Technical information for machinable collet system

The clamping system for machining prototypes, samples and small to medium series

The machinable collet system consists of a base element with a flange plate and the machinable collet. To clamp a wide variety of workpieces only the collet needs to be exchanged, the base element with flange plate remain the same. Standard aluminium collet blanks are used for clamping workpieces. The contour of the workpiece to be clamped is machined into this collet blank.

Both external and internal contours can be clamped with the machinable collet system. Different collets for internal and external clamping are available for this purpose.

The integrated spring package generates a clamping force of 5.8 kN. The clamping force can be raised to 43.5 kN by pneumatic post-clamping.



Machinable collets for workpieces that couldn't otherwise be clamped

- whether geometrical or free-form: you have full control of the most difficult workpiece contours
- can be set up on grid plates, T-slot plates and your own fixtures
- clamping range of 25 140 mm and workpiece weights up to 25 kg
- clamps rough parts, machined parts, round and irregular-shaped parts
- low clamping depth of 1 mm can be achieved
- designed for external and internal clamping
- repeat accuracy of < 0.01 mm

Machinable collet system clamping- and retaining forces

| spring release pressure | spring clamping force | spring retaining force | post-clamping pressure | post-clamping force | post-clamping retaining force |
|----------------------------|--------------------------|---------------------------|---------------------------|------------------------|----------------------------------|
| 6 bar | 5.81 kN | 2.8 kN | 6 bar | 13.39 kN | 10.39 kN |
| 6 bar | 5.81 kN | 2.8 kN | 12 bar | 20.93 kN | 17.93 kN |
| 6 bar | 5.81 kN | 2.8 kN | 30 bar | 43.55 kN | 40.55 kN |

Machinable collet system set-up

| pos. | Description | piece | Γ |
|----------|--|-------|---|
| 1 | collet | 1 | Γ |
| 2 | flange plate | 1 | 1 |
| 3 | piston | 1 | 1 |
| 4 | spring package | 8 | 1 |
| 5 | screw / tension cone | 2 | 1 |
| 6 | base element | 1 | 1 |
| P1 P2 | Release collet with compressed air pistol connection Post-clamp with compressed air pistol connection | | |

