

Gaining efficiency through innovation



X-line crown technology

Benz Angle Heads feature gears composed of crown gears and straight gears which give increased benefits of:

- Higher speed rpm
- Transfer higher torque
- Compact housing with less wear parts
- Increased system rigidity by using optimised application of bearings
- Longer durability of cutting edge
- Longer time between maintenance
- Rotary feedtrough: for pressure up to 100 bar and rpms up to 15.000 min⁻¹. Usable for all methods of modern manufacturing and capable of unrestricted dry running.



Example of an additional support method



For designs according to your application we will be glad to advise you.

Additional support

An additional support increases the stiffness between unit and machine.

This guarantees an optimum transfer of force and reduces vibrations, which can negatively effect the quality of the work piece and the lifetime of the tool.

If additional support is required it will depend on the machining process case by case.

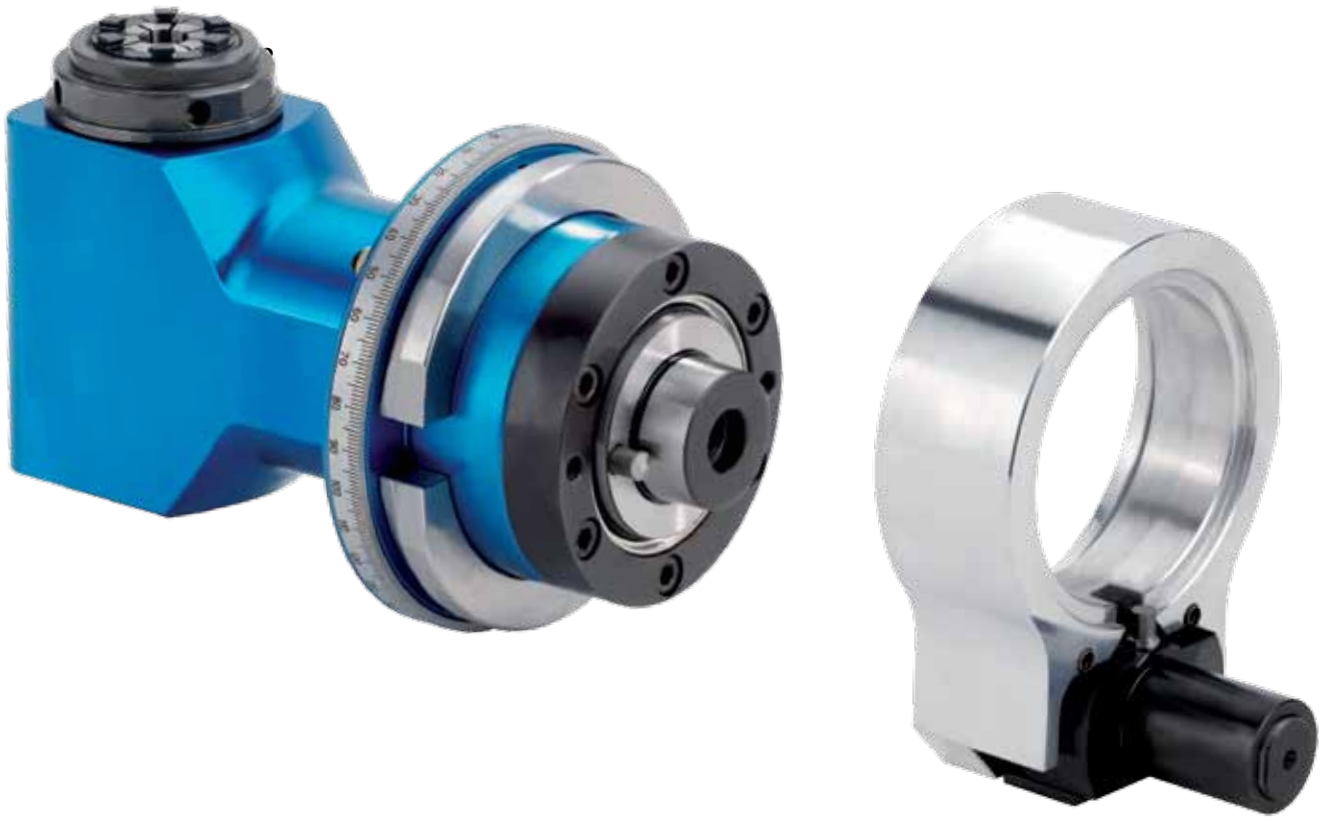
Rotary feedthrough

All BENZ angle heads are equipped with high performance rotary feedthrough.

Applications with coolant emulsion, cutting oil, minimum quantity lubrication, oil mist lubrication as well as dry, oil-free air can be realised.

The designs are usable for pressure up to 100 bar and rpms up to 15.000 min⁻¹ and can be dry run indefinitely.





Build your right angle head according to your individual needs.

- 1 Right angle head: designs depending on your manufacturing needs available in various sizes
- 2 Tool output: as standard equipped with ER Collet chuck type ER (DIN 6499) or with the BMS modular system. All standard tooling configurations or special designs are possible.
- 3 Torque arm is built according to machine specifications.
Alternatively a standard torque arm is available from BENZ.
- 4 Drive: all standard tapers are available

Individual customer requirements, such as e.g. additional functionality of a C-axis can be accommodated. Please contact us for further details.

Modular designs for flexible applications

- **Wide product range**
- **Short delivery times**
- **Very easy to service and maintain**



HSK DIN 69893



ISO SK
DIN 69871; DIN 2080



Coromant Capto[®]



MAS BT

Additional designs on request.



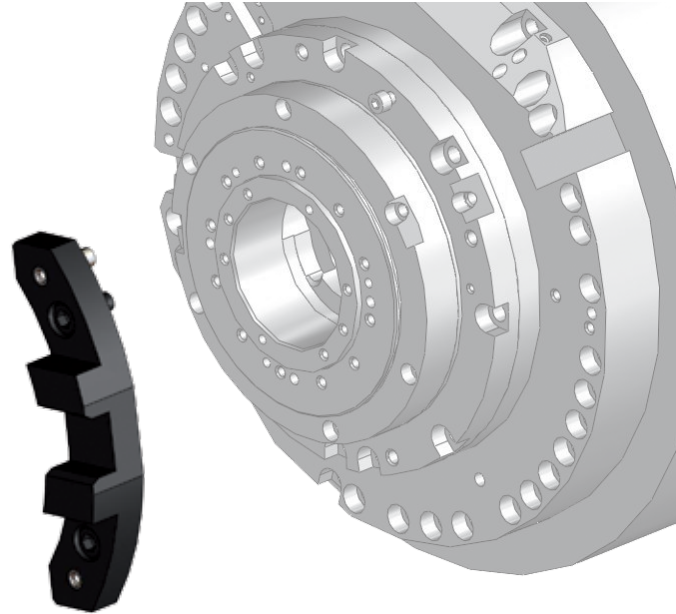
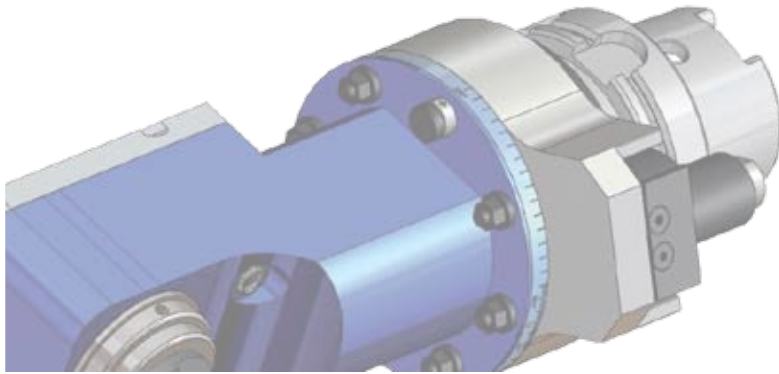
KM[™]



CAT

Lock and unlocking device: Stop block

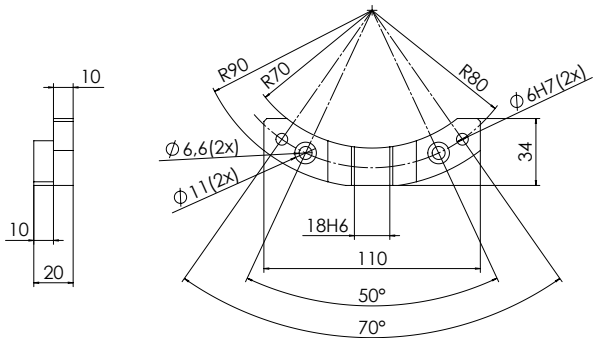
- Fixes the housing at a certain position to avoid turning
- Is used for positioning accuracy
- Ensures repeatability during automated tool change



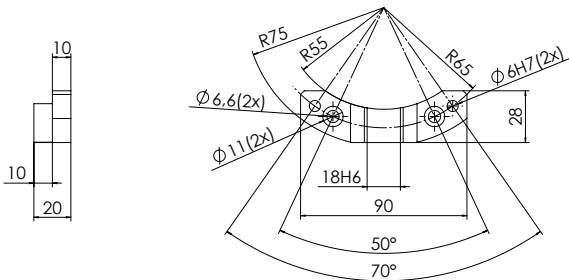
Basic principle: the torque arm and the stop block used in the machine have to fit together.

The following 3 examples are according to ISO 9524.

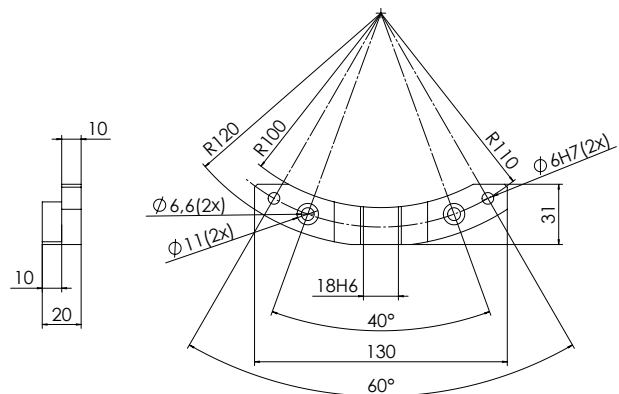
The stop block is not included with standard delivery and must be ordered separately.



K00600-070/090 suitable for dimension A 80

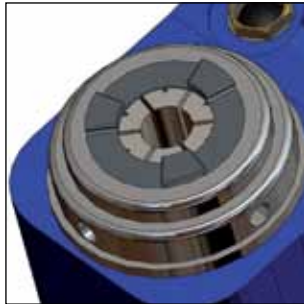


K00600-055/075 suitable for dimension A 65

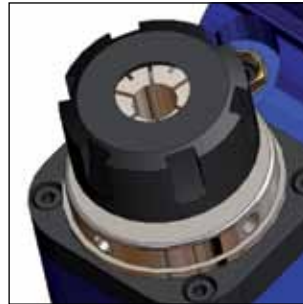


K00600-100/120 suitable for dimension A 110

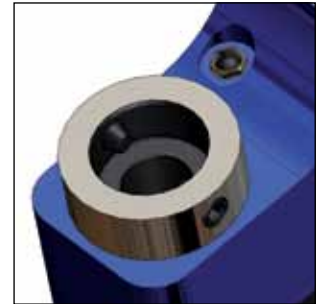
Spindle variations and clamping systems



Collet chuck
System ER DIN 6499



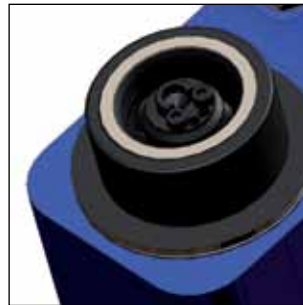
Collet chuck
System Ortlieb DIN 6388



Modular System BMS



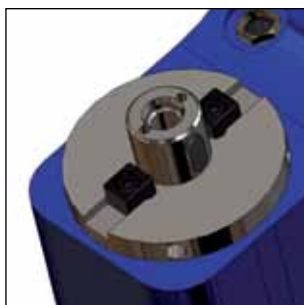
Coromant Capto®



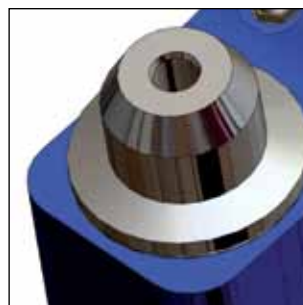
KM™



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Milling arbor



Weldon und Whistle -
Notch combined



HSK Form A+C

Angle Heads can be manufactured with any of the clamping systems listed above.