual Welding Technologies: MIG, MAG, TIG
- Spot Welding
- Maximum Welded Part Size: $4,000 \times 2,000$ mm
- Maximum Welded Part Weight: 1,500 kg

Edge and Surface Finishing

- Deburring - Maximum Width: 1,480 mm
- Robotic Grinding - Maximum Size: $2,000 \times 1,000 \times 750$ mm
- Machine Grinding - Maximum Width: 1,250 mm
- Manual Grinding

Powder Coating Line

- Automatic Continuous Line for Serial Coating
- 5-Stage Chemical Pre-Treatment - Nanotechnology
- 2 Coating Booths
- Single-Layer and Double-Layer Coating (including Zinc Primer Option)
- Automatic Guns Controlled by Optical Gate
- Coated Materials: Steel, Aluminum, and Galvanized Steel
- Maximum Coated Part Size: $3,600 \times 1,700 \times 700$ mm (L x H x W)
- Maximum Weight: 130 kg



TELESCOPIC COVERS FOR MACHINE TOOLS AND GRINDING MACHINES

Telescopic covers are a traditional means of covering guideways, spindles, shafts, columns and other sensitive machine tool parts. Their application:

- Protects surfaces against chips and cutting fluids
- Prevents mechanical damage to surfaces
- Prolongs machine service life.

By focusing on the continuous development of new technologies, we are also reducing the energy required to power our machine tools and are therefore contributing to the reduction of CO2 emissions.

Benefits of HESTEGO telescopic covers:

- Sliding elements with low passive resistance
- Roller elements for high load bearing and speed of motion
- Wiping systems with high blade flexibility and easy replacement
- Patented impact absorption
- High quality steel with maximum flatness
- Flexible application for all working positions.

Casing:

Machine bed



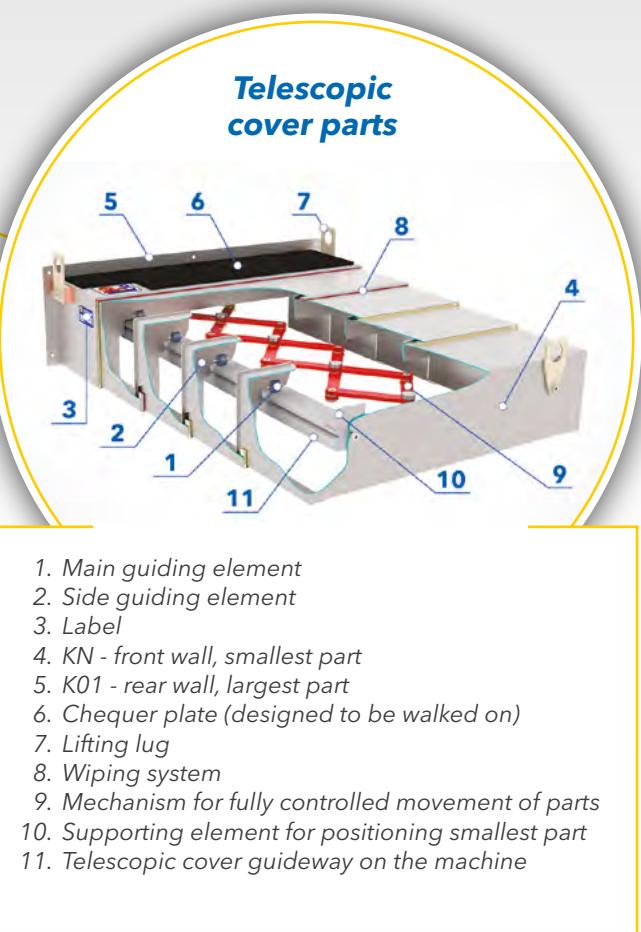
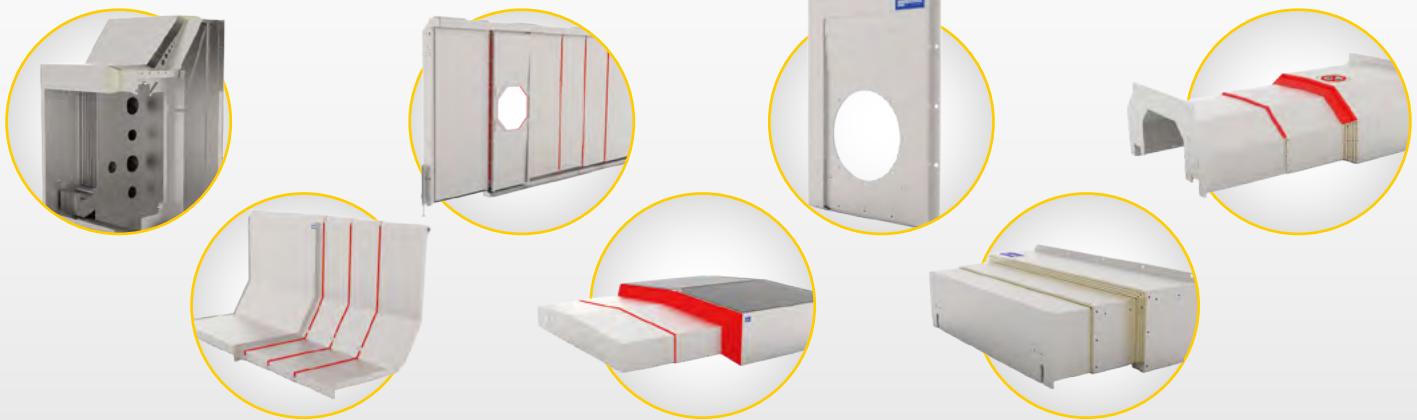
Machine stand

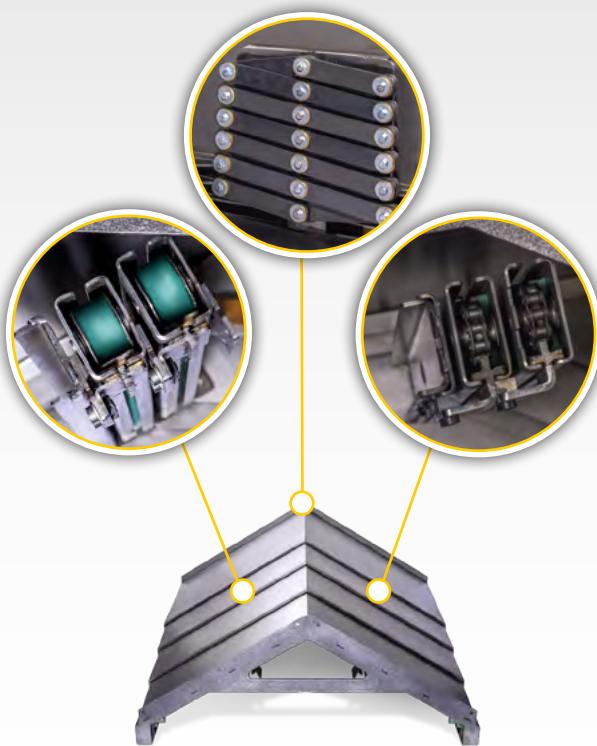


Machine cross member

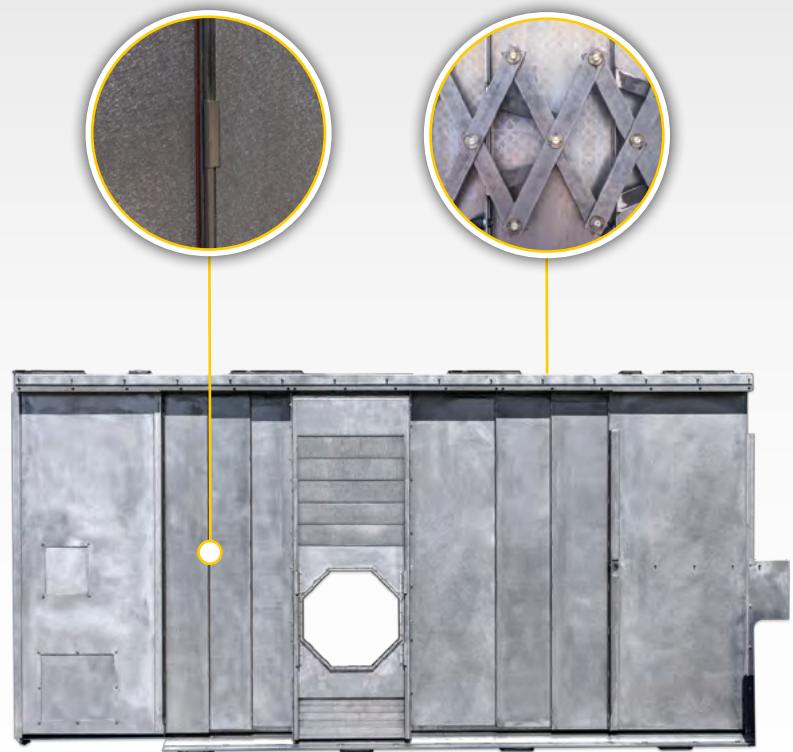


Basic shapes of telescopic covers





Telescopic covers with synchronized (constrained) movement



Special versions of telescopic covers

Before a telescopic cover is shipped to the customer, it is extensively tested using a specially designed test station.

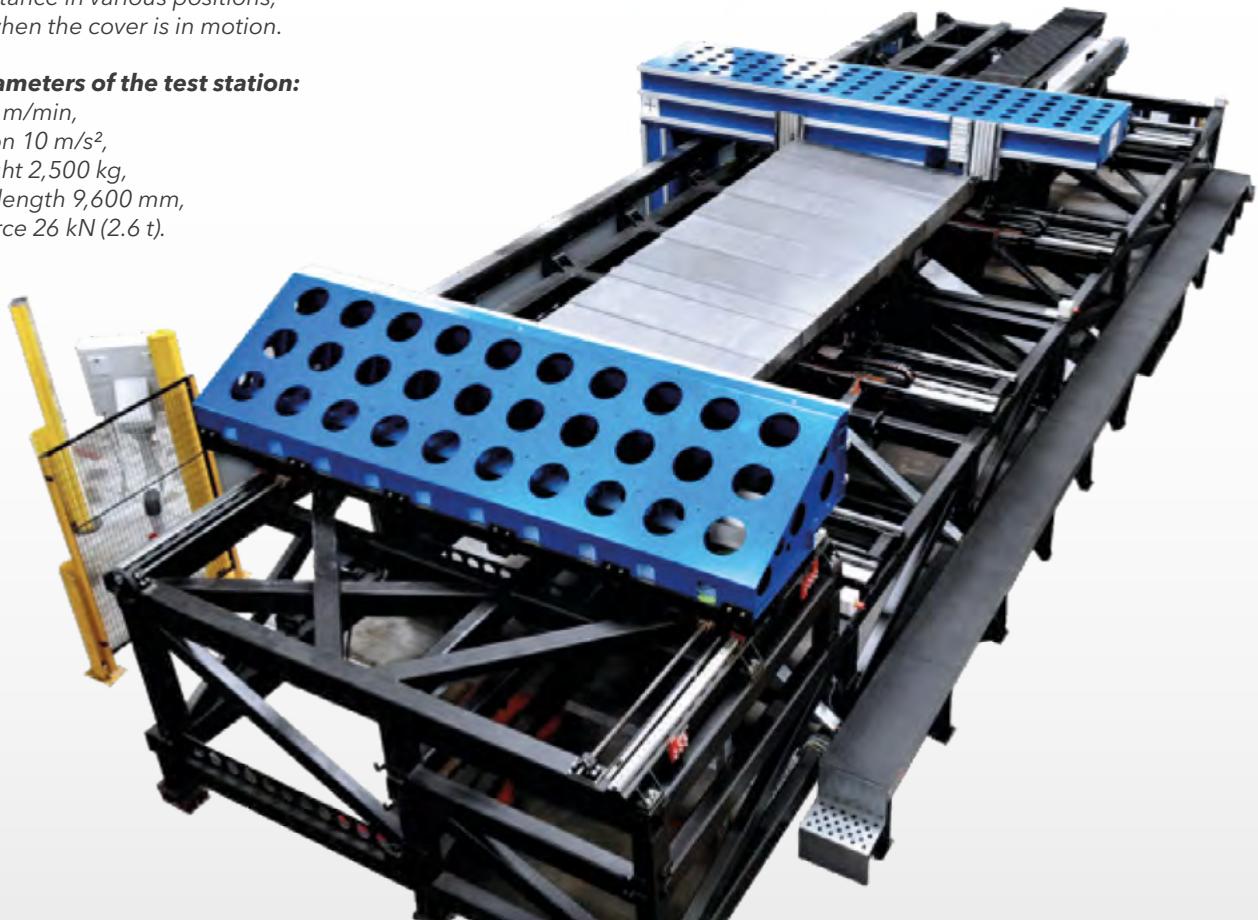
Covers that need to operate in different positions can be tested. The following are tested: smoothness of cover operation; required Lmin and Lmax parameters; and effectiveness of shock absorption

The following data can be incorporated in the measurement report:

- Cover resistance in various positions,
- Vibration when the cover is in motion.

Maximum parameters of the test station:

- Speed 100 m/min,
- Acceleration 10 m/s²,
- Cover weight 2,500 kg,
- Extended length 9,600 mm,
- Traction force 26 kN (2.6 t).



PROTECTIVE BELLOWS

Bellow types



stitched



welded



with moving cover plates



with hard cover plates

SHAPES OF BELLOWS



Practical use of bellows



Lifting equipment



Machine tools

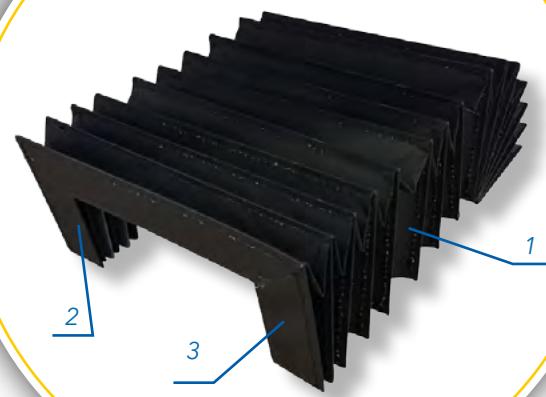


Lasers



Measuring equipment

Bellows



1. Fabric with protective layer
2. PVC reinforcement frame with sliding elements
3. End flanges for attachment to the machine

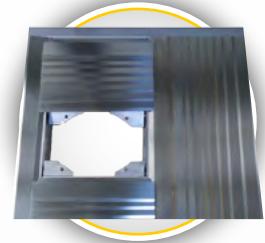
Fabric parameters:

- carrier material: PES (polyester - Yantai, Kevlar, Aramid),
- coating: PU (polyurethane - PTFE (Teflon) or PVC),
- material thickness: 0.22 - 0.4 mm,
- temperature stability: -20 to +120°C.

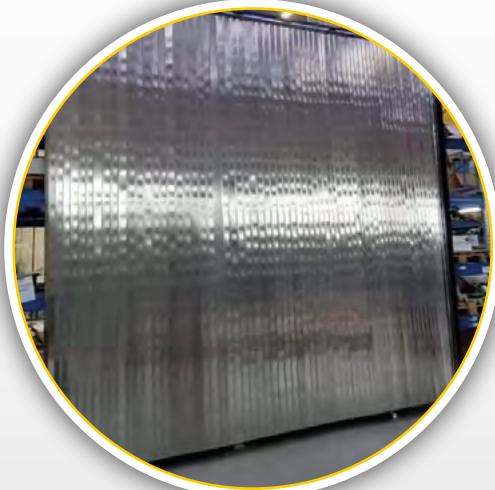
Atypical covers

XY modules

- maximum dimension 5,000 x 2,000 mm



Bellows systems (screens)



WIPING SYSTEMS

Wiping systems are used for cleaning the guide surfaces of machine tools. Their use helps to maintain accuracy and increase the service life of the guide surfaces. Depending on the type, they can either be screwed, riveted, glued, or spot-welded onto a supporting profile.

- continuous development to reduce passive resistance
- application of new materials
- applications for wet and dry operations
- wide range of profiles and applications
- manufactured in-house

Reduced energy consumption:

- New wiper material based on a thermoplastic polyurethane with modifiers which reduces the passive resistance of the wiper itself by 75% in dry machining, while maintaining all its key properties, such as abrasion resistance and toughness.

Precise surface wipers

■ S type

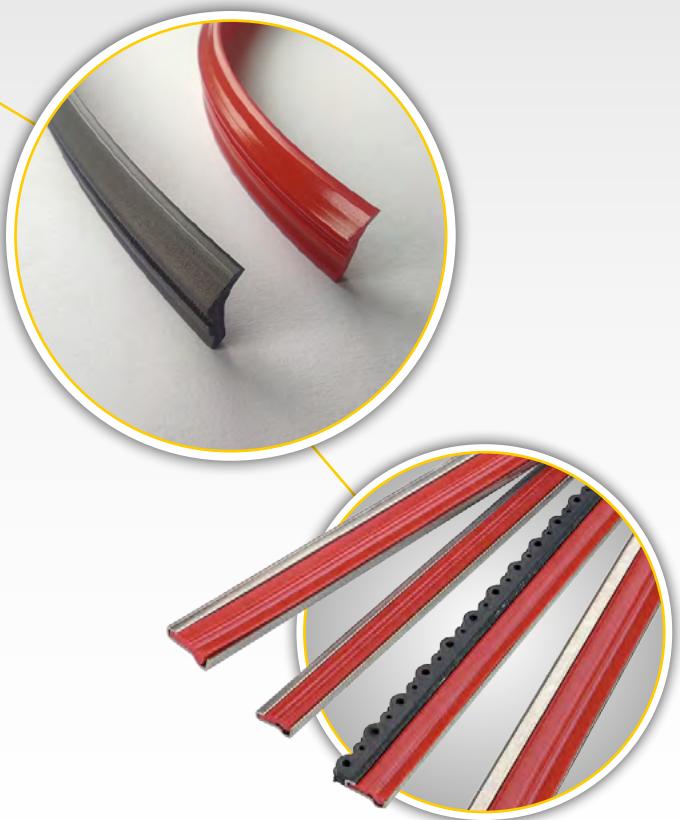
Heavy duty wiper in a stainless-steel profile. PU85 wiping profile. Suitable for wiping large volumes of chips and liquid on precise surfaces. Blade stroke 1 mm. Can be fitted with a pre-wiper of flexible stainless steel.

■ E type

Easy Click wiper for standard applications. PU80 wiping profile with screw holes mounted to a steel profile. Particularly suitable for guideway surfaces under telescopic covers. Blade stroke up to 3 mm. Follows the surface to be wiped with precision.

■ Cast wipers

Characterized by their high precision. Made from NBR and mounted to a steel profile. Mainly designed for serial production.



Wipers for standard surfaces of telescopic covers

■ DSP8

Designed for use with small telescopic covers. Features stainless-steel support profile for welding. The SLP8 wiping profile made from PU85 material is replaceable. Available in a version with integrated shock absorption.

■ DSP12

Designed for use with medium-sized telescopic covers. Features stainless-steel support profile for welding. The SLP12 wiping profile made from PU85 material is replaceable.

■ DV12

Designed for use with large telescopic covers. Features a stainless-steel support profile for welding. The SLV12 wiping profile made from PU85 material is replaceable. Big blade stroke.

■ LP8

Designed for use with small and medium-sized telescopic covers. Features a drawn support profile for welding. The ST1 wiping profile with optimized geometry and reduced passive resistance is replaceable.

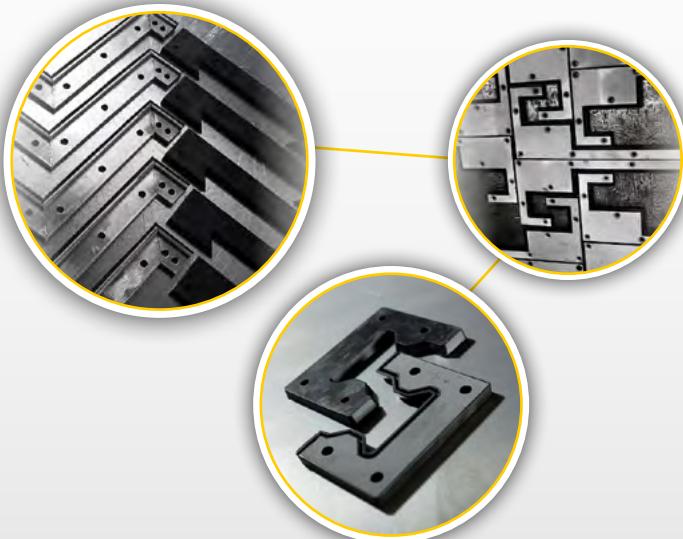
Wipers for versatile use

■ L type wipers

Made from NBR. Features a vulcanized wiping profile mounted to a 500 mm long steel support profile. Types: L12,5, L14, L18, L25, P01, P02, P03.

■ FB-D1 wiper

Features Viton wiping material mounted to a steel support profile by vulcanization. Viton is highly resistant to wear and is protected from chips by a stainless-steel pre-wiper.



SIGHT WINDOWS

Sight windows and spin windows enable an unobstructed view of the machining area and the production process.

It is recommended to use sight windows to protect machine operators. If machine tools are only equipped with simple polycarbonate glass, it quickly becomes brittle due to the permanent contact with coolants, thereby losing its retention power. For this reason, HESTEGO uses a combination of safety glass and polycarbonate for the manufacture of its sight windows.



Based on the recommendations of VDW, sight windows should be replaced every 5 years.



Impact tests

Our sight windows have been designed to comply with the standards for machine tools. Due to their encapsulation and sealing, the sight windows are permanently and effectively protected against external influences.

The retention capacity is tested in accordance with the aforementioned standards. This involves bombarding the sight window with projectiles weighing up to 2.5 kg, travelling at a speed of up to 80 m/s before impact, and with a force of up to 8,000 Nm.

We supply sight windows for machine tools as composite safety panels made from a combination of polycarbonate and safety glass.

SPINVISTA sight windows

When machine tools are in operation, the view of the interior can be restricted due to flying chips and cooling lubricant splashing around.

SPINVISTA sight windows rotate at such a high speed that liquids and debris are kept away from the disc. The result is a clear view of the production process without the risk of injury to the operator.

The sight windows are designed for all types of CNC machines and machining centres, both for new equipment and for retrofitting. They are suitable for high-speed milling and grinding machines and, as a single system, for lathes, too.

SPINVISTA sight windows:

- **SPINVISTA EVO** - outer diameter 253 mm and visible area approx. 284 cm²
- **SPINVISTA NEO** - outer diameter 290 mm and visible area approx. 430 cm²



Various installation options

SPINVISTA sight windows can be mounted to both the (existing) sight glass and sliding doors of a machine tool.

ROLLING COVERS

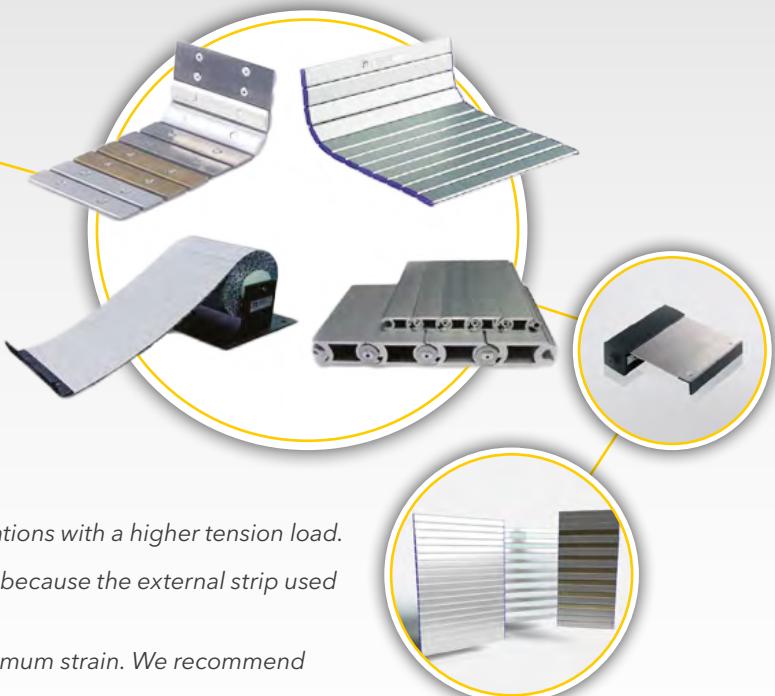
Rolling covers can be used as a replacement for folded bellows where lack of space does not allow for another technical solution and where perfect sealing is not required.

Design

- Without protective case
- With protective case

Strip material used

- regular steel
- stainless steel
- plastic



Rolling cover drives

- **FM-drives** - they are used with steel strips mostly in applications with a higher tension load.
- **SA-drives** - they are supplied only with standard steel strip because the external strip used for covering also serves as spring drive.
- **TF-drives** - they are used for high running speeds with minimum strain. We recommend them mostly for plastic strips.

SECTIONAL SCREENS

Sectional screens are used for frontal protection against small amounts of chips and coolant. Due to their simplicity they offer good mobility, easy assembly, and do not require much space.

- **FLEXPRO Link screen**
- **FLEXSTAR screen**
- **FLEXSTAR-Windows**
- **FLEXWALK**



TELESCOPIC SPRINGS

These protect spindles from contamination that can affect the dynamics of running movements, therefore enabling efficient and exact positioning

Mounting position

- Horizontal
- Vertical

Inner diameter 15 - 160 mm

Extension length up to 4,500 mm for vertical types

Material

- Steel or stainless steel

THE PERFECT CLAMPING SYSTEM FOR EVERY APPLICATION

We supply the highest performance and torque pneumatic clamping or braking systems for a wide range of applications.

Both axles and moving bodies can be clamped on the linear guideway. The clamping system provides a high clamping force and improves safety. If the compressed air system fails, the axle or load is immediately fixed into position. The manually operated clamp is ideal for fixing machine parts for transport or rebuilding purposes.



RotoClamp

RotoClamp is a compact pneumatic clamping system for rotary applications. The high clamping force outperforms hydraulic systems in terms of efficiency and efficacy, with significantly lower system costs. RotoClamp is fail-safe because in the event of tire failure, the shaft is clamped immediately and with great force.



PClamp

PClamp is a modular system for the safe clamping of bar loads and pneumatic cylinders. It can be adapted to standard systems such as pneumatic cylinders from leading manufacturers (e.g. SMC, Festo) or to customised solutions.



LinClamp

LinClamps are used wherever moving masses need to be held or braked in the axial direction. This clamping and braking system can be used on almost all commercially available linear guides and elements and are easy to install.



MClamp

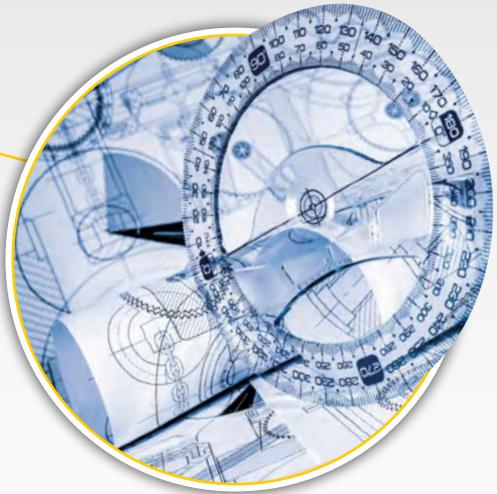
Clamps are often used only as safety devices for machine tools. Hydraulic, pneumatic or electric models would have to be completely oversized for this purpose. Our engineers have therefore designed a low-cost manual clamping system for simple rail clamping - MClamp.

R&D / INSTALLATION / SERVICING

Our R&D department takes a holistic view of product design.

Every product starts with an idea, either from a customer, marketing specialist or designer.

When taking up an idea, it is our customers that define the requirements and inform the direction of product development. From start to finish, the ensuing process is a holistic one that also involves designers, engineers and technical experts. Together, their combined efforts help us to create innovative and successful products that are technically sound and completely functional.



While endeavouring to satisfy the ever changing needs of our customers, we also constantly bear in mind sustainability and environmental considerations, as based on our company's well-established policy on corporate social responsibility.

It is these factors that are the keys to our success on the market.



INSTALLATION / ELECTRICAL INSTALLATION

We also offer electrical installations of complete products. We can install required components into an existing product, perform basic electrical testing and load software. Alternatively, we can design customised electrical solutions according to a customer's needs, including testing.

SERVICING/REPAIR OF TELESCOPIC COVERS

Covers protect your machine and its operator. We are happy to provide technical assistance in the maintenance of internal cover systems for machine tools and devices.

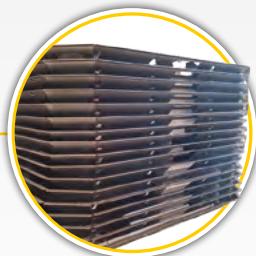
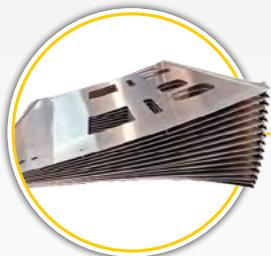
We provide a fast, high-quality service whenever you need to quickly resolve a machine casing defect anywhere in Europe. Our servicemen are always at the ready and will deal with the problem in the shortest time possible. They are fully equipped to handle such demanding situations.



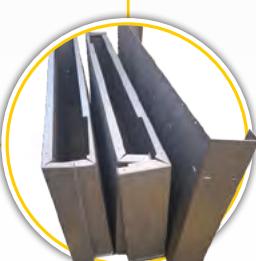
- Fully equipped service vans direct to your door
- Inspection of the technical condition and replacement of worn out cover components and wipers
- Complete repairs of covers (also from other manufacturers)
- "FAST TRACK" repairs and servicing of telescopic covers within short deadlines
- Measurement of the cover directly on the machine and making of new telescopic cover if repair is not possible
- Installation of covers
- Repairs of other manufacturer's covers.

CUSTOM PRODUCTION

CUT AND BENT PARTS



WELDED PARTS



COMPLETE WELDMENTS



PAINTED PARTS



ASSEMBLED UNITS

