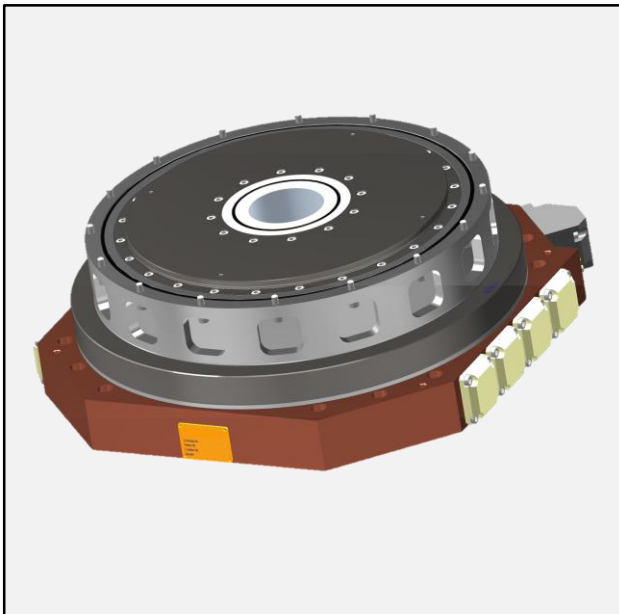


# Max. Precision at swiveling!

## Hydrostatic swivel unit



### Special features:

- entire swivel axis with hydrostatic bearing and sealing
- with torque motor drive
- with high-precision angle measurement system
- high-precision clamping by axial bearing shut down
- large rotary joint with side-exit for oil return of top-mounted hydrostatic grinding spindles
- horizontal or vertical application
- for fast and precise wheel exchange

### Advantages of hydrostatic B-Axes

- **wear free bearing and clamping**  
=> unchanged characteristics, precision positioning and bearing stiffness for many years
- **free of play and friction free**  
=> Positioning accuracy according to angle measurement systems specifications (1-2") possible  
=> Same position of the grinding spindle after swivel out and swivel in
- **excellente vibration dampening**  
=> vibration absorption for best surface quality and material removal rates  
=> long tool lifetime
- **high axial load and tilt torque**  
=> both high and eccentric weights and tilt torque moments from high machining forces can be taken
- **very high stiffness and low energy input using PM-flow controller**  
=> optimized precision at work piece  
=> high dynamics possible
- **torquemotor with high peak moment for quick wheel exchange**

Base octagon / size $\emptyset$	SW 440 mm / $\emptyset$ 376 mm	SW 520 mm / $\emptyset$ 456 mm
max. axial force / tilt torque at 32bar	13 kN / 1200 Nm	20 kN / 2200 Nm
max. axial force / tilt torque at 50bar	20 kN / 2000 Nm	30 kN / 3000 Nm
max. radial force at 32 / 50bar	bis 1500 / 3000 N	3.000 / 5000 N
max. rotational speed	360°/ sec	360°/ sec
Hydraulic oil HLP with viscosity	VG68, VG46, VG32	VG68, VG46, VG32
max. oil demand at 32 / 50bar VG46 at 35°C	1,5 l/min / 2,2 l/min	2,3 l/min / 3,0 l/min
max. moment torquemotor	350 Nm / 31 A	647 Nm / 31 A
absolute angle measurement system	Heidenhain RCN5580	Heidenhain RCN8580

Swivel units can be designed according to customer requirements. Oil type and pump pressure are optimized for excellent vibration dampening characteristics.