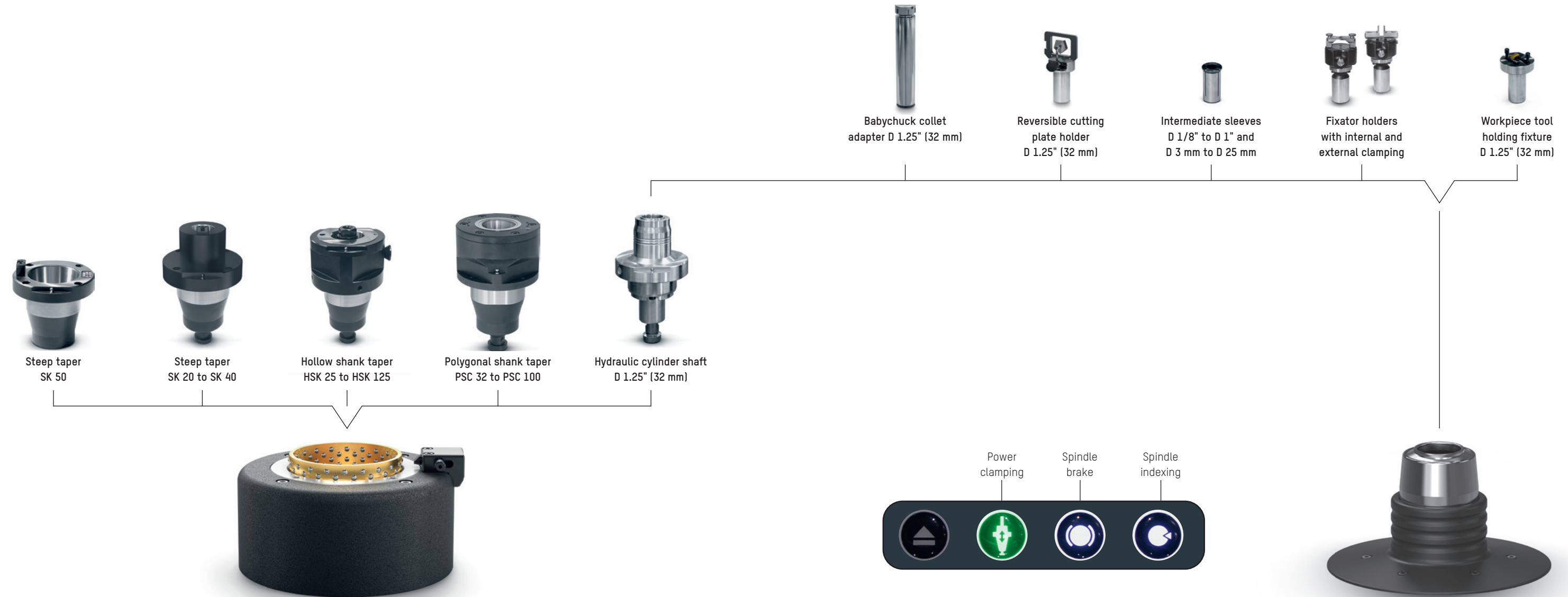


High-Precision Spindle

Advantages of the ZOLLER high-precision spindles

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



High-precision spindle »tcs« – with power clamping and quick-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 µm
- 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