5-axis clamping system compact

Function

We are setting standards with the new „5-axis clamping system compact“ in this field. The system was specifically designed for the optimal machining of complex workpieces on modern 5-axis machines.

The intelligent clamping technology increases clamping rigidity for the highest cutting and feed forces. The optimal accessibility to the workpiece allows short, standard tooling to be used. Tooling costs are significantly reduced.

![5-axis clamping system compact diagram]

1 Positioning unit with jaw plate
2 Clamping element
3 Fine adjustment with knurled screw
4 Clamping screw
5 Extension shafts
6 Base plate

ADVANTAGES:
- Very high tractive force
- High stiffness in the system
- Pull-down function of the jaw plates on both sides
- Optimum fine adjustment of the jaw plates on the workpiece
- Increased tool service life
- The workpiece is always centred due to the systematic construction
- Large clamping width, 20 mm to 320 mm, freely extendable
- Clamping depth adjustable from 3 to 20 mm using seating ledges
- Best tool accessibility from all sides
- Easy to clean
Forces

The new clamping technology ensures force flow separation and workpiece positioning. The intelligent force distribution in the system allows only weak forces to be transferred to the machine table.

- Division of force flow and positioning
- Highest clamping force on the workpiece
- Maximum stiffness
- Centric tension
Clamped workpiece using jaw plates with pins. The high tractive force creates a positive clamping situation.

Clamped blank. Sure set-up through positive clamping pins.

Blank after clamping. Clamping pin imprint is visible on the edge of the workpiece.
With the coupling for cross-clamping, two 5-axis clamping systems can be compactly connected with each other offset by 90 degrees. Setups for workpieces with different dimensions of 4 sides are possible.

5-axis clamping system compact direct on the machine table.
Workpiece clamping with smooth jaws.

The jaws can be quickly tightened or loosened using the adjustable handles. When the clamping lever is open, the jaws can be fine adjusted with the knurled knob.