

GUHRING

MQL
by GÜHRING
.....

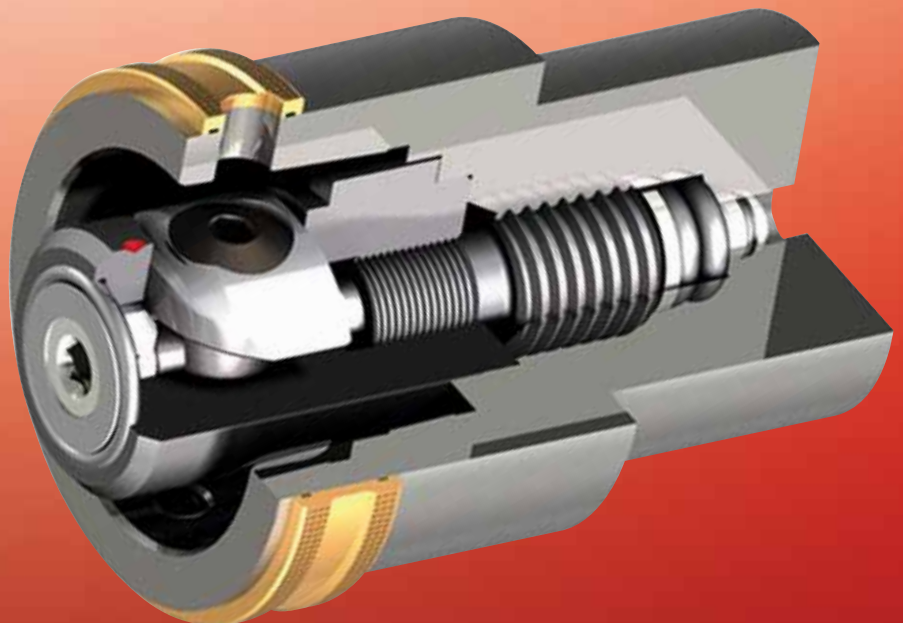
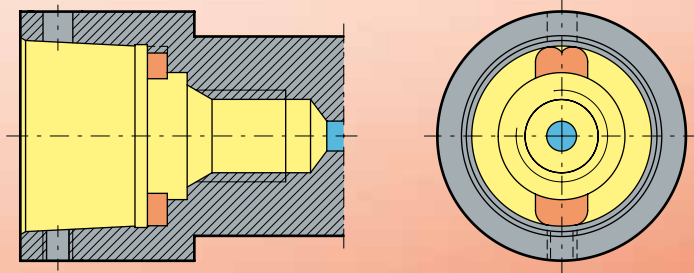


**The top MQL
clamping set from
Guhring – now
for many spindle
contours!**

The Genuine Article - the clamping set with Guhring contour

Guhring 4-point clamping sets offer maximum clamping force and optimal coolant supply. They are suitable for radial manual tool clamping in spindles (short drilling spindles, multi-spindle drilling heads) and are available in two designs, that thanks to their identical spindle contour are 100% compatible:

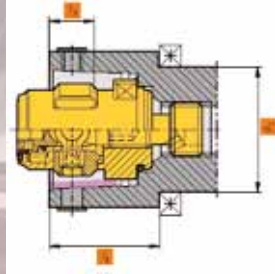
- for conventional cooling
- for minimal quantity lubrication (MQL)



GUHRING

Advantages of the 4-point spindle connection contour:

- Smallest bearing diameters d_1 enable increased speed limits and minimal spindle centre distances (with multi-spindle heads)
- The short bearing distance l_1 ensures increased rigidity of the spindle
- The spindle can be re-ground (i.e. following collision) as the locating face for the clamping set can be reset



High radial rigidity

- The 4-point clamping set is active over the complete length of the taper. Subsequently, it offers very high rigidity and enables high speed limits with HPC machining
- The high radial rigidity is also confirmed by VDMA (German Engineering Association)

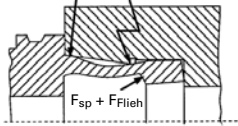
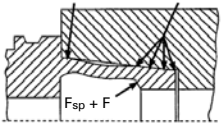
Influence of active spindle length

Guhring 4-point clamping set

clamping set with bayonet connector

radial support - line contact

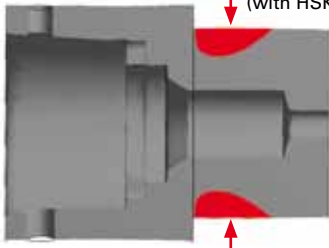
radial support point contact



Minimal radial deformation:

- Minimal radial deformation thanks to central threaded spindle
- Secure clamping through defined clamping shoulder position l_2
- Cost-efficient spindle contour manufacture

minimal radial deformation below $1 \mu\text{m}$ (with HSK 50)



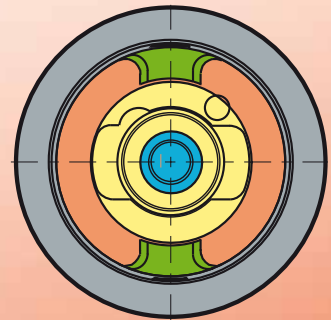
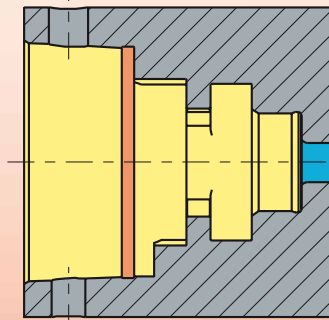
MQL suitable design:

- A central, coaxial MQL duct ensures a MQL coolant delivery to the tool without coolant pockets and offers quick operating times.



NEW: **Guhring M contour**

Don't ignore the benefits of the maximum clamping force for your tool holders and the advantages of MQL machining just because you don't apply the Guhring spindle contour. Why? Because with immediate effect the excellent Guhring 4-point clamping sets are available with different current spindle contours, for example the M-contour (Mapal).

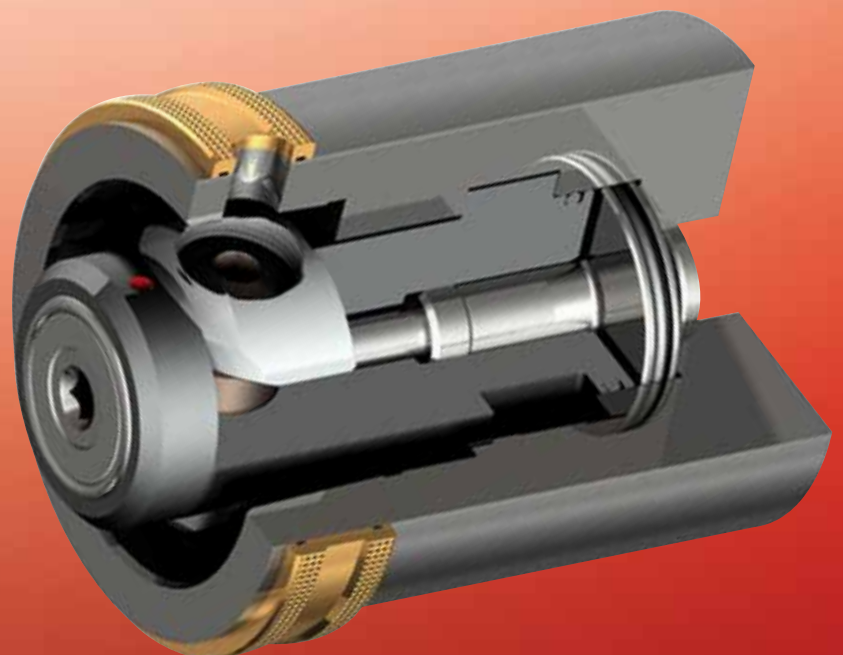
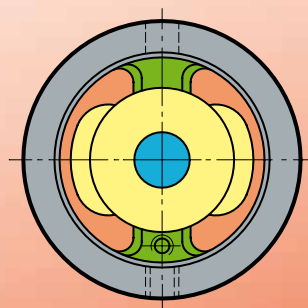
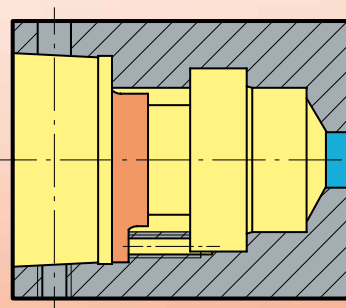


GUHRING



NEW: PowerClamp

Don't ignore the benefits of the maximum clamping force for your tool holders and the advantages of MQL machining just because you don't apply the Guhring spindle contour. Why? Because with immediate effect the excellent Guhring 4-point clamping sets are available with many different spindle contours, for example for PowerClamp/ KomLoc.



GUHRING



NEW

GUHRING

Please do not hesitate to contact us.
We will inform you about the possibilities
to modify the Guhring 4-point clamping set
for your special machining configuration!

Guhring oHG

P.O. Box 10 0247 • 72423 Albstadt
Herderstr. 50-54 • 72458 Albstadt
Germany

Tel. +49 74 31 17-0

Fax +49 74 31 17-21 279

info@guehring.de

www.guehring.de

