

HSK clamping with precise angular positioning = compact palletizing system manually and automatically



newChuck: ideal table chuck for machining of the 5th or 6th side, for example, with integrated ripas

The main advantages of ripas

- Very space-saving, as integrated completely in the spindle
- Easy to retrofit
- Very torsionally rigid
- High precision
- Standard interface proven in thousands of applications
- When required, standard adapter can also be used (no rough positioning possible)

The principle

The basis is the standardized HSK clamping with conventional clamping sets. However, the carrier cams are precisely ground and can deflect axially. The counterpart (HSK adapter) has a precise groove as well as a positioning bore for the guide pin.

The function

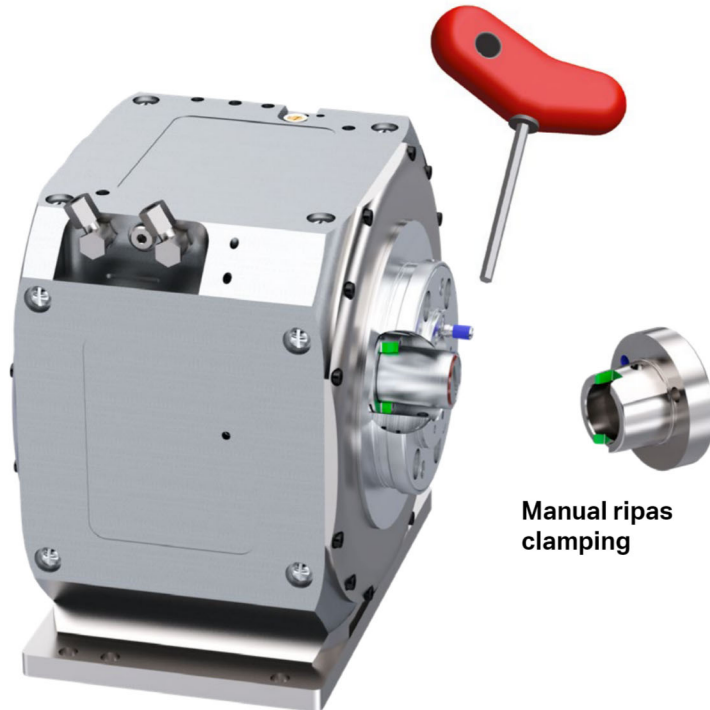
ripas has 3 functions:

- A** Anti-twist protection
- B** Rough positioning
- C** Precision positioning

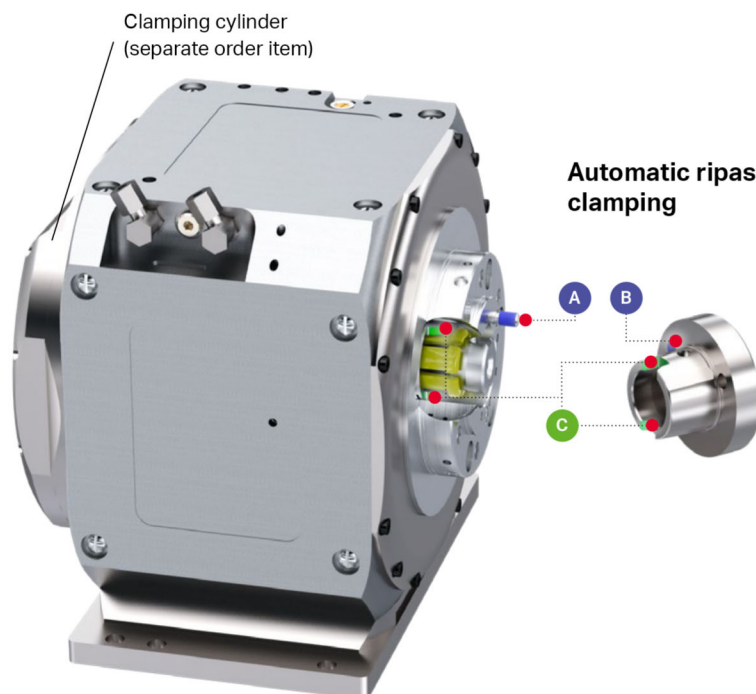
Process

During changes (manually or automatic), the guide pin **A** ensures proper orientation while providing rough positioning at the same time **B**.

Shortly before the face is reached, the inner precision cams perform the precision positioning **C**.



Manual ripas clamping

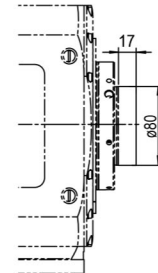


Automatic ripas clamping

Flexible, precise, compact and can be automated –
the ripas / zero point clamping system from
pL LEHMANN

Item no.	Designation	Weight [kg]	Manual (MAPAL)	Pneumatic	Required clamping cylinder
RIP.91x-63m	ripas clamping, manual, A63		•		
RIP.91x-63p	ripas clamping, pneumatic, A63			•	SPZ.91x-z9-d80
RIP.91x-63m-OT	ripas clamping adapter for collet chuck, A63, manual (Ottet)		•		
RIP.63ada	ripas adapter, A63				RIP.91x-63m or RIP.91x-63p
RIP.63-KD-1	Alignment pin, A63				

HSK = Hollow shank taper to DIN 69063-1 (spindle) or DIN 69893 (adapters)



Above dimensions apply with ripas adapter inserted. Without adapter, the clamping kit protrudes approx. 10.5 mm.

Technical data for ripas / HSK

	Unit	HSK-A63 manual		HSK-A63 automatic	
		Standard	ripasGrip (option)	Standard	ripasGrip (option)
Tensile force	kN		–		10 ¹⁾
Resulting insertion force on adapter, max.	kN		30 at 20 Nm ²⁾		30
Perm. pull-out torque (before losing face contact)	kN		approx. 600		approx. 600
Transport load	kg		approx. 60		approx. 60
Perm. torque ³⁾ (slip ⁴⁾ max. ± 0.003") A	Nm	–	approx. +50%	approx. 150	approx. 300
Perm. torque ³⁾ (slip ⁴⁾ max. ± 0.01") B	Nm	–	approx. +50%	approx. 250	approx. 450
Repeat accuracy, XYZ	mm		< 0.005		< 0.005
Repeat accuracy, angular	± arc sec		8		4

¹⁾ with SPZ.91x-z9-d80

²⁾ Radial screw

³⁾ Values apply under static conditions, without any vibrations, with no load, dry, free of grease, clean

⁴⁾ returns to original position after unclamping/clamping

Overview
& Facts

System &
smartBOX

Rotary tables

KAB, WDF,
CNC, WMS

AGG, DDF,
RST, LOZ

Service &
Technology

Tooling