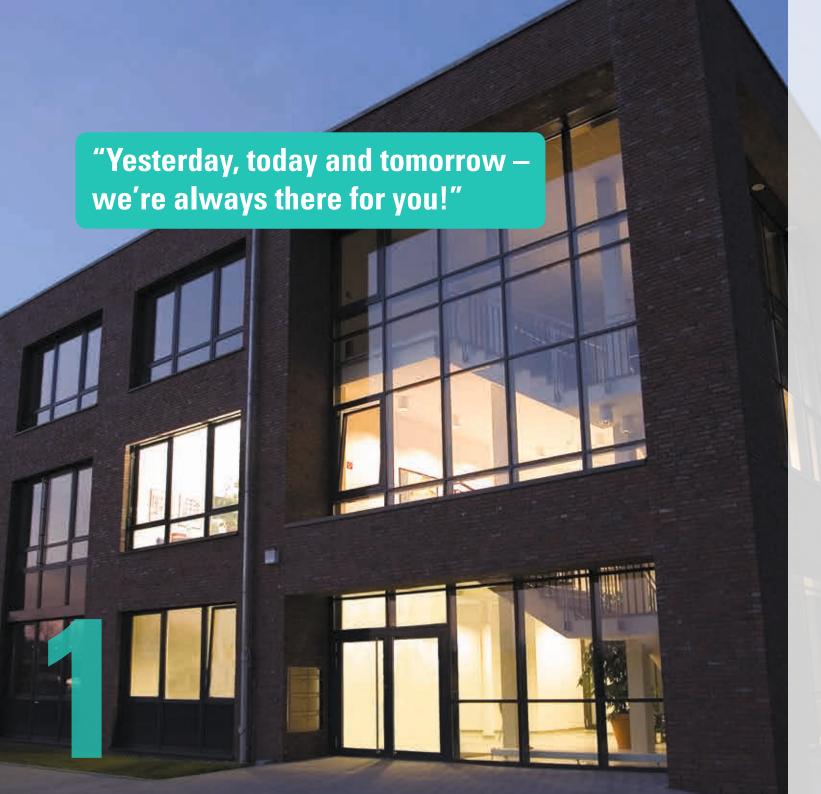








MOVING THE FUTURE



1973

Indunorm GmbH founded

1985

Started distributing THK products

1997

Started developing and manufacturing linear axes and axis systems

2001

Subsidiary Indunorm Fertigungstechnik founded

2004

Development of Indumatik® linear axis robots for loading components at machining centres

2005

Construction of the linear technology logistics centre in Duisburg to supply the European market faster

2012

Stuttgart branch founded

2016

Once again named "Top Sales Performer" and largest European distributor by THK.

Indumatik® ToolChanger developed to expand tool range for milling machines

2018

New Indumatik location in Duisburg

INDUNORM CONTINUES TO GROW

For over 40 years, Indunorm Bewegungstechnik has been a leading company in the development, production and sales of linear movement guides and handling systems.

As THK's largest distributor in Europe, we have over 140 employees at three locations to support our customers with linear movement technology products. We supply the European market from our state-of-the-art logistics centre in Duisburg.

Our Stuttgart location serves as an engineering partner and linear technology specialist for Southern Germany.

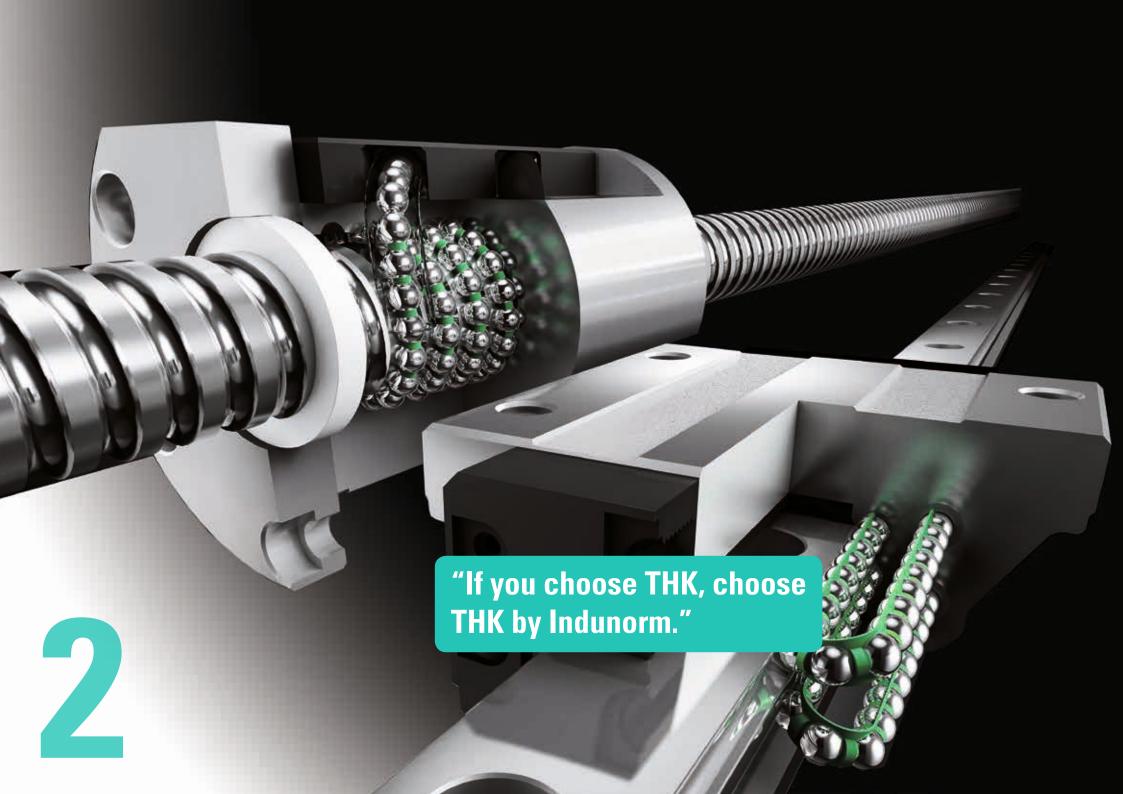
Fast delivery times are standard thanks to our high stock level.



Thomas Droste, Klaus-Dieter Matthes, Dietmar H. Heim (Managing Director)



Our Team in Duisburg



THK BY INDUNORM

STRONG PARTNER, STRONG PRODUCTS

As Europe's largest distributor of THK products, Indunorm is a capable and reliable partner, representing quality and availability in the field of THK linear technology.

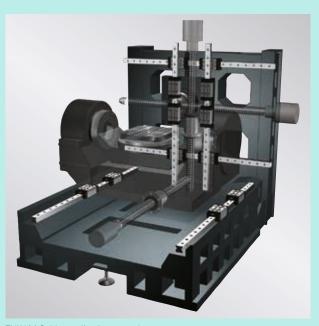
High stock capacities, fast delivery times and the adaptation of products to suit your needs are just some of our strengths when it comes to the distribution of THK quality products!

BENEFITS OF INDUNORM

- High stock capacities
- Short delivery times
- Customised adaptations



An excerpt of our products



THK LM Guide application example

THK LM GUIDE

Our ball chain technology ensures outstanding running properties, a long service life and long lubrication cycles.

THK COMPACT BALL SPLINE

Torsion-proof shaft guides are innovative linear movement guide systems. The spline nut transfers torque and can simultaneously carry out linear movements.

THK BALL SCREW

Interior balls ensure highly efficient movements. This reduces the drive torque by two thirds compared to trapezoidal spindles.







THK Ball Screw

THK CROSS-ROLLER RING SERIES

This roller bearing offers high rotational accuracy and can handle high loads in any direction.

THK CAGED ROLLER LM GUIDE

The ultra-rigid caged roller LM guide with smooth running properties enables maintenance-free operation. With the rollers as the rolling elements and the use of the caged roller, a very rigid guide system with outstanding running properties is ensured without rollers tilting. The mounting surfaces must thereby be extremely precisely machined.

CUSTOMISATIONS

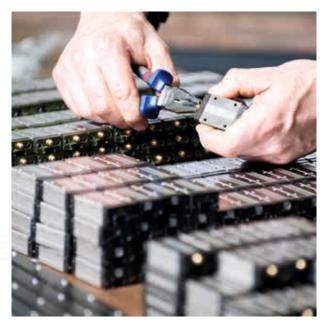
- Specially-machined slide and carriage, e.g. fitted bore
- Pretension adjustment by exchanging balls for all sizes
- Special lubrication, e.g. food grade lubricant
- Coated carriage and slide surfaces
- Customisation according to customer requirements



THK Cross-Roller Ring Series



THK Caged Roller LM Guide



Grease Fitting Installation





SAMICK BALL BUSHINGS

As the European distributor for Samick Precision, we supply the entire product range of ball bushings, housing units, shafts and accessories. Our ball bushings and shafts are also available in corrosion-resistant versions. At our plant in Duisburg, highly-qualified specialists work on implementing your custom end machining.

ROLLER LM GUIDES

When it comes to light loads and smooth movement, or heavy loads and harsh environmental conditions — with roller linear movement guide systems, you as the designer will be able to reach your goal together with your customers. Our roller LM guides provide our customers with product ranges suitable for many applications, pushing recirculating ball systems to their limits.

TELESCOPIC GUIDES

We added robust, flexurally-rigid telescopic slides to our product portfolio. The comprehensive range is available in various lengths and a variety of loads up to 2000 kg.

The guides are extremely smooth running and can be used very flexibly.



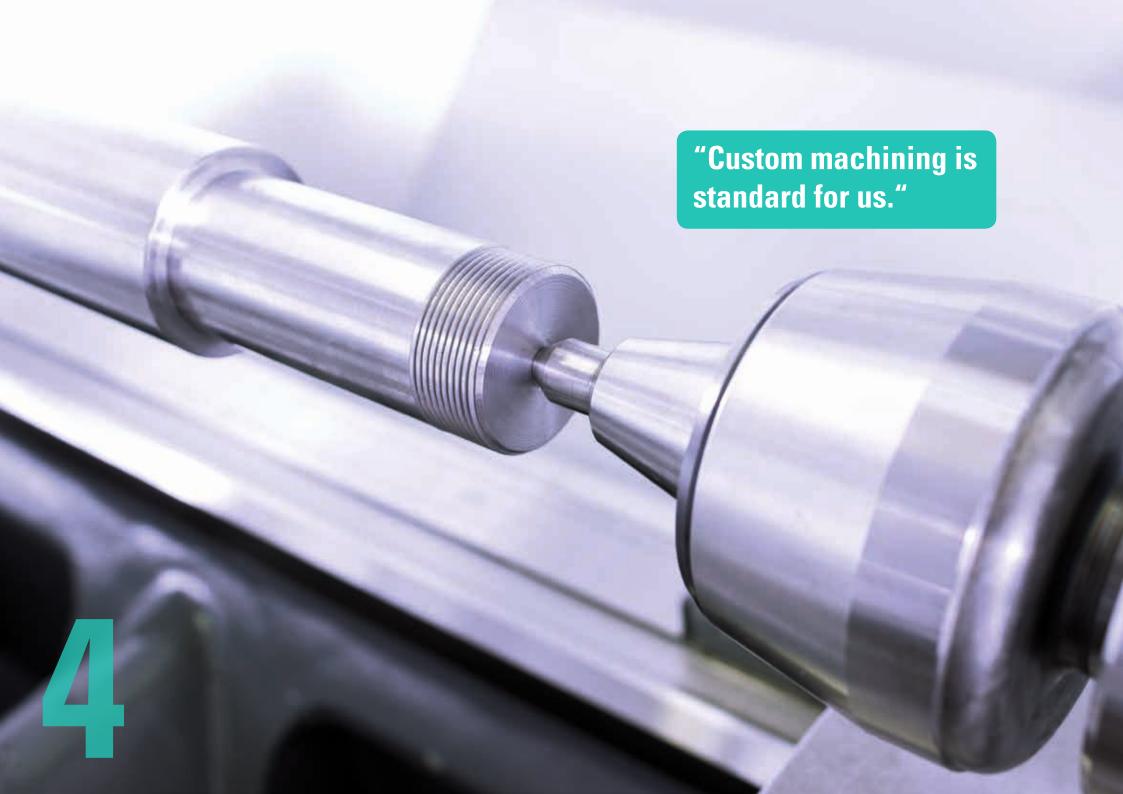
Ball Bushings



Roller LM Guide Systems



Telescopic Guides





BALL SCREWS

Our ball screws stand out due to their high positioning accuracy and long service life. A high inventory of DIN ball screws guarantees fast delivery times. Our flexible manufacturing can also quickly implement custom end machining from drawings.

TRAPEZOIDAL SCREW DRIVES

Trapezoidal screw drives are a low-cost alternative to ball screws. Since trapezoidal screw drives are self-locking, they rarely need to be secured (e.g. brake). Trapezoidal screw drives optimally tailored to your needs with special grades or special nut dimensions complete our flexible product range.

CUSTOMISATION

- Custom end machining implemented quickly
- Fast delivery times for standard versions



Ball Screws



Trapezoidal Screw Drives



Pretension Adjustment



LINEAR AXES BY INDUNORM

INNOVATION WITH SYSTEM

Drawing on our years of experience in linear technology, our engineers have developed a comprehensive product range of linear axes and systems. Apart from individual components, we now also supply linear axis systems and custom assemblies.

ON-SITE CONSULTATION

Our engineers will gladly provide an on-site consultation and develop innovative solutions for your specific situation together with you.

IN-HOUSE FABRICATION

We produce components at our production facility using state of the art machines which are in part fully automated.

NEW STANDARDS

Our developments set standards in linear movement technology. An optimised price-performance ratio along with a high-quality standard is very important to us.



Area Gantry



Multi-Axis System

GROUND CARRIAGE

BFW 800

- Up to 70 m/min
- Compact design
- Extremely low overall height
- Modular length extension
- With energy chain guide
- With integrated lubrication
- Sturdy floor anchor

3-AXIS SYSTEM FOR LASER EQUIPMENT

- High rigidity
- Long-lasting accuracy
- Exact dimensional stability for adjacent construction
- Basic structure made from hard stone

LINEAR TABLE/

CROSS TABLE

- Steel linear table
- Different motor connections available (toothed belt transmission, direct flange)
- Spindle drive
- High repeat accuracy
- Axial rigidity



Ground Carriage BFW 800



3-Axis System for Laser Machine



Linear Table/Cross Table

CLOSED

LINEAR AXIS

- Metal sandwich conveyor
- THK inside
- Spindle drive
- Sandwich conveyor makes it suitable for unclean environments

UNLOADING SYSTEM FOR PLASTICS MACHINE

- Highly dynamic with small axial dimensions
- Sheet metal construction to optimise weight
- Customised adaptations implemented by our engineers

COMPONENT LIFT MAGAZINE FOR ROBOT LOADING

- Compact design
- Self-locking trapezoidal threaded spindle
- Very little machining
- Good price-performance ratio



Linear Axis with Metal Sandwich Conveyor



Unloading System



Component Lift Magazine





CLOSED LINEAR AXES

WITH BALL SCREW

The linear axes with ball screw stand out due to high positioning accuracy and repeat accuracy, and a high-power transmission. The ball screw and the linear movement are protected by a sandwich conveyor. The linear axes are therefore enclosed and can be used in a variety of areas, including dirty environments.

CLOSED LINEAR AXES WITH GEARED BELT DRIVE

The closed geared belt axes are designed for high travel speeds. The sandwich conveyor allows the linear axes to be used outside closed machines and in dirty environments. Slotted versions allow lifting significantly higher than 6 metres. The wide versions with parallel linear movement guides are also suitable for building linear portals.

OPEN LINEAR AXES FCONOMIC

Wherever linear axes are used in machine rooms and closed function cells, the Economic open geared belt axes are a good choice. The cost-effective linear axes have flexurally and torsionally rigid aluminium profiles. The exterior linear movement guides are generously sized. They're designed for fast handling and positioning tasks.



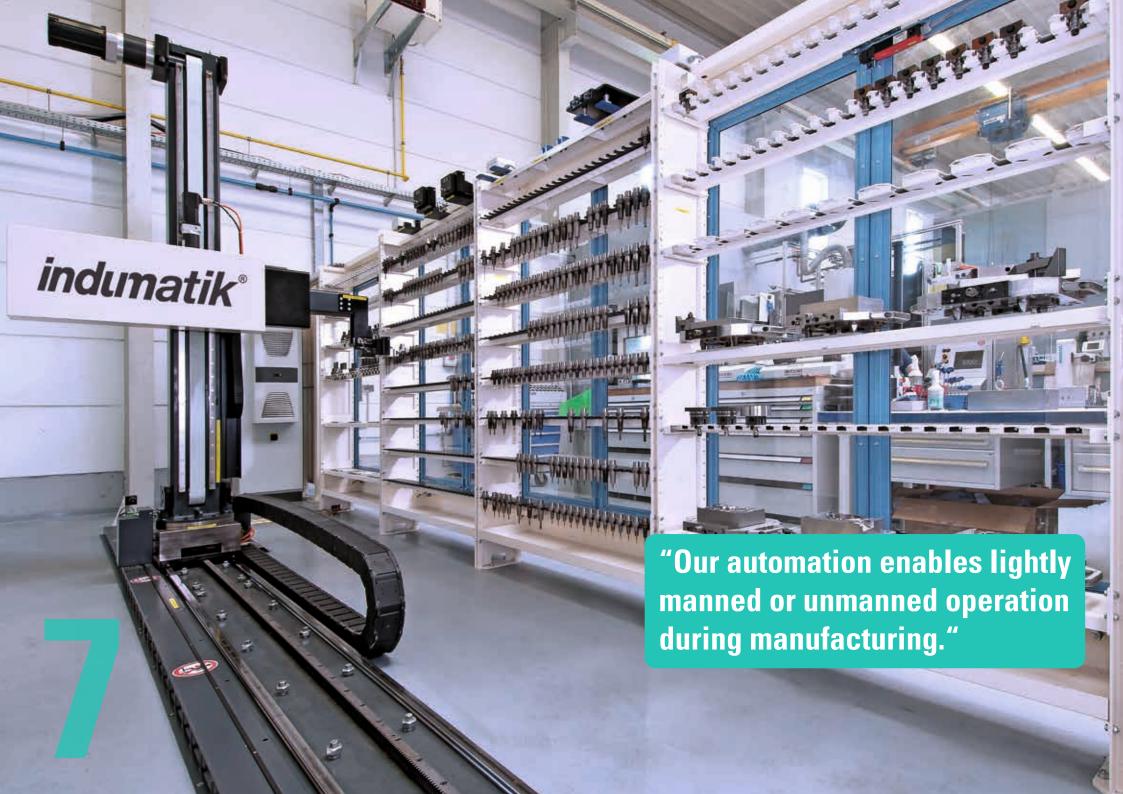




LAG Toothed Belt Drive



LAF Economic



INDUMATIK® BY INDUNORM

AUTOMATION MADE EASY

Our Indumatik® linear axis robot is an innovative product for automated component and tool change. The robot makes equipping production machines more effective, thus reducing costs, and the increase in productivity also increases the profits of our customers.

LAYOUT

With the Indumatik[®] we have developed an overall concept consisting of linear-axis robot, clamping system and component magazine. The modular

design allows for a number of options in order to tailor the system optimally to your specific handling task.

CONNECTIVITY

Our technicians will handle the mechanical and electrical connection to your machine tool, working in close cooperation with you and the machine tool manufacturer. This of course complies with the CE directives. Virtually any existing machine tool can be retrofitted.



Indumatik® Light 120



Indumatik® ToolChanger

HEIDENHAIN
PARTNER AUTOMATION

Partner of

GENERAL OVERVIEW INDUMATIK®

INDUMATIK® ULTRALIGHT 100

Dimensions [B x T x H]	1700 mm x 1700 mm x 2000 mm
permissible handling weight	100 kg
Pallet gripper	Zero point gripper
Subgripper/gripper options	Parallel gripper Fork gripper
Storage place dimensions [W x D]	320 mm x 320 mm
Standard pallet spaces	8 / 16 / 30 depending on pallet size
Operation	Touch screen
Part stocking/picking	via loading door
Transfer carriage	optional
Dual machine operation	optional

INDUMATIK® ULTRALIGHT 300

Dimensions [W x D x H]	2100 mm x 2100 mm x 2000 mm
permissible handling weight	300 kg
Pallet gripper	Fork gripper
Subgripper/gripper options	Zero point gripper
Storage place dimensions [W x D]	320 mm x 320 mm, 400 mm x 400 mm
Standard pallet spaces	8 / 10 depending on pallet size
Operation	Touch screen
Part stocking/picking	via loading door
Transfer carriage	optional
Dual machine operation	optional

INDUMATIK® LIGHT 8

Dimensions [W x D x H]	1120 mm x 875 mm x 2100 mm
permissible handling weight	8 kg
Pallet gripper	Parallel gripper
Subgripper/gripper options	Fork gripper
Storage place dimensions [W x D]	120 mm x 120 mm
Standard pallet spaces	40 depending on pallet size
Operation	Touch screen, master computer optional
Part stocking/picking	via loading door
Transfer carriage	-
Dual machine operation	-



Indumatik® Ultralight 100



Indumatik® Ultralight 300



Indumatik® Light 8

GROUND CARRIAGE

BFW 800

- Up to 70 m/min
- Compact design
- Extremely low overall height
- Modular length extension
- Includes energy chain guide
- Integrated lubrication
- Properly covered
- Sturdy floor anchor

VERSIONS CUSTOMER-SPECIFIC APPLICATIONS

The modular design enables sizing for pallets with an edge length from 50 mm to 630 mm. Different subgrippers and pre-pallets can be ordered and combined into one system.

ZERO POINT CLAMPING SYSTEMS PALLETS AND VICES

The Indumatik® automation systems can handle pallets and vices by virtually any other manufacturer. This ensures consistency throughout your operations. Indunorm also offers proprietary solutions to complete the product range, e.g. vices with integrated pallets to fit the selected automation solution optimally.







Gripper



Vico

INDUMATIK® LIGHT 30

Dimensions [W x D x H]	1740 mm x 1300 mm x 2400 mm
permissible handling weight	30 kg
Pallet gripper	Fork gripper
Subgripper/gripper options	Zero point gripper Parallel gripper
Storage place dimensions [W x D]	240 mm x 190 mm
Standard pallet spaces	50 depending on pallet size
Operation	Touch screen, master computer optional
Part stocking/picking	Stocking and picking station
Transfer carriage	optional
Dual machine operation	-

INDUMATIK® LIGHT 60

Dimensions [W x D x H]	1900 mm x 1600 mm x 2400 mm
permissible handling weight	60 kg
Pallet gripper	Zero point gripper
Subgripper/gripper options	Parallel gripper Fork gripper
Storage place dimensions [W x D]	320 mm x 320 mm
Standard pallet spaces	24 depending on pallet size
Operation	Touch screen, master computer optional
Part stocking/picking	Stocking and picking station
Transfer carriage	optional
Dual machine operation	-

INDUMATIK® LIGHT 120

Dimensions [W x D x H]	2500 mm x 2500 mm x 2900 mm
permissible handling weight	120 kg
Pallet gripper	Fork gripper
Subgripper/gripper options	Zero point gripper Parallel gripper
Storage place dimensions [W x D]	400 mm x 400 mm
Standard pallet spaces	24 depending on pallet size
Operation	Touch screen, master computer optional
Part stocking/picking	Stocking and picking station
Transfer carriage	optional
Dual machine operation	optional

indunatik*





Indumatik® Light 60

Indumatik® Light 120

INDUMATIK® 150

Dimensions [W x D x H]	varies by version
permissible handling weight	150 kg
Pallet gripper	Zero point gripper
Subgripper/gripper options	Parallel gripper, fork gripper, tool gripper
Storage place dimensions [W x D]	50 mm x 50 mm, 400 mm x 400 mm
Standard pallet spaces	48, individually extendible
Operation	Touch screen, master computer optional
Part stocking/picking	Stocking and picking station
Transfer carriage	Base axis included
Dual machine operation	optional

INDUMATIK® TOOLCHANGER

Dimensions [W x D x H]	varies by version e. g. 1500 mm x 1500 mm x 3000 mm
Tool Mounts	HSK63 / HSK100 / SK40 / SK50 / Capto C6 / BT40 / CAT40
Handling weights	8 kg / 20 kg
Tool length	up to 450 mm
Tool diameter	up to 200 mm
Number of tool positions	up to 224
Operation	Touch screen

INDUMATIK® TRANSFER CARRIAGE FLEXIBLE AUTOMATION

Even machine tools which can only be accessed from the front due to their setup can be optimally automated. Without interfering contours in the hall floor, you can switch between manual and automated operation within seconds. This again enhances the efficient use of the machine without the fear of losing manual access.









Indumatik® Transfer Carriage

PRODUCT OVERVIEW

THK LM GUIDE

- THK caged ball technology
- High efficiency
- Maintenance-free long term
- High stock capacities

BALL SPLINES AND

BALL GROOVE SHAFTS

- High accuracy
- Good high-speed running properties
- Custom end machining

CROSS ROLLER RING

- Extremely efficient cylinder roller bearing for high moment loads
- Maximum true-running accuracy
- Prevents rollers from tilting









Cross Roller Rings



BALL SCREWS

- Designed and computed by our engineers
- · Custom end machining
- Axial clearance or pretension adjustment
- High stock capacities with a large range of models

TRAPEZOIDAL SCREW DRIVES

- High stock capacities
- Custom end machining
- Self-locking

BALL BUSHINGS AND SHAFTS

- Large selection of European and Asian dimensions
- · High-quality name-brand products
- Fast delivery ex stock
- Custom guide shaft machining







Trapezoidal Screw Drives

Ball Bushings

ROLLER LM GUIDES

- Model ranges for light loads and smooth running
- Model ranges for heavy loads and harsh environments
- Systems for linear and curved movements
- Rust-proof versions available

TELESCOPIC GUIDES

- Robust machine design
- Cost-effective
- High stock capacities at the Duisburg location

TOOTHED BELT AXES

- Open and closed systems
- High efficiency
- Maintenance-free long term
- Low-cost installation
- Best performance with minimal space requirements







Telescopic Guides



Geared Belt Axes

SPINDLE AXES

- Good positioning accuracy
- High power transmission
- With sandwich conveyor to prevent dirt

AXIS SYSTEMS

- Designed in cooperation with the customer
- Modular design
- Weight and rigidity optimised systems

INDUMATIK® HANDLING SYSTEM

for loading components and tool expansion for machining centres

- Compact systems
- Non-proprietary connection
- Intuitive operation



Linear Axis with Spindle Drive



Linear Axis System



Indumatik® Handling System



BUSINESS UNITS



CAPABLE FIELD SERVICE

Since we're not simply satisfied by what is standard and our customers often require special solutions, a knowledgeable, personal consultation from our engineers is the basis for successful cooperation.

KNOWLEDGEABLE APPLICATION ENGINEERS

Of course, we also offer detailed technical consultations over the phone. Our internal technicians and engineers are available to answer any questions regarding our products and their applications.

DEDICATED ORDER PROCESSING

Your assigned customer service representative will answer any questions relating to orders and delivery. Our goal is to assist you quickly once your order has been placed!



Dietmar Heim, Uwe Hartwig, Jens Hartwig, Jürgen Trinkies, Ulrich Haas, Jörg Breuer, Holger Laufenberg, Bodo Heinz, Stefan Bauer



Dirk Arians, Kerstin Blomberg, Sigrid Binder, Benjamin Steil, Axel Harbeke, Daniela Chakir



Stefan Dirkes, Sandra Huber, Cedric Boortz, Ute Gehring, Alexander Kuck Susan Klein

SKILLED ENGINEERING

The engineers in our development and design departments implement the planned projects using 3D CAD. Many of our products have CAD downloads available online. This makes it easier for you to materialise your designs.

CREATIVE INDUMATIK LOCATION

Our young automation team works at our new location in the south of Duisburg. Our Indumatik® linear axis robots are an innovative product for automated component and tool changes.

STRONG STUTTGART LOCATION

At our Stuttgart location, our managing director Dietmar H. Heim and his team support our customers in Hesse, Rhineland-Palatinate, Saarland, Baden-Württemberg and Bavaria – including on site.



Tim Selke, Hubert Geisen, Nikolas Eberz, Larissa Grey, Sven Efkemann, Robert Sablotni, Folko Ridder, Tobias Franken



Indumatik Team



Dietmar Heim, Stefan Bauer, Josefa Murgia, Rita Kramer, Ulrich Haas, Uwe Hartwig

FLEXIBLE PRODUCTION

Our services include cutting rails to length, adjusting the pretension of carriages and guide rails, coating the components or machining to drawing at our state-of-theart production facility.

EXPERIENCED ADMINISTRATION

We're always here to help you! Whether you need help from accounting, administration or the switchboard, our friendly staff will be glad to help. Our business manager Ulrike Dornbusch binds the team together.

SOUND INVENTORY

Our energetic warehouse staff pick your orders, modify the products as per your request and then dispatch them quickly and safely.



Horst Höck, Mark Obschernicat, Carsten Mertes, Martin Rissel



Susanne Kremser, Tomislava Kasumovic, Beate Rinkowski, Ulrike Dornbusch Sigrid Flore, Sigrun Elbers



Our Warehouse Team

CONCLUSION STRENGTHS OF INDUNORM

STRONG DELIVERY CAPACITY

- LARGEST THK INVENTORY IN EUROPE
- MANY OTHER STANDARD PRODUCTS EX WORKS

FLEXIBILITY THROUGH ENGINEERING

- IN-HOUSE ENGINEERING OFFICE FOR LINEAR TECHNOLOGY
- CUSTOMISED AND COMPLEX MACHINING AS WELL AS SPECIAL SOLUTIONS AVAILABLE

LINEAR TECHNOLOGY SPECIALIST

- FULL-RANGE SUPPLIER FOR LINEAR TECHNOLOGY
- LARGEST THK DISTRIBUTOR IN EUROPE
- THK PREMIUM PARTNER SINCE 1985

EXPERIENCED PARTNER

- EXPERTISE FROM OVER 40 YEARS OF EXPERIENCE
- STATE-OF-THE-ART MACHINE OUTFIT
- FLEXIBLE FIELD SERVICE INCLUDING NEAR YOU

9

INDUNORM

AVAILABLE EVERYWHERE

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System Technology Sales Manager

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Sales East Germany

Thomas Moldenhauer Tel.: +49 (0)151 57147-712

Sales North- and West Germany

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Uwe Hartwig

Tel.: +49 (0)151 46249-703

Sales Retail and Telescopic Guides

Holger Laufenberg Tel.: +49 (0)175 2929-381



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Duisburg location
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