# High-Precision Spindle

# Advantages of the ZOLLER high-precision spindles

- Automatic user-independent clamping
- High radial/axial run-out accuracy
- Perfectly adjusted to your requirements





Babychuck collet adapter D 1.25" (32 mm)



Reversible cutting plate holder D 1.25" (32 mm)



Intermediate sleeves D 1/8" to D 1" and D 3 mm to D 25 mm



Fixator holders with internal and external clamping



holding fixture D 1.25" (32 mm)



Steep taper SK 50



Steep taper SK 20 to SK 40



Hollow shank taper HSK 25 to HSK 125



Polygonal shank taper PSC 32 to PSC 100



Hydraulic cylinder shaft D 1.25" (32 mm)



## Spindle Power Spindle brake indexing clamping



### High-precision spindle »tcs« - with power clamping and guick-change system

Power-operated tool clamping – constant, independent of the user

High axial and radial run-out accuracy – better than 2 µm

Pneumatic spindle brake and indexing – for fixing the spindle in the desired position

High changing accuracy of adapter tool posts – better than 1  $\mu m$ 

Quick adapter tool post change – in less than 10 seconds

Integrated calibration spheres on adapter tool posts - for simple, quick and precise determination of the spindle zero point

## High-precision spindle »ahd« - with automatic hydraulic clamping

Power-operated tool clamping – constant, independent of the user

Direct hydraulic clamping – reduction of interfaces

High axial and radial run-out accuracy - better than 2 µm

Pneumatic spindle brake and indexing – for fixing the spindle in the desired position