

WE LOVE TECHNOLOGY



WE ARE YOUR SYSTEMS PARTNER FOR  
**ROTARY TABLES**



MEMBER OF THE LÄPPLE GROUP



**FIBRO ROTARY TABLES**  
**MEMBER OF THE LÄPPLE GROUP**



**LÄPPLE**  
 AUTOMOTIVE

FORMING SOLUTIONS FOR  
 CAR BODY CONSTRUCTION

**FIBRO**

STANDARD PARTS  
 AND ROTARY TABLES

**FLT**

AUTOMATION  
 SOLUTIONS

**LÄPPLE**  
 AUS-UND WEITERBILDUNG

BASIC AND  
 ADVANCED TRAINING

**Together we make the world more successful**

As a family-run group of companies, LÄPPLE offers high-quality products and solutions in the industrial supply chain around the world. The high-performance and innovative range of products from these specialised companies includes forming and bodywork technology as well as automation plant, machine and tool construction.

With a wide range of expertise and many years of experience, LÄPPLE is a reliable partner in terms of its customers' interests and market developments. Around 2,300 employees develop, produce, sell and support a broad spectrum of innovative products in the world's industrial regions.

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## WE MAKE PRODUCTION PROCESSES **MORE EFFICIENT**

Whatever the application, FIBRO combines maximum precision with enormous processing strength as well as the shortest cycle times, thus making your production processes more efficient.

Our rotary tables are deployed as swivelling & positioning axes, as workpiece carriers in machine tools, and in the field of assembly work. Tens of thousands of rotary-table units around the globe are now integrated in high-productivity machines as major components. The quality, powerful technology and broad product range serve to satisfy our customers' requirements in the best possible way.

With its international position, FIBRO is your production partner, competent in resolving problems associated with rotary-table and NC applications across the globe. Our experts are available to assist you during and beyond the planning phase of your projects.







## ROTOCUTTING ROTARY TABLES FOR MACHINE TOOLS

### FIBROPLAN®

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NC rotary tables with worm drive

### FIBROMAX®

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Heavy-duty NC rotary tables with twin drive

### FIBRODYN® DA

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Highly dynamic NC rotary tables with direct torque drive

### FIBROTAKT®

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Precision rotary tables with Hirth face gearing

### CUSTOM SOLUTIONS

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Customer-specific rotary tables

### FIBROTOR®

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Universal rotary tables with cam drive

### FIBROMAT®

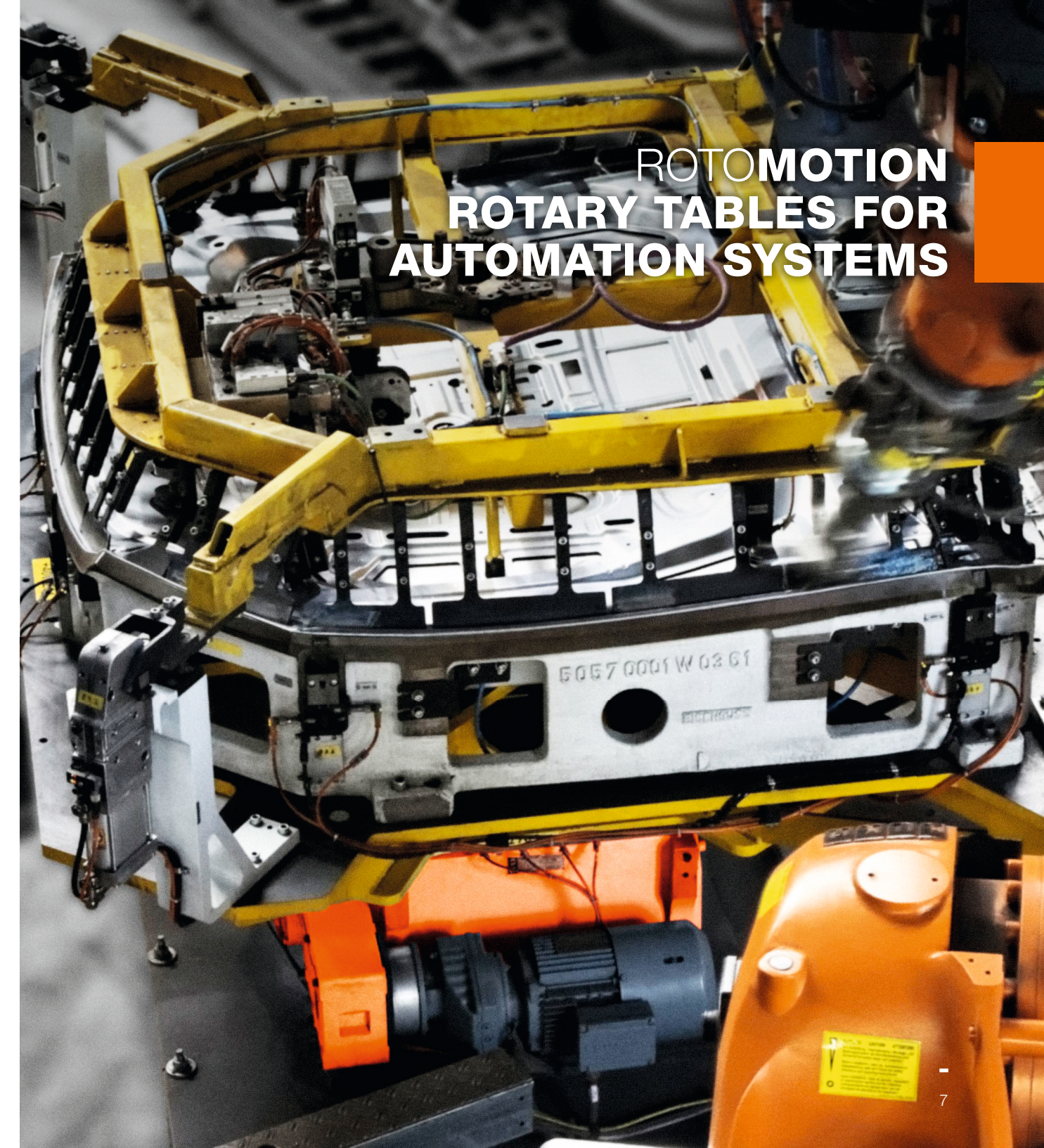
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Heavy-load positioning tables

### CUSTOM SOLUTIONS

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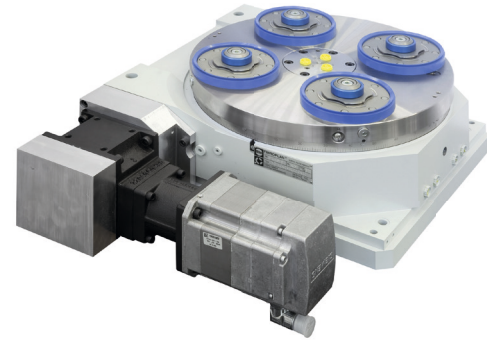
Custom-made automation solutions



## ROTOMOTION ROTARY TABLES FOR AUTOMATION SYSTEMS



# FOR USE IN MACHINE TOOLS ROTOCUTTING



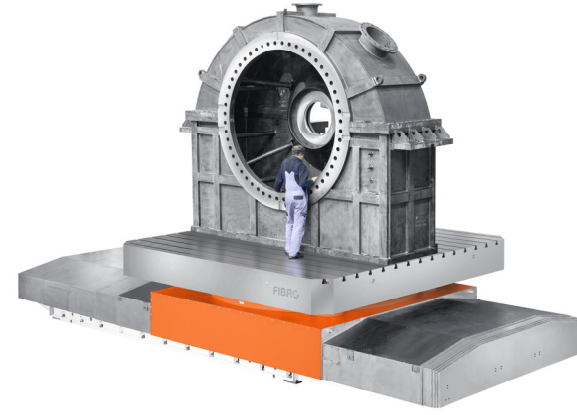
FIBROPLAN®

### NC rotary tables with worm drive

- All-rounder for the most diverse applications
- Available as single or multi-axis combination
- Transport loads up to 20 tons
- Ideal for circular milling and simultaneous machining
- Extremely broad range of table top diameters (160–3,000 mm)

### Your benefits

- Worm drive (with adjustable play) for highest drive torques and lowest backlash
- Extremely low design for maximum operating area
- Design with force distribution optimisation for highest rigidity
- Pre-stressed axial/radial bearing for highest resistance to tilt and best axial runout accuracy and concentricity
- High-resolution encoder for excellent positioning accuracy (up to  $\pm 2''$ ) and repeat accuracy (up to  $\pm 0.25''$ )
- Hydraulic table top clamping for highest tangential rigidity without loading the drive components
- Tried and tested over decades, renowned for best possible operational safety



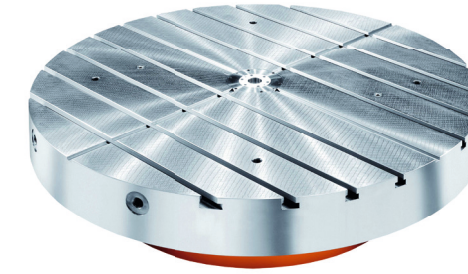
FIBROMAX®

### Heavy-duty NC rotary tables with twin drive

- Transport loads over 400 tons
- Positioning as well as circular and simultaneous multi-axis machining
- Available in the modular system as a stand-alone rotary table and as a rotary-linear table
- With additional tilting axis, perfectly suitable for machining wind turbine hubs

### Your benefits

- Roller bearing for highest cost-effectiveness and minimal energy consumption with lowest temperature rise
- Twin drive for highest precision and low backlash
- Design with force distribution optimisation for highest rigidity
- Pre-stressed, largely dimensioned axial/radial bearing for highest resistance to tilt and best axial runout accuracy and concentricity
- Highest geometric accuracy in the  $\mu$  range
- High-resolution encoder for excellent positioning accuracy (up to  $\pm 2''$ ) and repeat accuracy (up to  $\pm 0.25''$ )
- Hydraulic table top clamping for highest tangential rigidity without loading the drive components



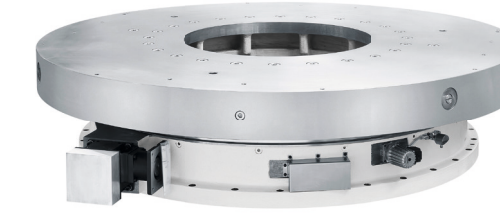
FIBRODYN® DA

### Highly dynamic NC rotary tables with direct torque drive

- Highest speeds and accelerations
- Diverse operating modes without spanning: positioning mode, rotary, circular and simultaneous machining
- Suitable for applications not permitting any backlash
- Highest machining accuracies at extremely low speeds

### Your benefits

- Highest dynamics for extremely fast positioning times
- High-precision bearings for perfect concentric and axial runout
- Integrated motor to prevent interference contours
- Without gear parts to minimise damage in the event of collisions
- High-resolution encoder for excellent positioning accuracy (up to  $\pm 2''$ ) and repeat accuracy (up to  $\pm 0.25''$ )
- Hydraulic table top clamping for highest tangential rigidity
- Compatible with the FIBROPLAN® model as an upgrade option for fastest acceleration without additional design overhead



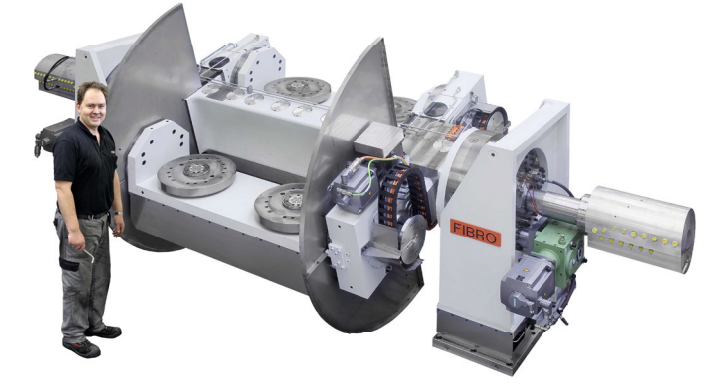
FIBROTAKT®

### Precision rotary tables with Hirth face gearing

- For precision positioning applications up to  $\pm 1''$ , repeat accuracy up to  $\pm 0.1''$
- No NC controller required
- Driven and controlled hydraulically, electrically or pneumatically
- Also available as a built-in variant for integrated machine designs, e.g. custom rotary indexing table machines

### Your benefits

- Precision FIBRO face gearing for best geometric accuracies
- Hydraulic locking of the face gearing for highest resistance to tilt
- Flat design for maximum operating area
- Sturdy, wear-resistant design for long service life with low maintenance overhead
- Extremely broad spectrum of sizes, fittable with table top diameters up to 3,000 mm
- Transport loads up to 15 tons
- Tried and tested over decades: the pioneer amongst rotary tables for reliable process deployment in your production process



CUSTOM SOLUTIONS

### Customer-specific rotary tables

- Rotary-table solutions tailored to your applications, e.g.:
  - Rotary table multi-axis combinations
  - Planetary tables
  - Built-in rotary tables
  - Rotary-linear tables
  - Stand-alone rotary tables

### Your benefits

- Lowest tooling times with the most flexible positioning and machining capabilities
- The best of all our rotary tables combined into one solution
- From problem-solving to delivery – everything from a single source
- Many years of FIBRO expertise in the engineering and design of custom rotary-table solutions for highest flexibility and process reliability
- Highest level of production expertise in conjunction with a comprehensive range of machinery
- Alignment with interfaces and machine concepts required by the customer



# FOR USE IN AUTOMATION SYSTEMS ROTOMOTION



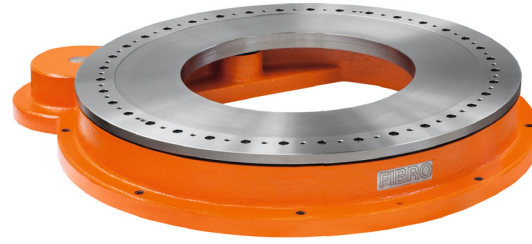
FIBROTOR®

## Universal rotary tables with cam drive

- Universal positioning applications, e.g. for assembly, packaging, printing, labelling or riveting applications
- Broad range of storage, transport and feed tasks
- General drive applications, e.g. as a drive of discontinuous belts or as a shift gearbox
- Available as an NC or indexing variant

## Your benefits

- Three standard types – the right one for any task:
  - FIBROTOR® EM – for precision, custom requirements
  - FIBROTOR® ER – with the highest level of standardisation for the fastest possible delivery times
  - FIBROTOR® RT – as a ring table with large centre through-hole
- Largely dimensioned axial needle bearing for highest transport loads
- Cam rollers with contact bearings for highest rigidity
- Hardened radial cams for optimal motion sequence and best power transmission
- Available with many additional options
- Sturdy design for minimal maintenance and longest service life



FIBROMAT®

## Heavy-load positioning tables

- For the dynamic and precise positioning of large and heavy fixtures and parts
- For superstructural parts up to 9,500 mm
- Ideal for shell and welded design applications
- Deployable as a setup station, large-format pallet exchanger and for general handling tasks
- Available as an NC or indexing variant

## Your benefits

- Heavy-duty positioning table with very large centre hole and extremely flat design
- Lubricated for life and maintenance-free for highest process reliability
- Perfect power cut and emergency stop behaviour through drive with spur gear toothing
- Available with many additional options
  - Indexing unit for indexing accuracy of max.  $\pm 15^\circ$  for freely selectable angles
  - Cross roller bearing for particularly high tilting moments
  - Adaptions for replacement of existing rotary tables
  - Customised design for individual applications



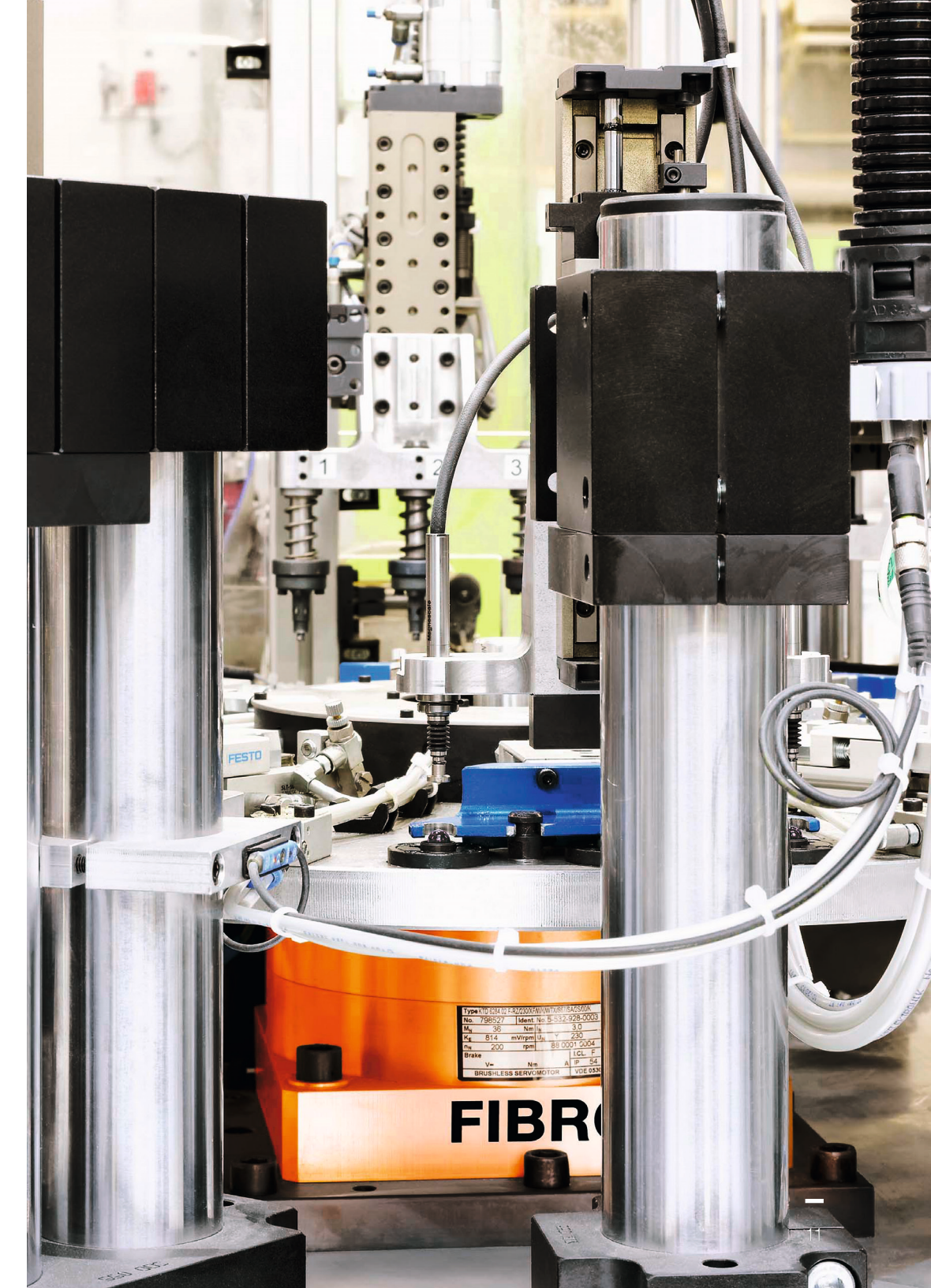
CUSTOM SOLUTIONS

## Custom-made automation solutions

- Rotary-table automation solutions tailored to your applications, e.g.:
  - Complete solutions
  - Rotary table multi-axis combinations
  - Machine stands and additional table tops
  - Workpiece seats and fixtures
  - Environment designs, e.g. protective housings

## Your benefits

- Lowest tooling times with the most flexible positioning and handling capabilities
- The best of all our rotary tables combined into one solution
- From problem-solving to delivery – everything from a single source
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- Highest level of production expertise in conjunction with a comprehensive range of machinery
- Alignment with interfaces and machine concepts required by the customer





FIBRO GMBH

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