Table line
Rotary tables / Rotary-swivel tables
Top positioning accuracy for ultra-precise 5-axis machining
The KESSLER Table line includes single-axis rotary tables and dual-axis rotary-swivel tables. It incorporates the renowned KESSLER x-how for superior quality and innovative technology. The individual components form a modular system which can be configured to suit your specific requirements. Let us help you build the ideal system for your application environment.

Heavy workpieces can be quickly positioned and secured. High positioning accuracy ensures precise results for 5-axis machining. Our ultra-flexible rotary and rotary-swivel tables feature high acceleration and swivel speeds for maximum productivity – driven by the very latest torque motor generation from KESSLER. High-speed rotary tables can also be used for turning operations.

End-to-end precision from the components to the service on site

Founded in 1923 by Franz Kessler, the company has developed to become a leading supplier of motor spindles as well as direct driven swivelling heads and rotary-swivel tables for the machine tool industry. KESSLER is proud to count many major companies from the mechanical engineering sector amongst its long-standing customers.

With over 90 years of expertise, KESSLER is continuously developing further and optimizing its products. The KESSLER product portfolio serves a wide range of branches, procedures and applications. Close cooperation with our customers remains our key focus. The extensive product portfolio, ranging from high-tech spindles, swivelling heads, rotary and rotary-swivel tables to motors and drive systems enables KESSLER to realize customized solutions with speed and flexibility.

Service is a matter of trust – rely on us as your trusted service partner: KESSLER has an established global network of technology and service centres.
Experts for simultaneous processing

The right table for every workpiece:
Modular table system from MINI to LARGE

**KESSLER TABLE line**

<table>
<thead>
<tr>
<th>MINI 2AT 400/500</th>
<th>SMALL 2AT 500/630</th>
<th>MEDIUM 2AT 630/800</th>
<th>LARGE 2AT 800/1.000</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1.png" alt="Image" /></td>
<td><img src="image2.png" alt="Image" /></td>
<td><img src="image3.png" alt="Image" /></td>
<td>On request</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>MINI 1AT 400/500 (MT)</th>
<th>SMALL 1AT 500/630 (MT)</th>
<th>MEDIUM 1AT 630/800 (MT)</th>
<th>LARGE 1AT 800/1.000 MT</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image4.png" alt="Image" /></td>
<td><img src="image5.png" alt="Image" /></td>
<td><img src="image6.png" alt="Image" /></td>
<td><img src="image7.png" alt="Image" /></td>
</tr>
</tbody>
</table>

Individually customized to your requirements:

- **2 drive axes for 3 sizes:**
  The rotary-swivel tables MINI 2AT one-sided and SMALL 2AT both-sided, plus SMALL 2AT one-sided and MEDIUM 2AT both-sided each have the same drive components.

- **Table cartridge:**
  for use as high-speed rotary version for milling-turning operations or with lower speed for just milling and drilling operations.

1 AT = 1-axis table  MT = mill turn
2 AT = 2-axis table  P = positioning
All benefits at a glance

- 5-axis simultaneous processing with direct drive
- Precision stops and defined swivel axis height
  Simple adjustment in the machine tool
- Modular design for individual configuration
- Highly flexible and suitable for a wide variety of applications, easy to change table plate
- Various table plates available — individual shapes can be defined as required
- Precise machining results due to high positioning accuracy
- Very maintenance friendly
  Wear parts can be easily replaced on site
- Powerful KESSLER COOLMOTION® motors for more dynamic
- Turning operation option with high-speed rotary tables
- Extremely robust design with high rigidity
- High productivity due to fast acceleration and swivel speed
- Cable drag chain on the left or right

HIGH QUALITY
MADE IN GERMANY
### MINI 1AT

<table>
<thead>
<tr>
<th></th>
<th>Milling table cartridge MINI 1AT</th>
<th>Milling-turning table cartridge MINI 1AT MT</th>
<th>Positioning table MINI 1AT P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Table plate diameter (mm)</td>
<td>400 - 500</td>
<td>400 - 500</td>
<td>500</td>
</tr>
<tr>
<td>Maximum speed (rpm)</td>
<td>200</td>
<td>1,500</td>
<td>25</td>
</tr>
<tr>
<td>Maximum workpiece weight (kg)</td>
<td>500</td>
<td>350</td>
<td>1,000</td>
</tr>
<tr>
<td>Total height (mm)</td>
<td>300</td>
<td>300</td>
<td>215</td>
</tr>
<tr>
<td>Torque S1 (Nm)</td>
<td>400</td>
<td>450</td>
<td>265 / 530</td>
</tr>
<tr>
<td>Maximum torque (Nm)</td>
<td>800</td>
<td>750</td>
<td>800</td>
</tr>
<tr>
<td>Clamp</td>
<td>Hydraulic / Pneumatic table</td>
<td>Hydraulic</td>
<td>Hydraulic</td>
</tr>
<tr>
<td>Clamping torque (Nm)</td>
<td>2,000</td>
<td>2,000</td>
<td>2,040</td>
</tr>
<tr>
<td>Measuring system</td>
<td>Absolute</td>
<td>Absolute</td>
<td>Absolute</td>
</tr>
<tr>
<td>Accuracy of measuring system (°)</td>
<td>± 5</td>
<td>± 5</td>
<td>± 7.5</td>
</tr>
<tr>
<td>Cooling</td>
<td>Water</td>
<td>Water</td>
<td>Convection / Water</td>
</tr>
</tbody>
</table>

Positioning tables cannot be used in rotary-swivel tables

### SMALL 1AT

<table>
<thead>
<tr>
<th></th>
<th>Milling table cartridge SMALL 1AT</th>
<th>Milling-turning table cartridge SMALL 1AT MT</th>
<th>Positioning table SMALL 1AT P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Table plate diameter (mm)</td>
<td>500 - 630</td>
<td>500 - 630</td>
<td>630</td>
</tr>
<tr>
<td>Maximum speed (rpm)</td>
<td>100</td>
<td>1,200</td>
<td>25</td>
</tr>
<tr>
<td>Maximum workpiece weight (kg)</td>
<td>850</td>
<td>500</td>
<td>2,000</td>
</tr>
<tr>
<td>Total height (mm)</td>
<td>355</td>
<td>355</td>
<td>300</td>
</tr>
<tr>
<td>Torque S1 (Nm)</td>
<td>1,040</td>
<td>1,250</td>
<td>430 / 860</td>
</tr>
<tr>
<td>Maximum torque (Nm)</td>
<td>2,080</td>
<td>1,875</td>
<td>1,290</td>
</tr>
<tr>
<td>Clamp</td>
<td>Hydraulic / Pneumatic table</td>
<td>Hydraulic</td>
<td>Hydraulic</td>
</tr>
<tr>
<td>Clamping torque (Nm)</td>
<td>3,200</td>
<td>3,200</td>
<td>4,500</td>
</tr>
<tr>
<td>Measuring system</td>
<td>Absolute</td>
<td>Absolute</td>
<td>Absolute</td>
</tr>
<tr>
<td>Accuracy of measuring system (°)</td>
<td>± 5</td>
<td>± 5</td>
<td>± 6</td>
</tr>
<tr>
<td>Cooling</td>
<td>Water</td>
<td>Water</td>
<td>Convection / Water</td>
</tr>
</tbody>
</table>

Positioning tables cannot be used in rotary-swivel tables
1-axis rotary tables

### MEDIUM 1AT

<table>
<thead>
<tr>
<th></th>
<th>Milling table cartridge MEDIUM 1AT</th>
<th>Milling-turning table cartridge MEDIUM 1AT MT</th>
<th>Positioning table MEDIUM 1AT P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Table plate diameter (mm)</td>
<td>630 - 800</td>
<td>630 - 800</td>
<td>800</td>
</tr>
<tr>
<td>Maximum speed (rpm)</td>
<td>100</td>
<td>1,000</td>
<td>25</td>
</tr>
<tr>
<td>Maximum workpiece weight (kg)</td>
<td>1,200</td>
<td>850</td>
<td>3,000</td>
</tr>
<tr>
<td>Total height (mm)</td>
<td>338</td>
<td>353</td>
<td>300</td>
</tr>
<tr>
<td>Torque S1 (Nm)</td>
<td>1,850</td>
<td>2,100</td>
<td>750 / 1,500</td>
</tr>
<tr>
<td>Maximum torque (Nm)</td>
<td>3,700</td>
<td>3,100</td>
<td>2,240</td>
</tr>
<tr>
<td>Clamp</td>
<td>Hydraulic / Pneumatic table</td>
<td>Hydraulic</td>
<td>Hydraulic</td>
</tr>
<tr>
<td>Clamping torque (Nm)</td>
<td>4,000</td>
<td>4,000</td>
<td>7,000</td>
</tr>
<tr>
<td>Measuring system</td>
<td>Absolute</td>
<td>Absolute</td>
<td>Absolute</td>
</tr>
<tr>
<td>Accuracy of measuring system (*)</td>
<td>± 5</td>
<td>± 5</td>
<td>± 5</td>
</tr>
<tr>
<td>Cooling</td>
<td>Water</td>
<td>Water</td>
<td>Convection / Water</td>
</tr>
</tbody>
</table>

Positioning tables cannot be used in rotary-swivel tables.

### LARGE 1AT

<table>
<thead>
<tr>
<th></th>
<th>Milling table cartridge LARGE 1AT</th>
<th>Milling-turning table cartridge LARGE 1AT MT</th>
<th>Positioning table LARGE 1AT P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Table plate diameter (mm)</td>
<td>-</td>
<td>1,000</td>
<td>1,000</td>
</tr>
<tr>
<td>Maximum speed (rpm)</td>
<td>-</td>
<td>1,000</td>
<td>25</td>
</tr>
<tr>
<td>Maximum workpiece weight (kg)</td>
<td>-</td>
<td>1,500</td>
<td>4,000</td>
</tr>
<tr>
<td>Total height (mm)</td>
<td>-</td>
<td>494</td>
<td>300</td>
</tr>
<tr>
<td>Torque S1 (Nm)</td>
<td>-</td>
<td>2,000</td>
<td>970 / 1,940</td>
</tr>
<tr>
<td>Maximum torque (Nm)</td>
<td>-</td>
<td>3,000</td>
<td>2,720</td>
</tr>
<tr>
<td>Clamp</td>
<td>-</td>
<td>Hydraulic</td>
<td>Hydraulic</td>
</tr>
<tr>
<td>Clamping torque (Nm)</td>
<td>-</td>
<td>7,500</td>
<td>9,000</td>
</tr>
<tr>
<td>Measuring system</td>
<td>-</td>
<td>Incremental</td>
<td>Incremental</td>
</tr>
<tr>
<td>Accuracy of measuring system (*)</td>
<td>-</td>
<td>± 5</td>
<td>± 5</td>
</tr>
<tr>
<td>Cooling</td>
<td>-</td>
<td>Water</td>
<td>Convection / Water</td>
</tr>
</tbody>
</table>

Positioning tables cannot be used in rotary-swivel tables.

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**Modular extensions (MINI to LARGE 1AT)**

- Pressure control
- Rotary union
- Prepared for balancing monitoring system
- Pallet changer
- Pneumatic clamping
MINI 2AT

A-axis (swivelling axis)
- Torque S1: 1,040 Nm
- Maximum torque: 2,080 Nm
- Maximum speed: 100 rpm
- Clamping: hydraulic / pneumatic table
- Clamping torque: 3,200 Nm
- Swivelling angle: ± 120°
- Measuring system: absolute
- Accuracy of measuring system: ± 5"

C-axis (turning axis)
- Torque S1: 400 Nm
- Maximum torque: 800 Nm
- Maximum speed: 200 rpm
- Clamping: hydraulic / pneumatic table
- Clamping torque: 2,000 Nm
- Measuring system: absolute
- Accuracy of measuring system: ± 5"

Dimensions (mm)

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Unit</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Table plate diameter</td>
<td>D1</td>
<td>400 - 500</td>
</tr>
<tr>
<td>Distance A-axis to table surface</td>
<td>H2</td>
<td>60</td>
</tr>
<tr>
<td>Total width</td>
<td>B1</td>
<td>1,377</td>
</tr>
<tr>
<td>Height of A-axis to mounting surface</td>
<td>H1</td>
<td>250</td>
</tr>
<tr>
<td>Workpiece - maximum Ø</td>
<td>mm</td>
<td>630</td>
</tr>
<tr>
<td>Maximum workpiece height</td>
<td>mm</td>
<td>315</td>
</tr>
<tr>
<td>Maximum workpiece weight</td>
<td>kg</td>
<td>500</td>
</tr>
<tr>
<td>Total weight</td>
<td>kg</td>
<td>950</td>
</tr>
</tbody>
</table>
Modular extensions available

A-axis
+ Pneumatic clamping
+ Leakage monitoring
+ Pressure monitoring
+ Cable carrier
+ Measuring system with enhanced accuracy for all standard control systems

C-axis
+ High-speed rotary (maximum speed: 1,500 rpm)
+ Pneumatic clamping
+ Leakage monitoring
+ Pressure control
+ 4 and 8 channel rotary union
+ Pallet clamping system
+ Measuring system with enhanced accuracy for all standard control systems
### SMALL 2AT

**A-axis (swivelling axis)**

**One-sided drive**
- Torque S1: 1,850 Nm
- Maximum torque: 3,700 Nm
- Maximum speed: 100 rpm
- Clamping: hydraulic / pneumatic table
- Clamping torque: 4,000 Nm
- Swivelling angle: ± 120°
- Measuring system: absolute
- Accuracy of measuring system: ± 5”

**A-axis (swivelling axis)**

**Driven on both sides**
- Torque S1: 2 x 1,040 Nm
- Maximum torque: 2 x 2,080 Nm
- Maximum speed: 100 rpm
- Clamping: hydraulic / pneumatic table
- Clamping torque: 2 x 3,200 Nm
- Swivelling angle: ± 120°
- Measuring system: absolute
- Accuracy of measuring system: ± 5”

### Dimensions (mm)

<table>
<thead>
<tr>
<th></th>
<th>Version driven on one side</th>
<th>Version driven on both sides</th>
</tr>
</thead>
<tbody>
<tr>
<td>Table plate diameter</td>
<td>D1</td>
<td>500 - 630</td>
</tr>
<tr>
<td>Distance A-axis to table surface</td>
<td>H2</td>
<td>100</td>
</tr>
<tr>
<td>Total width</td>
<td>B1</td>
<td>1,590</td>
</tr>
<tr>
<td>Height of A-axis to mounting surface</td>
<td>H1</td>
<td>325 / 250</td>
</tr>
<tr>
<td>Workpiece - maximum Ø</td>
<td>mm</td>
<td>800</td>
</tr>
<tr>
<td>Maximum workpiece height</td>
<td>mm</td>
<td>400</td>
</tr>
<tr>
<td>Maximum workpiece weight</td>
<td>kg</td>
<td>850</td>
</tr>
<tr>
<td>Total weight</td>
<td>kg</td>
<td>1,320</td>
</tr>
</tbody>
</table>
Modular extensions available

A-axis
+ Pneumatic clamping
+ Leakage monitoring
+ Pressure monitoring
+ Cable carrier
+ Measuring system
  with enhanced accuracy for all standard control systems

C-axis
+ High-speed rotary
  (maximum speed: 1,200 rpm)
+ Pneumatic clamping
+ Leakage monitoring
+ Pressure monitoring
+ 4 and 8 channel rotary union
+ Pallet clamping system
+ Measuring system
  with enhanced accuracy for all standard control systems
MEDIUM 2AT

A-axis (swivelling axis)
- Torque S1: 1,850 Nm
- Maximum torque: 2 x 3,700 Nm
- Maximum speed: 100 rpm
- Clamping: hydraulic / pneumatic table
- Clamping torque: 2 x 4,000 Nm
- Swivelling angle: ± 120°
- Measuring system: absolute
- Accuracy of measuring system: ± 5”

C-axis (turning axis)
- Torque S1: 1,850 Nm
- Maximum torque: 3,700 Nm
- Maximum speed: 100 rpm
- Clamping: hydraulic / pneumatic table
- Clamping torque: 4,000 Nm
- Measuring system: absolute
- Accuracy of measuring system: ± 5”

Dimensions (mm)

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Table plate diameter</td>
<td>D1</td>
</tr>
<tr>
<td>Distance A-axis to table surface</td>
<td>H2</td>
</tr>
<tr>
<td>Total width</td>
<td>B1</td>
</tr>
<tr>
<td>Height of A-axis to mounting surface</td>
<td>H1</td>
</tr>
<tr>
<td>Workpiece - maximum Ø</td>
<td>mm</td>
</tr>
<tr>
<td>Maximum workpiece height</td>
<td>mm</td>
</tr>
<tr>
<td>Maximum workpiece weight</td>
<td>kg</td>
</tr>
<tr>
<td>Total weight</td>
<td>kg</td>
</tr>
</tbody>
</table>
Modular extensions available

A-axis
+ Pneumatic clamping
+ Leakage monitoring
+ Pressure monitoring
+ Cable carrier
+ Measuring system
  with enhanced accuracy for all standard control systems

C-axis
+ High-speed rotary
  (maximum speed: 1,000 rpm)
+ Pneumatic clamping
+ Leakage monitoring
+ Pressure monitoring
+ 4 and 8 channel rotary union
+ Pallet clamping system
+ Measuring system
  with enhanced accuracy for all standard control systems
KESSLER is the innovation engine behind state-of-the-art direct drive technology and is renowned for powerful and energy-efficient motors with high torque density and top reliability even in high-demand applications. Practically-based simulations and individual customer calculations are a prerequisite for the development excellence of KESSLER motors.

The inverter-optimized COOLMOTION® motors are recognized for their low-loss design and enhanced heat dissipation. Innovative modifications to the motor components have enabled us to reduce the rotor and stator losses by 25%. Special construction measures have resulted in significantly enhanced heat dissipation.

The COOLMOTION® technology optimizes efficiency to a maximum.
Table *line* specials

A global table manufacturer, KESSLER provides not only standard products but also customized special solutions.

**Multi-axis rotary-swivel tables**
for simultaneous machining in multi-spindle machines

**Highly dynamic positioning tables**
for up to 1,000 positioning cycles per minute

**45° tables**
highly compact design, optimal for use in machines with little available space

**One-arm rotary-swivel tables**
compact design for simple table loading and good access during the machining process
Operating Worldwide for our Customers

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