

# Precision in Motion

THE OPTIMUM IS OUR STANDARD

A photograph of Gunther Schulz, President, in a factory setting. He is an older man with white hair and glasses, wearing a white shirt and a dark tie. He is looking down at a large, circular, metallic industrial component in the foreground. The background is a blurred industrial environment with blue and white tones.

„HIGH QUALITY COMPONENTS ARE NOT  
A UNIQUE SELLING PROPOSITION.

WHAT REALLY COUNTS IS HOW MUCH THEY HAVE  
TO OFFER BEYOND STANDARD SPECIFICATIONS.

THAT IS OUR STRENGTH.“

Gunther Schulz, President

## MECHANICAL ELEMENTS WITH ENGINEERED SOLUTIONS

Rodriguez is one of the leading suppliers of thin-section, precision and customized bearings as well as linear technology for a wide range of industrial applications. Our portfolio also includes components and systems for the automotive industry. From single machine components through ready-to-install complete systems, our technically sophisticated, integrated and customized solutions successfully satisfy the customer demands.

Our factory in Eschweiler/Germany boasts a comprehensive machine shop. This is the basis for our flexibility and guarantees consistently high standards of quality. We pride ourselves in a high level of engineering competence, based on decades of practical experience. In-house production allows us to supply our products in all versions and types required by the market.

One of our major priorities is establishing and maintaining close business relationships with our customers which allow us to provide individual advice. To support this philosophy, our Sales & Marketing division is staffed with qualified technical experts. We are also highly committed to the further education and training of all our employees throughout the company.

Their creativity, ideas and innovative energy are the springboards for practical oriented research and product development, ensuring the high capacity and performance of our company.



# THE EVOLUTION

In-house production is the key to our ability to respond quickly, be flexible to customer requirements and provide them with custom-made system solutions. Rodriguez has an impressive machine park and a large in-house depth of manufacturing for rotary and linear technology.

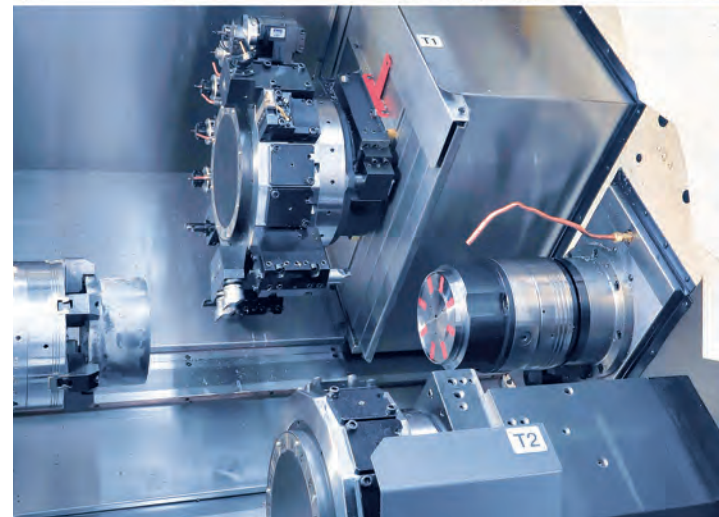
The following examples show the range of the machine park:

For precision bearings it is possible to manufacture turntable bearings with outer diameters up to 1,400 mm. The increasing demand for rotary units with a smaller diameter of 15 mm and more can also be met.

Rodriguez uses modern CNC turning machines for linear technology.

They allow us to produce shafts with an outer diameter of up to 100 mm.

Our long-term goal is to further increase the share of in-house production. With this in mind, recent investments have focused on process optimization and capacity expansion. Production is constantly modernized with new equipment and modern tools.



„OUR LEVEL OF PERFORMANCE IS NOT ONLY BASED ON A MODERN MACHINERY EQUIPMENT, BUT IT IS A COMBINATION OF STRATEGIC INVESTMENTS IN STAFF AND MACHINE.“

Nicole Dahlen, General Manager

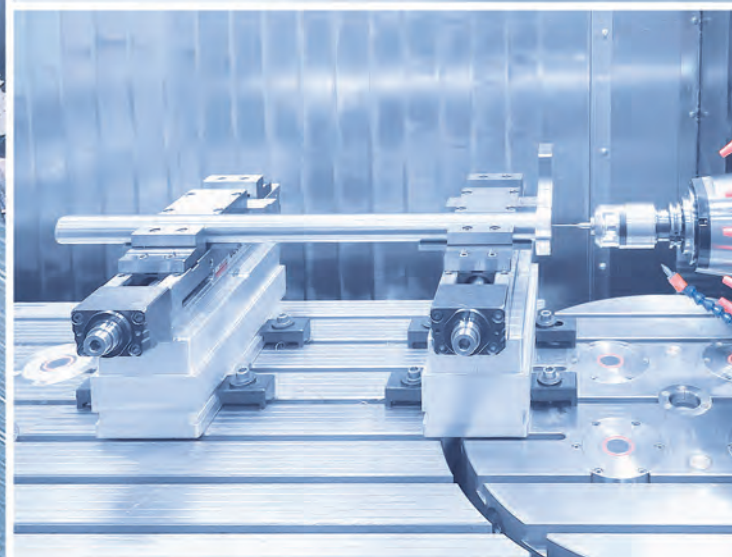






„FROM THE DESIGN RIGHT UP  
TO THE MANUFACTURING OUR  
CUSTOMIZED SOLUTIONS  
‘MADE IN ESCHWEILER’ ARE  
PRODUCED IN-HOUSE.“

Gunther Schulz, President



## MADE IN ESCHWEILER

From design, development, manufacturing and assembly right up to quality inspections, field tests and installation, we've developed sophisticated solutions which help prevent long and cost intensive trial and error methods for the end user. Utilizing combined knowledge and practical experience along with our comprehensive production facility including CNC turning and milling machines, CNC machining centres and state-of-the-art measuring technology, we have all the necessary methods and equipment to guarantee highly efficient problem solving solutions.

A simple question could become a major challenge just because of a single detail. Determining the optimal functionality of surrounding components, the correct method of assembly and design are often cost-intensive and time-consuming aspects during the development of a system. Rodriguez provides the technology and system know-how to support our products and mounting of surrounding components. End users do benefit from the best results of customized solutions and Value Added Products from Rodriguez: Mechanical Elements with Engineered Solutions.





„AT THE END WE ALWAYS DELIVER SOLUTIONS BEYOND THE STANDARD: DRIVE COMPONENTS DEVELOPED ACCORDING TO THE MAXIME ‘ALWAYS THE RIGHT BEARING FOR THE CORRESPONDING REQUIREMENT’.“

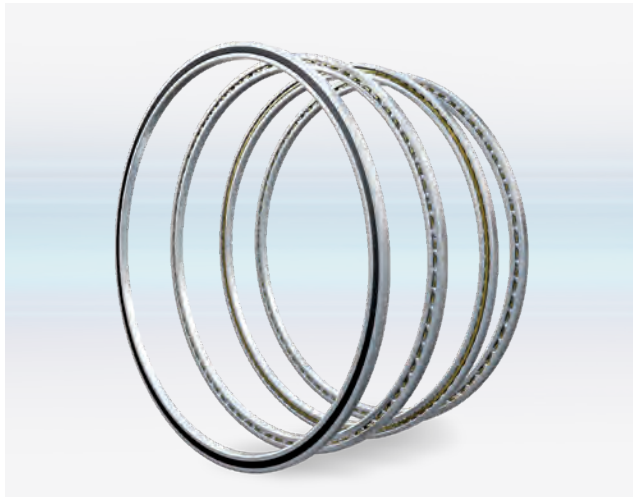
Nicole Dahlen, General Manager

## PRECISION BEARINGS – NOTHING MOVES WITHOUT THEM

Whether it's in vehicles or machinery - bearings keep things moving in virtually all automated processes. The bearing technology used is as diverse as the range of possible applications. In the field of precision bearings, Rodriguez can demonstrate the decades long experience

our engineers have acquired when it comes to practical designing. Our customers from all areas of mechanical engineering benefit from this when it comes to the development of new products and the application oriented modification of individual components.

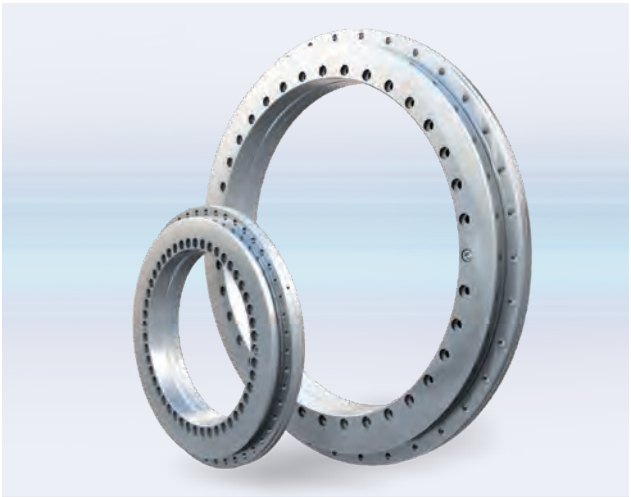
# HIGH-PERFORMANCE COMPONENTS FOR ROTARY MOTION



KAYDON®-REALI-SLIM® THIN-SECTION BEARINGS

Large bore diameter –  
small cross-section

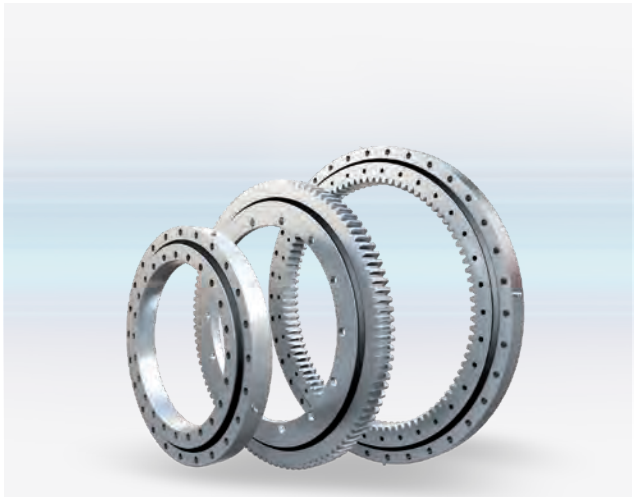
REALI-SLIM®, ULTRA-SLIM®, bearings in inch and metric dimensions, as well as hybrid versions with ceramic balls – the thin section bearing range offers 250 different types. They meet the highest standards regarding efficiency, miniaturization, weight reduction and compactness.



AXIAL-RADIAL-PRECISION ROLLER BEARINGS /  
ROTARY TABLE BEARINGS (RTB)

Perfect rotation for  
machine tools

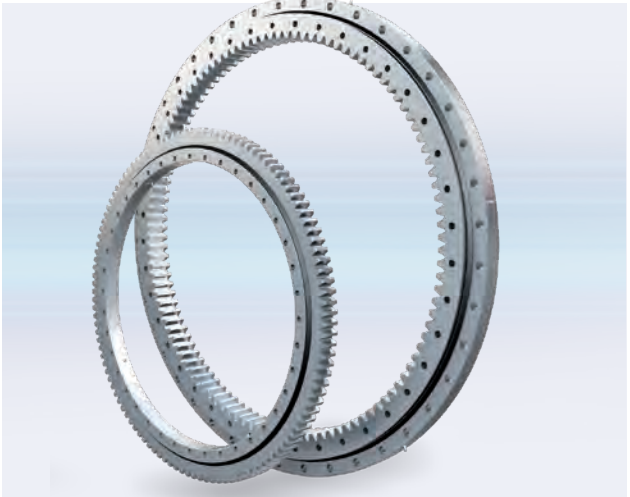
The ready-to-use compact axial-radial-precision roller bearings convince through high stiffness and high axial and radial capacity. Rotary table bearings (RTB) work reliable and accurate in rotary and positioning tables of machine tools delivering optimal processing results.



TURNTABLE BEARINGS

Precision in  
big dimensions

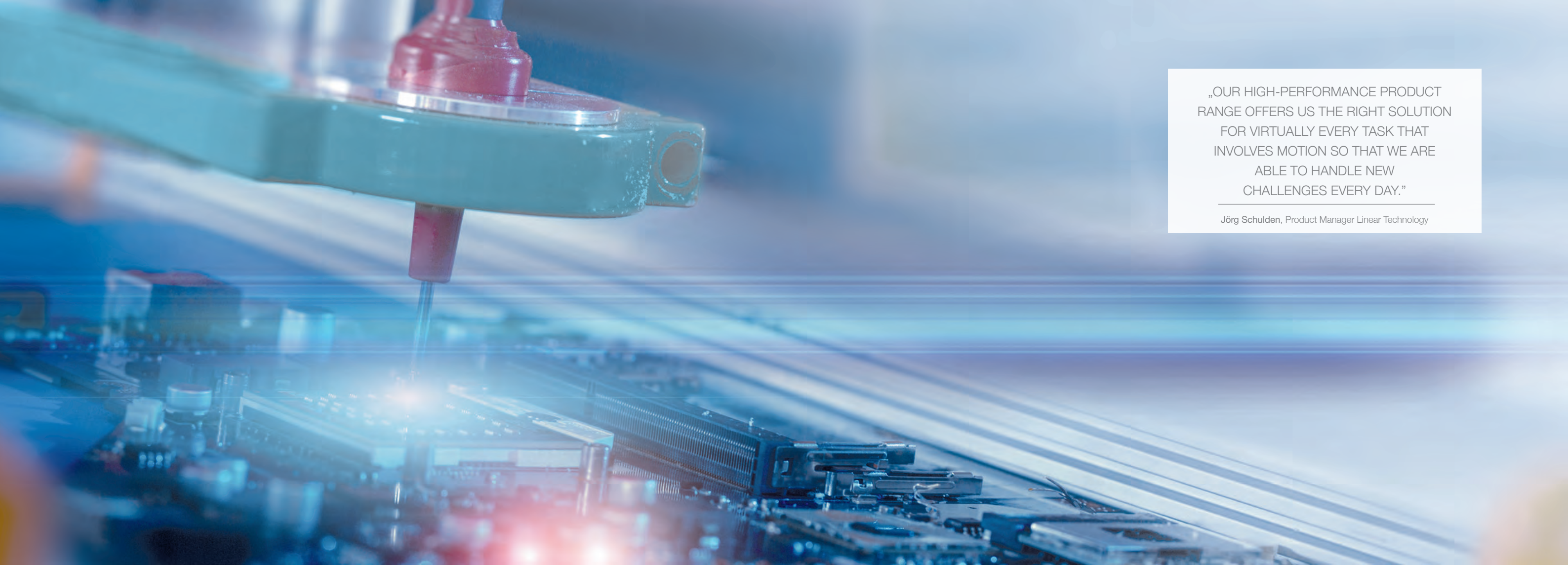
Turntable bearings are robust and proven solutions which can safely absorb axial and radial loads as well as tilting moments even under the toughest conditions. They are available with or without gear, optional corrosion resistant and in customized versions.



LARGE DIAMETER SLEWING BEARINGS

No matter if you are interested in a new design or an urgently required spare part, with internal or external gears, toothed belt or helical gears, RODRIGUEZ offers a suitable drive solution for nearly every application with a diameter up to 240 inch (6,100 mm).





„OUR HIGH-PERFORMANCE PRODUCT RANGE OFFERS US THE RIGHT SOLUTION FOR VIRTUALLY EVERY TASK THAT INVOLVES MOTION SO THAT WE ARE ABLE TO HANDLE NEW CHALLENGES EVERY DAY.“

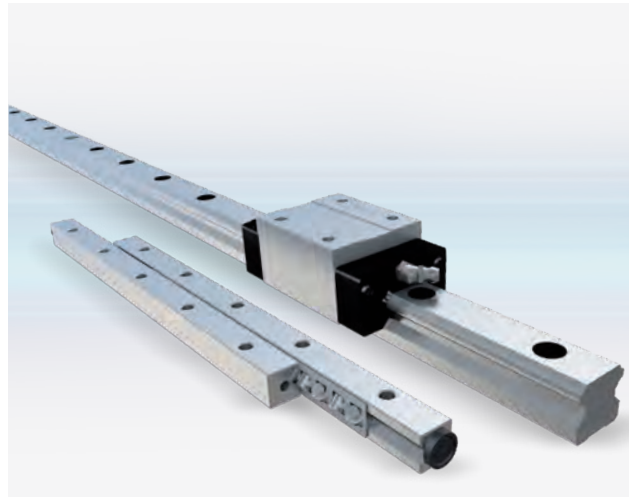
Jörg Schulden, Product Manager Linear Technology

## LINEAR TECHNOLOGY – PRECISE GUIDANCE FOR EVERY MOVEMENT

Linear guides and linear drives are used in diverse industrial applications. Linear technology, for example, is used in loading and unloading processes, pick & place applications or for numerically controlled processes in machines and systems. Rodriguez linear technology offers the right linear guide version and the compatible accessories

for virtually every task that involves motion as well as customized solution from our in-house production. Our customers benefit from optimally compatible linear technology components from a single source with the resulting reliability, precision and functionality. After all, the whole can only be as good as the sum of its components.

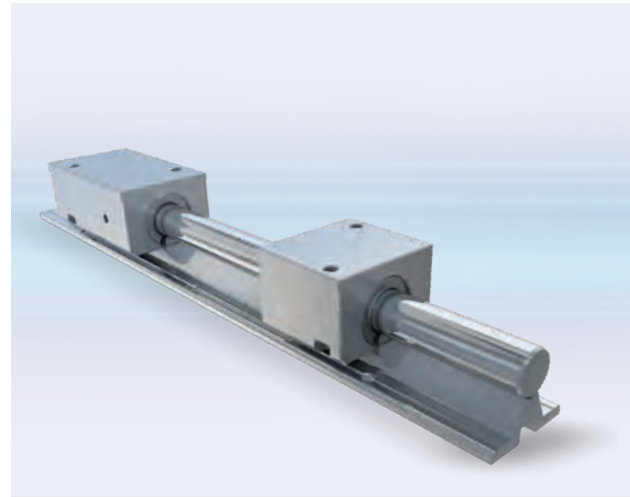
# HIGH-PERFORMANCE COMPONENTS FOR LINEAR MOTION



LINEAR GUIDEWAYS AND  
CROSS ROLLER GUIDES

Benefit through good guidance –  
compact and precise

These products are winners because of their compact design, high precision and stiffness as well as low coefficients of friction. For longer service of life, reduced maintenance work and less lubricant consumption, the standard linear guideways have long-term lubrication systems.



LINEAR ROUNDRAILS

Classic components for  
reliable linear motion

This product spectrum provides models for all types of application that require precision shafts in a range of materials, linear ball bearings satisfying all performance classes, linear housings, shaft brackets and shaft supports, as well as customized solutions perfectly matching client specifications.



BALL TRANSFER UNITS

Friction-free  
heavy goods transport

Our portfolio of approximately 150 different precision ball units offers optimal solutions for transport applications in cargo handling and conveyor systems. Ball units are available as standard or customized models in steel, stainless steel with load balls in different materials and capacities up to 5,000 kg and diameters ranging from 4.5 – 120 mm.

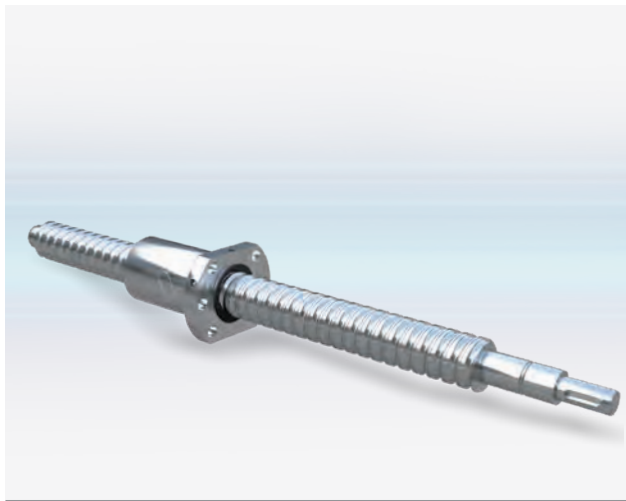
# PRECISION SHAFTS

We are specialists for induction hardened shafts. We produce completely machined components at short notice such as shafts with pins and chamfers, with radial or axial thread bores as well as fully assembled units with shaft brackets and shaft supports.





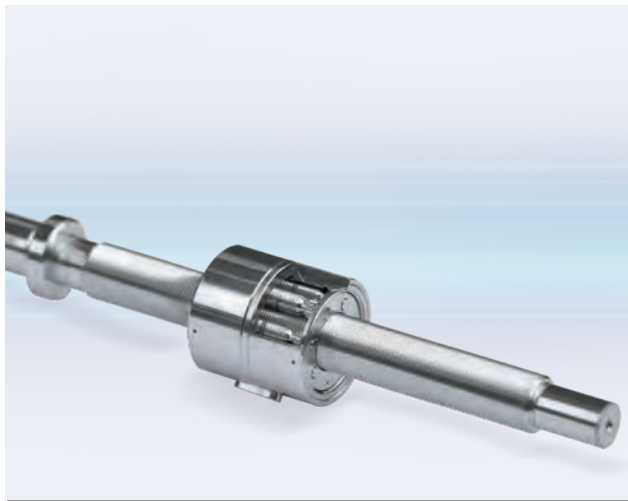
# HIGH-PERFORMANCE COMPONENTS FOR LINEAR MOTION



BALL SCREWS

Transform a rotational into a longitudinal motion

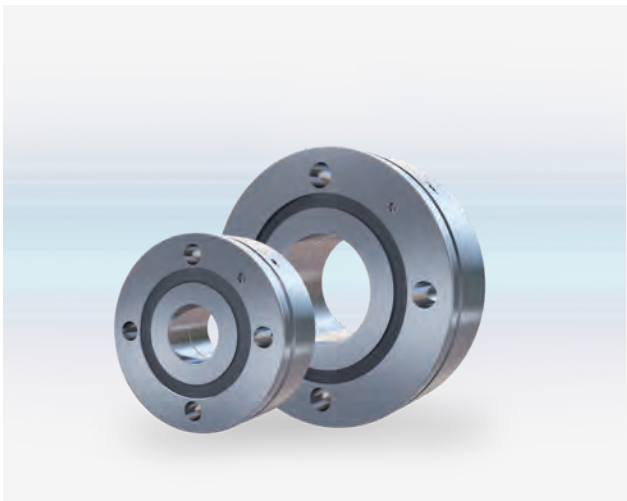
One of Rodriguez’s specialities is the production of customized ball screws. Each component, such as the ball screw spindles, ball nuts, nut housing and the end supports, uncompromisingly satisfy all application specific requirements including designs with driven ball nuts.



ROLLERSCREWS

Permit high axial loads

Rollerscrews consist of a ground spindle and the threaded nut which is equipped with rollers. The special geometry of the thread and the rollers characterize the rollerscrews. The contact areas of the rollers as well as the number of contact points permit a high axial load capacity.



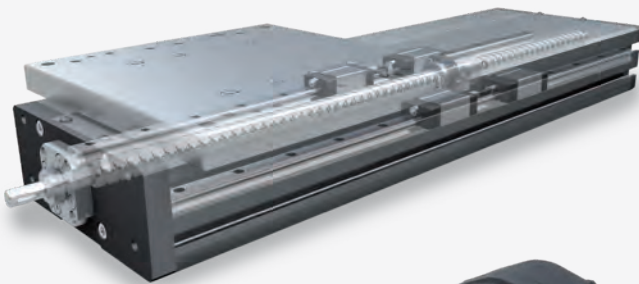
AXIAL ANGULAR CONTACT BEARINGS DRF/DRN

Precision for screw drives

The double row angular contact ball bearings with a 60° contact angle are designed for the fixing side of ball-screw spindles in modern machine tools. Their stiffness and rotation as well as precise tool positioning and repeatability satisfy the highest demands.

# LINEAR TECHNOLOGY SOLUTIONS

LINEAR SYSTEMS combine the advantages of linear guiding systems and electromechanical drive mechanisms in a compact and simple way. The right solution for nearly every linear motion requirement can be found in our portfolio.

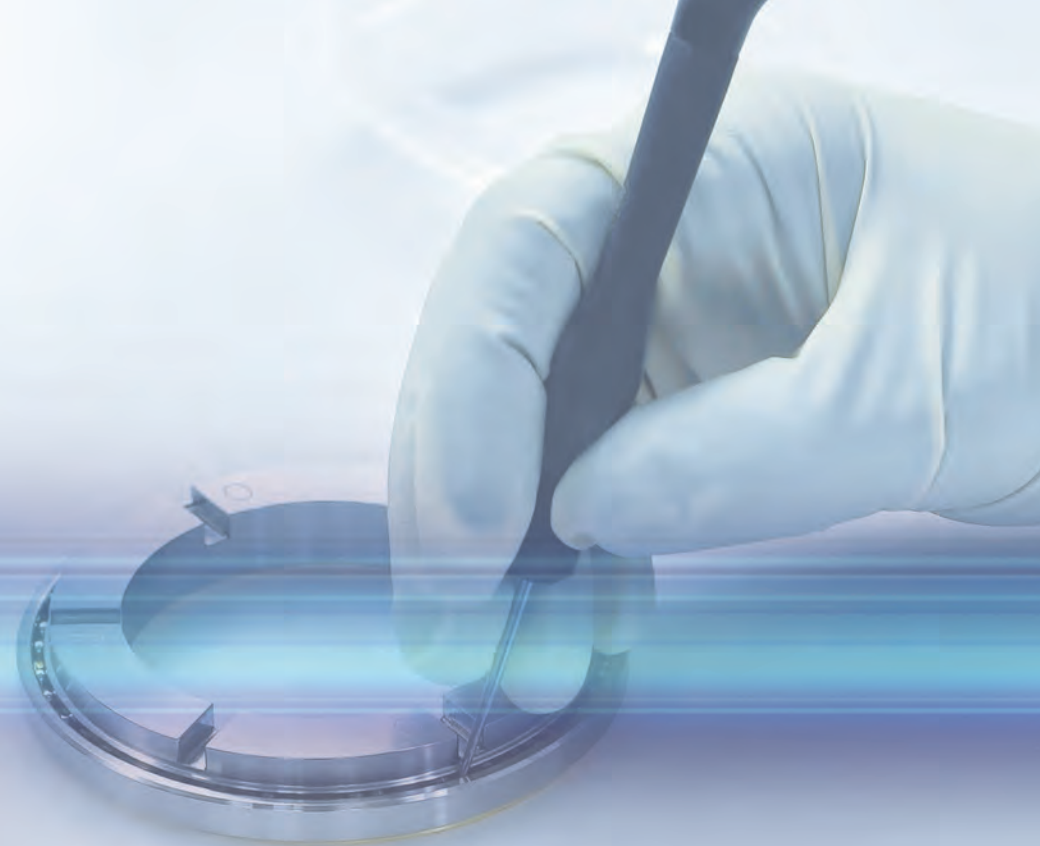


ELECTROMECHANICAL ACTUATORS offer improved machine performance and a higher degree of efficiency in comparison to hydraulic and pneumatic systems. Our extensive portfolio of linear actuators includes standard versions as well as special models designed for particularly high requirements.



„CUSTOMERS BENEFIT FROM A RELIEF IN PROCUREMENT. THE ADMINISTRATIVE INPUT FOR PURCHASING OF SEVERAL SMALL COMPONENTS IS NO LONGER REQUIRED, THE PROCESS COSTS DO REDUCE AND THE CUSTOMER IS ABLE TO CONCENTRATE ON HIS CORE COMPETENCIES.”

Ulrich Schroth, Managing Director Value Added Products

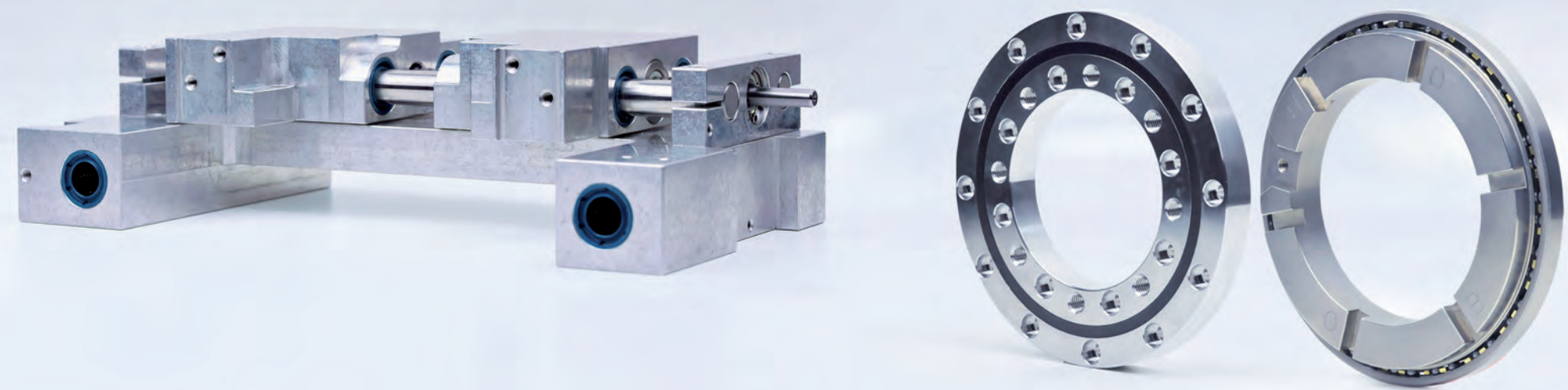


#### VALUE ADDED PRODUCTS

## ADDITIONAL BENEFIT FOR YOUR APPLICATION

Customized solutions are our core competencies. We develop, manufacture and supply complete customized solutions based on our thin section bearings and linear technology products.

For these applications it is important to choose carefully the individual components and ensure their precise production and correct mounting. This is very essential for the proper functionality of customized solutions which are developed by Rodriguez. We take care of every process step and you are benefitting from our entire technology and system know-how.



VALUE ADDED PRODUCTS FOR PRECISION  
BEARINGS AND LINEAR TECHNOLOGY





## THE BENEFITS OF VALUE ADDED PRODUCTS

- REDUCTION OF COMPONENTS AND AGGREGATE TOLERANCES
- LOWER EFFORT OF MOUNTING
- COST REDUCTION
- NO ADDITIONAL CONSTRUCTION EFFORTS
- CONCENTRATION ON CORE COMPETENCIES
- APPLICATION-SPECIFIC SOLUTIONS

## CUSTOMIZED SOLUTIONS – THE BENEFITS OF VALUE ADDED PRODUCTS

Customers who obtain sub-assemblies or complete customized systems from Rodriguez benefit from a relief in procurement. The administrative input for the purchasing of several small components is no longer required reducing processing costs which allow the customer to concentrate on their core

competencies. This also applies especially for small quantities. The integrated functionality does include gears, grooves with control functions, mountings, brackets as well as integrated ball races at shaft or housing.



# PRECISION BEARING APPLICATIONS



Semiconductor technology: Flange bearing systems for wafer handling



Integration of flanges at the thin section bearing



Easier mounting and improved system performance



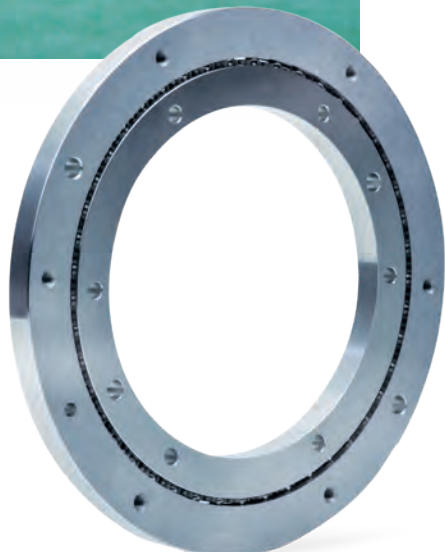
Bearing arrangement of a cable camera system



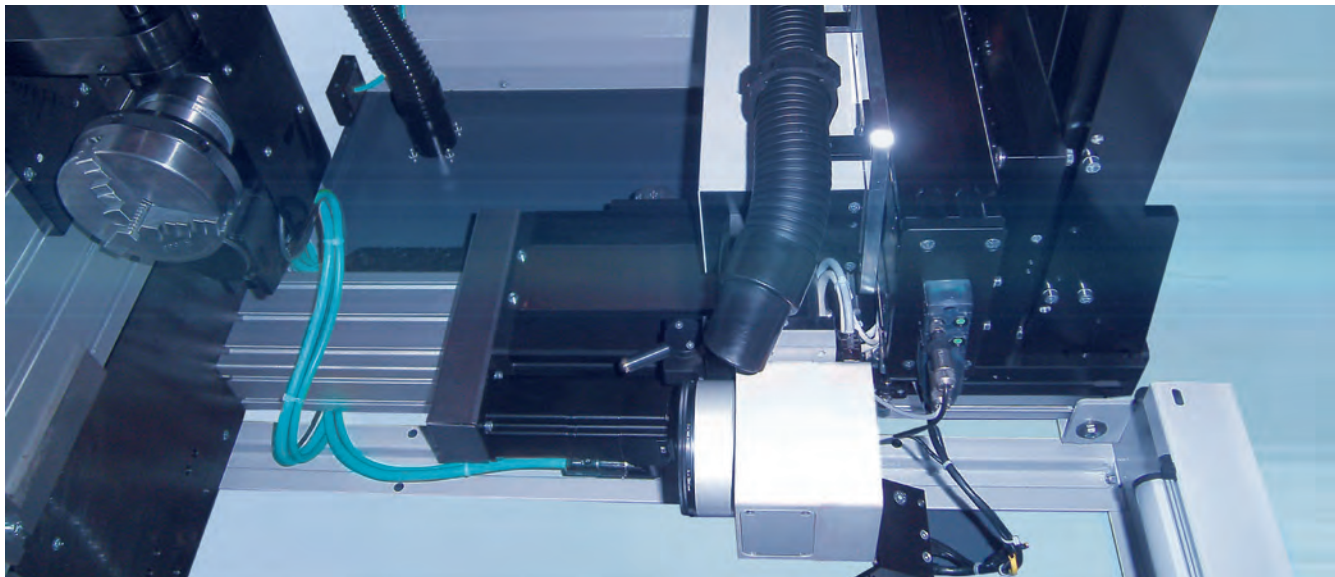
Development of a bearing system for a small direct drive motor. Direct adaptation of the motor to the bearing system



Reduction of interfaces and components. Moreover the two identical bearing systems reduce the parts diversity



# LINEAR TECHNOLOGY APPLICATIONS



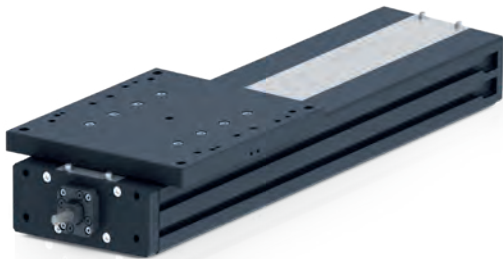
Lasermarking-equipment: Linearunit in X, Y, Z



Integration of linear guideways and ball screws in an aluminium profile



Design and development of a linear-unit specified into the application



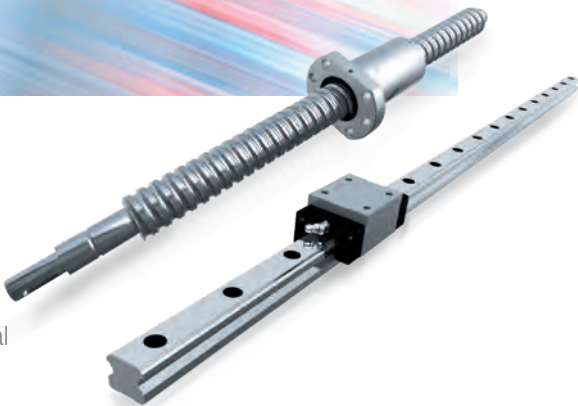
Printing industry: Printing on large format surfaces



High-precision production of a welded frame, incl. mechanical parts, as well as linear guideways and ball screws



Development, production and assembly of produced parts and drive-components to the highest standard in order to guarantee an optimal printing result





„A PARTICULAR FOCUS IS PLACED  
ON THE RELIABLE SECURING  
OF CARGO.

IN PARTNERSHIP WITH THE  
DEKRA TECHNOLOGY CENTER  
WE DEVELOPED AN ADDITIONAL  
QUALITY ASSURANCE AND  
CERTIFICATION SYSTEM WITH  
STEEL TESTING PROFILES.”

Frank Richter, Product Manager, Automotive

## AUTOMOTIVE PRODUCTS FOR SECURING OF CARGO



SIDE CURTAIN AND ROOF ROLLERS

Side curtain and roof rollers  
DEKRA-tested safety



OCS BUCKLE®

OCS BUCKLE® for a new securing  
of cargo generation

# RODRIGUEZ AUTOMOTIVE – DRIVING AHEAD THROUGH QUALITY AND SAFETY

Sliding curtain components for aluminium roof strap systems on trucks are important details to guarantee safe transport and rapid loading and unloading. DEKRA-certified products with the perfect version to match a whole range of differently shaped compartments guarantee safety and quality. They are rechecked and certified regularly.

The newly, patented OCS-buckle® boasts forward-looking DEKRA-tested quality and guarantees uncompromising safety in securing freight and truck loads. The innovative EASY-OPEN-function is a benchmark for operating ease and efficiency as well as being cost effective.

**RODRIGUEZ GmbH**

Ernst-Abbe-Str. 20  
52249 Eschweiler  
Tel +49 (0) 2403 780 - 0  
Fax +49 (0) 2403 780 - 860  
[info@rodriguez.de](mailto:info@rodriguez.de)  
[www.rodriguez.de](http://www.rodriguez.de)

**Office South Germany,  
RODRIGUEZ GmbH**

Max-Eyth-Str. 8,  
71672 Marbach a. N.,  
Tel +49 (0) 7144 8558 - 0  
Fax +49 (0) 7144 8558 - 20  
[info-sued@rodriguez.de](mailto:info-sued@rodriguez.de)  
[www.rodriguez.de](http://www.rodriguez.de)

**Office France  
RODRIGUEZ GmbH France**

29/31 Boulevard de la Paix  
Parc d'activités du Bel Air  
78 100 Saint Germain En Laye  
Fon +33 130 610 616  
Fax +33 130 615 282  
[info\\_france@rodriguez.de](mailto:info_france@rodriguez.de)  
[www.rodriguez.de/fr/](http://www.rodriguez.de/fr/)