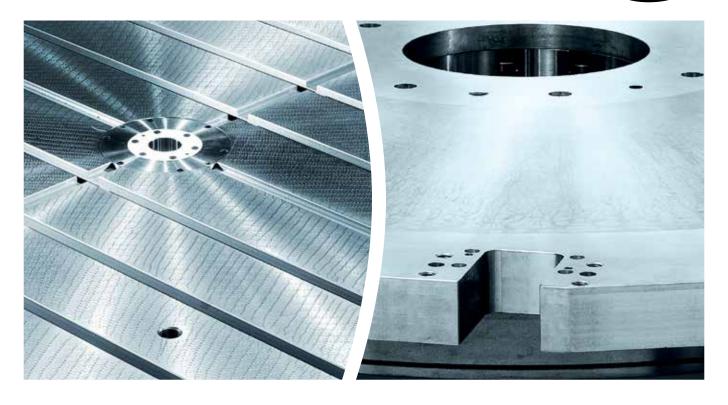


THE WORLDWIDE PIONEER IN

# ROTARY TABLES



## RotoCutting ROTARY TABLES FOR MACHINE TOOLS

#### **FIBROPLAN®**

NC rotary tables with worm drive

#### **FIBROMAX®**

Heavy duty NC rotary tables with twin-drive

#### FIBRODYN® DA

Highly dynamic NC rotary tables with direct torque drive

#### **FIBROTAKT®**

Precision rotary tables with Hirth face gearing

#### **CUSTOM SOLUTIONS**

Customer-specific rotary tables

## Roto*Motion*ROTARY TABLES FOR AUTOMATION SYSTEMS

#### **FIBROTOR®**

Universal rotary tables with cam drive

#### **FIBROMAT®**

Heavy-load positioning tables

#### FIBRODYN® DM

Direct driven high-speed rotary tables

#### **CUSTOM SOLUTIONS**

Custom-made automation solutions









#### **ROTARY TABLES FOR** THE USE IN **MACHINE TOOLS**

#### **FIBROPLAN®**

#### **NC** rotary tables with worm drive

#### Your application

- > 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 - 3000 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 ± 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

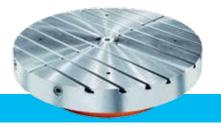
#### Your application

- > 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

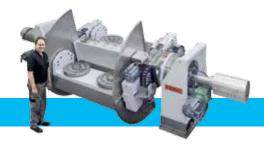
#### **Your benefits**

- > Roller bearing for highest costeffectiveness 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 u 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

# 30to Cuttin







#### FIBRODYN® DA

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

#### **FIBROTAKT®**

#### Precision rotary table with Hirth face gearing

### CUSTOM SOLUTIONS

#### Customer-specific rotary tables

#### Your application

- > 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 application

- > For precision positioning applications up to ± 1", repeat accuracy up to ± 0.1"
- > No NC controller required
- > Hydraulically, electrically or pneumatically driven and controlled
- Also available as a built-in variant for integrated machine designs, e.g. custom rotary indexing table machines

#### Your application

- > Tailor-made rotary table solutions especially for your application, e.g.
  - > Rotary table multi-axis combinations
  - > Planetary tables
  - > Built-in rotary tables
  - > Rotary-linear tables
  - > Stand-alone rotary tables

#### **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 ± 2") and repeat accuracy (up to ± 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

#### **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 3000 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

#### **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 to interfaces and machine concepts required by the customer





# ROTARY TABLES FOR THE USE IN AUTOMATION SYSTEMS

#### **FIBROTOR®**

#### Universal rotary tables with cam drive

#### **FIBROMAT®**

#### Heavy-load positioning tables

#### Your application

- 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 application

- For the dynamic and precise positioning of large and heavy fixtures and parts
- > For superstructural parts up to 9500 mm
- > Ideal for shell and welded design applications
- Deployable as a setup station, largeformat pallet exchanger and for general handling tasks
- > 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 for fastest possible delivery times with highest level of standardisation
  - > 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
- > With hydraulic clamping and reinforced table top support, suitable for light cutting tasks
- Available with many additional options for an array of add-on and deployment applications
- > Sturdy design with long-term lubrication for minimal maintenance and longest service life

#### **Your benefits**

- Heavy-duty positioning table with very large centre hole and extremely flat design
- Lubricated for life and maintenancefree 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 indexingaccuracy of max. ± 15" for freely selectable angles
  - Direct measuring system and additional drive for highest indexing accuracy up to ± 5"
  - > Cross roller bearing for particularly high tilting moments
  - Machine stands and adaptations for replacement of existing rotary tables
  - Special connecting dimensions and specific drilling templates for your individual application

# Roto/Motion







#### FIBRODYN® DM

#### Direct driven high-speed rotary tables

## **CUSTOM SOLUTIONS**

#### **Custom-made automation solutions**

#### Your application

- > For extremely quick positioning in automation systems
- > Highest positioning and repeat accuracy
- > Maximum flexibility for application and product conversions
- Universal deployment for the most diverse of applications

#### Your application

- > Tailor-made rotary table automation solutions specially for your application, 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**

- > Highest dynamics and productivity with extremely fast positioning times
- > Easy to use thanks to intuitive operating software program
- > Integrated control and plug-in cable connection for logic and power supply
- > Slim and very space-saving design
- > Large center hole
- > Energy-efficient design without the use of additional cooling units

#### **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
- 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 to interfaces and machine concepts required by the customer



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