

Power Skiving Unit

High Productive Manufacturing of ID/OD Gears and Splines with CNC Turning Centers.

Maximum flexibility, high quality, optimal handling.

In operation:

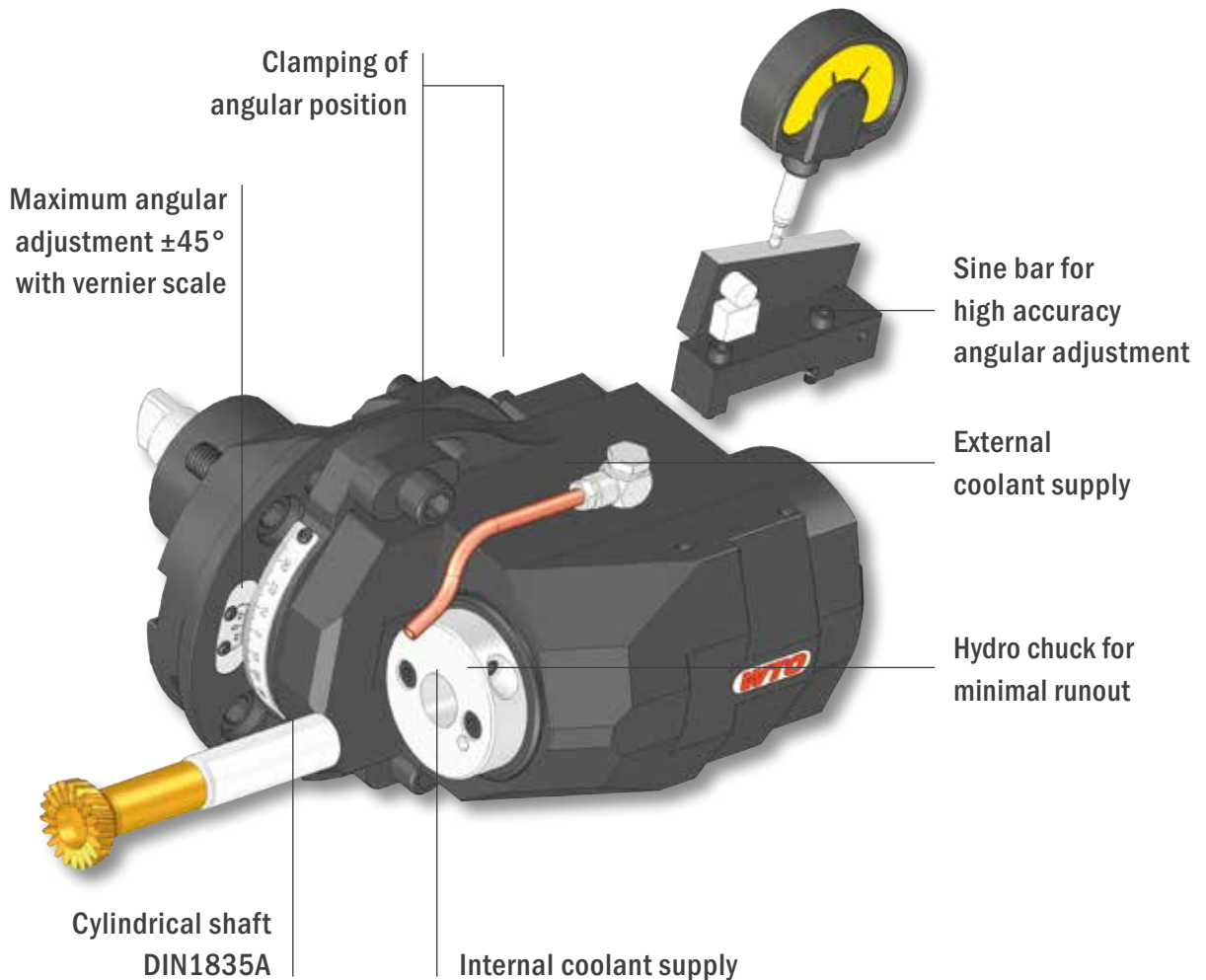


Power Skiving Unit for ID and OD

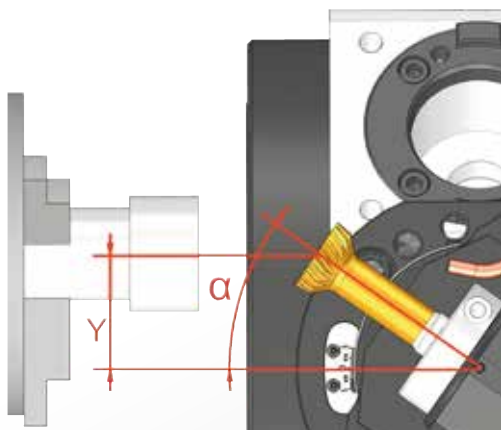
| | |
|-----------------------------|---------------------------|
| Ratio i (n1:n2) | 1:1 |
| Max. RPM (n2) | 3,000 |
| Max. torque M | 63 Nm |
| Max. scale swing α | $\pm 45^\circ$ |
| Tool clamping dia. | $\varnothing 20$ DIN1835A |
| Coolant supply | internal a. external |
| Max. coolant pressure | 1160 PSI (80 bar) |
| Required coolant filtration | $\leq 50 \mu\text{m}$ |



- | High stiffness and runout accuracy
- | Quick cutting tool change with hydro chuck

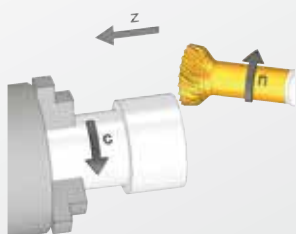


Operation principle: Power Skiving

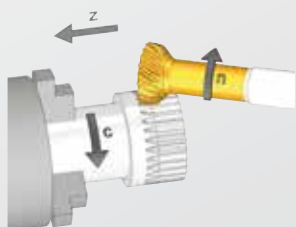


The workpiece axis and the skiving tool axis must be related to each other in a defined angle (α).

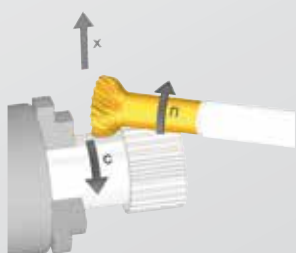
The offset of the cutting tool (Y) caused by rotating to the defined angle (α) must be compensated with the Y-axis of the machine.



Synchronization of work piece and tool rotation.



Feed movement in Z-axis.



When skiving is finished the cutter has to move towards X.

Please consider:

At the end of the gear/spline there must be sufficient clearance for the cutter.

Sample workpieces

