Multi-clamping system

Multi-clamping systems are mainly used for machining large workpiece batches.

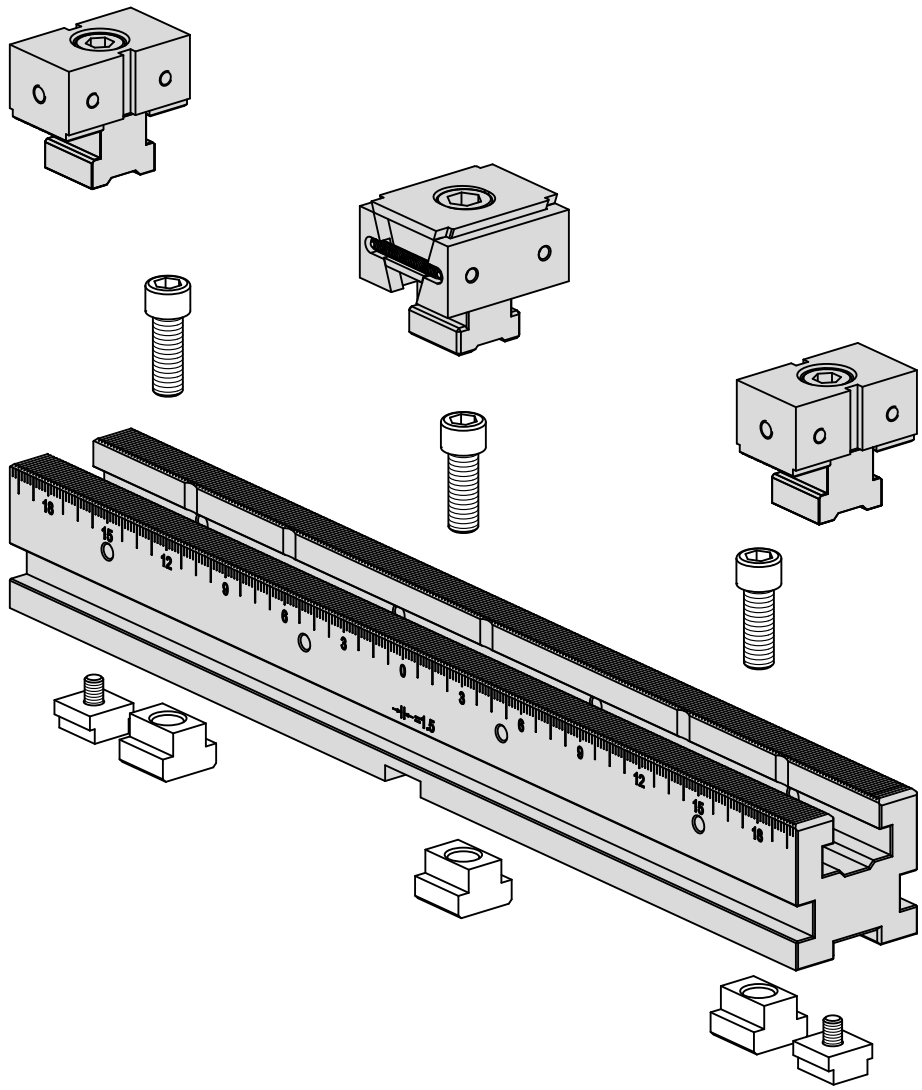
The system can be optionally set up for one or more workpieces.

Depending on the workpiece size and clamping rail length, several workpieces can thus be clamped simultaneously.

Due to the large component selection of the multiple clamping system (clamping rails, fixed jaws, wedge clamps and accessories) workpieces of different quantities and dimensions can be machined without problems and with optimised set-up times.

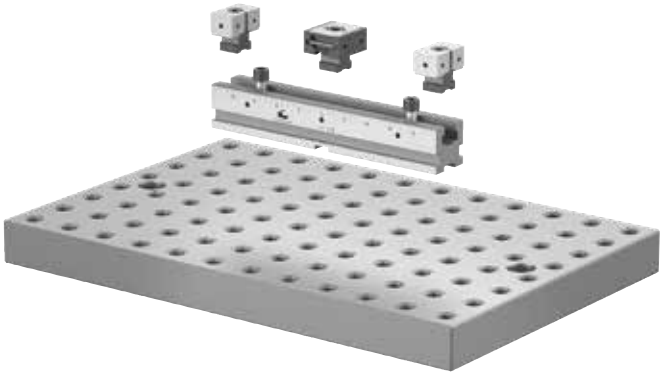
The user can choose between single-sided or double-sided types of wedge clamps.

The teeth on the clamping rails are precision-ground and guarantee secure and precise fastening of the fixed stops. By mounting several clamping rails along and across the table, the working area and the number of workpieces can be effectively optimised.

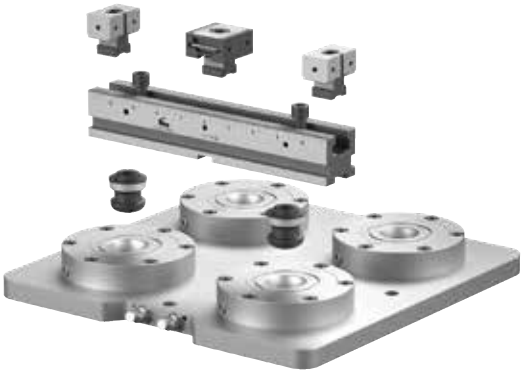


Interfaces

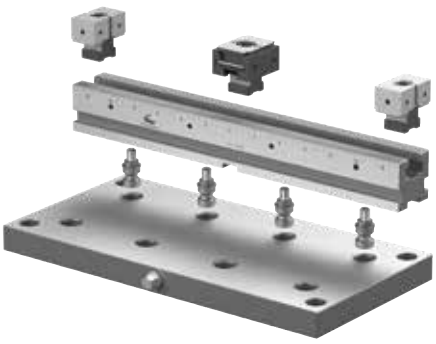
Mounting of the multi-clamping system along and across a T-slot machine table is possible.
Alignment with slot keys. Secured using screws or clamping claws.



Mounting the multi-clamping system on a grid system.
Positioned and fastened using shoulder screws.

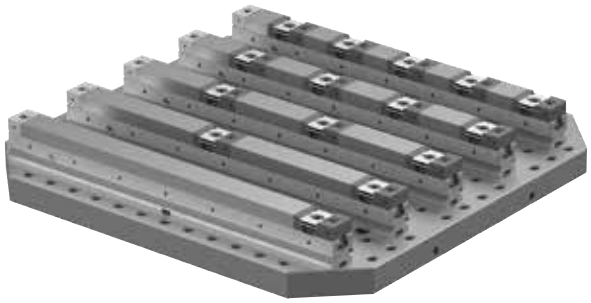


Adaptation of the multi-clamping system to a conventional zero-point clamping system.
Fits on 200 mm gauge size.
Ø25H6 locating hole and M12 fastening screw.

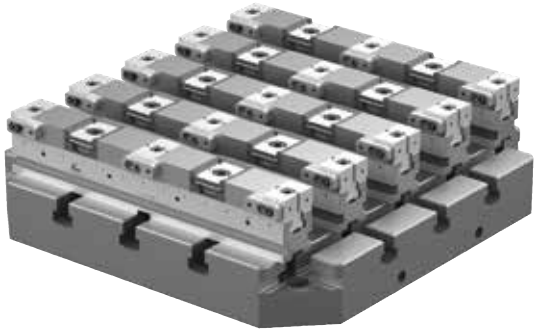


Adaptation of the multi-clamping system to a mechanical zero-point clamping system.
Fits on 96mm gauge size.
Ø16H6 locating hole and M10 fastening thread.

Example of a multi-clamping system



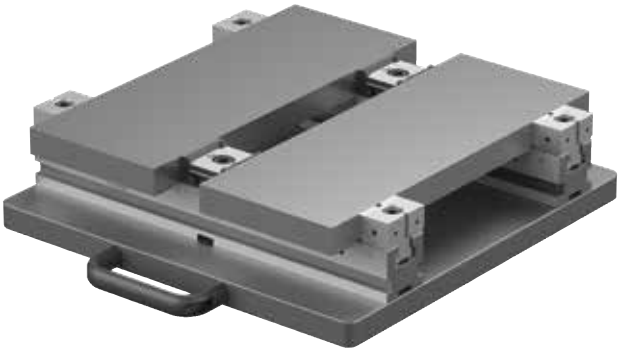
Application of the multi-clamping system with different workpieces.
Wedge clamps used here have the force coming from one side.
Depending on the workpiece size, several workpieces can be clamped using identical clamping rails.
The multi-clamping system can be modified flexibly and quickly.



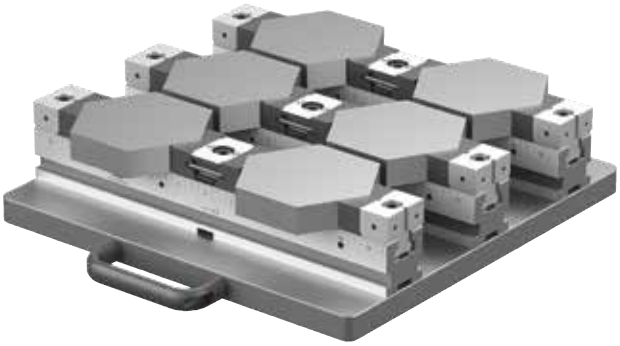
Multi-clamping system aligned and secured on pallet with T-slots.
Multi-clamping system set up for 20 identical workpieces.
Space-saving fixed jaws with one mounting screw.
Wedge clamps constructed as double-sided clamping element.

Flexible application of the multi-clamping system on an octagonal workholding tower.
With this clamping arrangement, many workpieces can be clamped simultaniously to extend the machine running time.

Example of a multi-clamping system



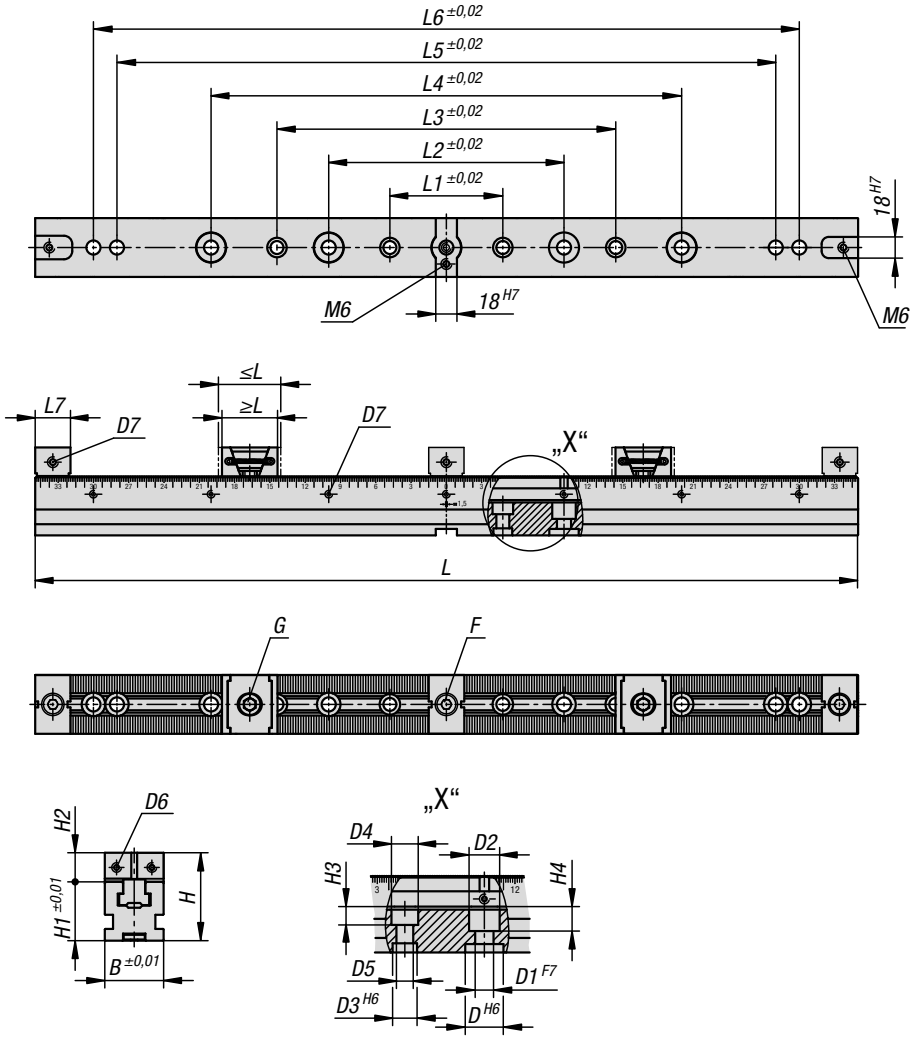
Mutli-clamping system mounted on an interchangeable pallet.
The workpieces can be reloaded externally to the machine to extend the machine running time.
With the double-sided arrangement of the wedge clamps, both plates can be clamped simultaneously.



Multi-clamping system mounted on an interchangeable pallet.
Attachment jaws with prisms are screwed onto the fixed jaws of the multi-clamping system.
Machinable wedge clamps are used on the clamping elements. The workpiece contour is machined into the excess material.

Multi-clamping system double-sided wedge clamps

Fixed jaw ES



Material:
Clamping rail and fixed jaw tool steel.
Wedge clamp mild steel.

Version:
Clamping rail and fixed jaw hardened and ground (HRC 55 ±2).
Wedge clamp hardened, phosphated.

Sample order:
K1828.05040001

Note:
The multi-clamping system can be fastened using various interfaces.

1. Lateral clamping edge for clamping claw set. Claw clamps can be fastened at any position.
2. Holes for DIN cap screws.
3. Ø25 mm locating holes for conventional zero-point clamping systems with 200 mm spacing.
4. Ø16 mm locating holes for zero-point clamping systems with 96 mm spacing.
5. Three 18H7 alignment slots for crosswise and lengthwise alignment on T- slot tables.
6. Ø12F7 and Ø16F7 reamed holes for 40 and 50 mm grid systems.

Three different versions are available:
- Multi-clamping system double-sided wedge clamp with OS fixed jaw / K1828.
- Multi-clamping system double-sided wedge clamp with DS fixed jaw / K1829.
- Multi-clamping system single-sided wedge clamp with OS fixed jaw / K1830.

Application:
A number of multi-clamping systems with different lengths can be mounted one behind the other or beside each other. The precision toothing enables highly precise positioning of the fixed jaws. Due to the lateral graduations on the clamping rails, each position of the fixed jaws can be documented and reset identically. Stops can be mounted in the tapped holes on the side. Turning the clamping screw moves the clamping segments outwards and press the workpieces against the fixed jaw.

Advantages:
Universal and flexible.
For small and large batch sizes.
Large components can also be clamped next to each other on several multiple clamping systems.

Multi-clamping system double-sided wedge clamps

Fixed jaw ES

Supplied with:
- 1x clamping rail.
- 2x double-sided wedge clamps.
- 3x fixed jaws ES.

Accessories:
Clamping pin K0967.
Cap screws K0869.10X30.
Cap screws K0869.12X25.
Shoulder screws K0815.12045 / K0815.16055.
Seating ledges K1752.
Attachment jaws with machining allowance K1753.
Attachment jaws with prism K1754.
Workpiece stop K1755.
Spacer K1756.
Clamping claw set K1757.
T-slot nut K1758.
T-slot key K0954.

KIPP Multi-clamping system double-sided wedge clamps, fixed jaw ES

Order No. smooth	Order No. serrated	L	B	H	L min.	L max.	L1	L2	L3	L4	L5	L6	L7
K1828.05030001	K1828.05030002	300	50	75	44,5	50,5	96	200	-	-	-	-	30
K1828.05040001	K1828.05040002	400	50	75	44,5	50,5	96	200	288	300	-	-	30
K1828.05050001	K1828.05050002	500	50	75	44,5	50,5	96	200	288	400	-	-	30
K1828.05060001	K1828.05060002	600	50	75	44,5	50,5	96	200	288	400	500	-	30
K1828.05070001	K1828.05070002	700	50	75	44,5	50,5	96	200	288	400	560	600	30

Order No. smooth	Order No. serrated	L	D	D1	D2	D3	D4	D5	D6	D7	H1	H2	H3	H4	F Socket head screw DIN 912	G cap screw DIN 912
K1828.05030001	K1828.05030002	300	25	12	20	16	17,5	11	M5	M6	50	25	12	16	M10x30	M12x25
K1828.05040001	K1828.05040002	400	25	12	20	16	17,5	11	M5	M6	50	25	12	16	M10x30	M12x25
K1828.05050001	K1828.05050002	500	25	12	20	16	17,5	11	M5	M6	50	25	12	16	M10x30	M12x25
K1828.05060001	K1828.05060002	600	25	12	20	16	17,5	11	M5	M6	50	25	12	16	M10x30	M12x25
K1828.05070001	K1828.05070002	700	25	12	20	16	17,5	11	M5	M6	50	25	12	16	M10x30	M12x25