PRODUCT GROUPS

TOOLING & MACHINE TOOLING TECHNOLOGY

TOOLING TECHNOLOGY







- Radial heads 90°
- Radial heads ≠ 90°
- Axial heads
- Swivel heads
- Multi-spindle heads
- **Broaching units**
- Rotating tool holders

LIVE TOOLS/TOOL HOLDERS **EXCHANGEABLE UNITS**

- Static tool holders

COMPONENTS. Our comprehensive tool concepts for turning centers and milling centers are ideal for nearly every application. Providing a technological advantage is our goal.

SPECIFIC TO THE CUSTOMER. Our modular approach enables customized configurations.

SYSTEMS. We develop special customer-specific tools for OEM and end customers on request.

- Angle heads 90°
- Angle heads ≠ 90°
- Swivel heads
- Multi-spindle heads
- **Broaching units**
- High-speed spindles

EXCHANGEABLE UNITS

- Angle heads 90°
- Swivel heads
- Multi-spindle heads
- Multi-axis heads
- Sanding units
- Floating head units

KNOWLEDGE AND EXPERIENCE. Our knowledge of the metalworking industry and decades of development partnership make us ideal for new tasks anywhere in the

COMPONENTS. We deliver a vast array of standard components from stock and develop innovative, customized systems for OEM and end customers.

VARIETY. Whether in machining centers in the automotive, aerospace or wind energy industries, units from Benz can be used anywhere. Numerous customers choose us as their systems and innovation partner.

FOR ANY APPLICATION. Cost-effectively process and machine wood, composites and aluminium: We provide series production angle heads for drilling, milling, sawing and grinding in addition to other units for special applications. FROM BASIC TO HIGH-END. Benz units are available in a variety of performance classes, making them ideal for everything from light machining to high-performance continuous operation.

SYSTEMS. We have the solution for your special applications: Customized Benz units for machining centers. Put us to the test!

MACHINE TOOLING TECHNOLOGY







METAI

MULTI-SPINDLE HEADS AND LARGE DRILL HEADS

- Large angle heads
- Large drill heads
- XXL multi-spindle heads

DEVELOPMENT PARTNER. We accompany you from brainstorming to inspection of the final machine, always to your expectations. Our assortment ranges from compact heads to XXL units. SYSTEMS. Benz stands for high-end solutions in the fields of machine tooling technology, specialty solutions, custom assemblies and mechanical modules. We manufacture and configure multiplespindle and large-angle heads as well as large drill heads. COMPONENTS. Attachment units complete our range.

INCIAL / WOOD/ COMI OSITE AND ACOM

SYSTEM TECHNOLOGY

- Multiple-spindle drill heads
- Motor spindles
- Motors
- 5-axis technology
- C-axes
- Swivel axes
- Rotary distributors
- Z-axes

COMPONENTS. Our range includes standard products in an assortment of shapes and sizes.

THE PERFECT ADDITION. Our system additions provide you with even more efficiency. Perfect your existing solutions with Benz products! SYSTEMS. We develop the technology of tomorrow. Your individual requirements for the efficiency of your machine tools and the suitability of the tools in use provide our benchmark for new, innovative solutions.

SERVICE

SERVICE

- Repair service
- Rapid Repair Kit
- Preventive maintenance
- Spare part management
- Global service
- Service hotline

DO NOT LOSE A SECOND. Speed is the order of the day when unexpected breakdowns occur. Our service center ensures immediate assistance around the world. We ensure your machine has as little downtime as possible. SERVICE QUALITY. We guarantee top service quality reflecting our expertise as a manufacturer. FORESIGHT. We go one step further: Preventive maintenance, customized Rapid Repair Kits and our spare part management service ensure you have the best setup to face any emergency. We look to the future to keep you at your peak.

OVERVIEW

PICTOGRAMS & ABBREVIATIONS

UNIT SPECIFICATIONS

Type of machining

Number of output spindles (tool holding fixtures)

Axis angle

Drive for spindle **Direction of** rotation

Coolant feed for cutting blade

Turret data





€ 1

one output

spindle

0°



Milling is suitable for milling machining



Threading is suitable for thread machining



Broaching and slotting is suitable for machining by broaching and slotting



0° 90° Unit for Unit for machining tasks machining tasks at a 0° angle at a 90° angle



Unit for machining tasks at an adjustable angle $0^{\circ} \pm \text{max.} \, \alpha^{\circ}$



clockwise / clockwise synchronized rotation



90°

clockwise / counterclockwise counter-rotation





feed line



Combination (EC+IC) The tool is cooled by a combination (spray nozzle) of both internal and external systems







Drive length of the tools shank in the turret



Turret type

ABBREVIATIONS

Maximum

M _{max}	torque
i	Gear ratio
n _{max}	Maximum speed
f _c	Feed
p _{max}	Maximum pressure (bar)
EC	External cooling
IC	Internal cooling
p.	Page
✓	Possible
-	Not possible
SW	Width across flats
mm	Millimeter