



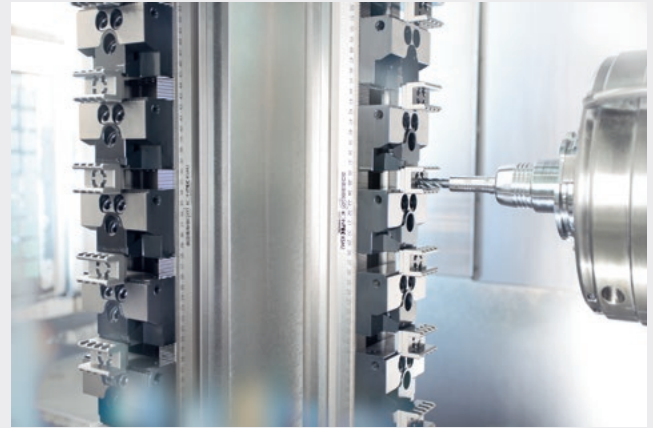
Tombstones

Tombstones with clamping devices

Hand in hand for tomorrow

Preconfigured tombstones

SCHUNK tombstones with clamping devices are fully configured, standard clamping solutions. Whether you need tombstones with reinforced KONTEC KSG machine vise, KONTEC KSC-F single-acting vise, KONTEC KSC-D double-acting vise, KONTEC KSM2 clamping rail or with spring-actuated TANDEM KSF3 clamping force blocks – you'll find we have the right standard tombstone for your particular application.



Advantages – Your benefits

- + Preconfigured tombstones**
Ready for immediate use
- + Stable hollow body design**
High rigidity and excellent vibration damping
- + Rectangularity to base plate of 0.01 mm to 200 mm**
High base accuracy, no additional surface grinding of tombstone necessary
- + Standardized pallet sizes**
Suitable for all common machining plates
400 x 400 mm and 500 x 500 mm
- + Two interfaces integrated as standard for positioning on the machine table**
Quick and easy adaptation to machine tools according to DIN 55 201 and JIS 6337-1980

Tombstone designs

VERO-S tombstones

VERO-S tombstones are equipped with VERO-S NSE-T3 138-V1 modules. This means that clamping devices can be mounted via clamping pins in a matter of seconds with extremely high repeat accuracy.



Tombstones with clamping devices

Tombstones with clamping vises are fully configured, standard clamping solutions. This means that they can be immediately put into operation.



Tombstones without clamping devices

Tombstones without clamping devices are blank tombstones. Depending on the application, these can be designed with raw clamping surfaces or various bore hole grids.



Clamping pillars for rotary tables

Clamping pillars are preconfigured tombstones that can be mounted directly on dividing heads as a fourth axis.



Tombstone shapes

Double angle tombstones

Double angle tombstones mean that clamping devices can be mounted from two sides. These tombstones are available with VERO-S tombstone modules, rough clamping surfaces, bore hole grid of 50 mm, and a reduced bore hole grid especially for SCHUNK clamping devices.



Triangle tombstones

Triangle tombstones mean that clamping devices can be mounted from three sides. These tombstones are available with VERO-S tombstone modules, rough clamping surfaces, bore hole grid of 50 mm, and a reduced bore hole grid especially for SCHUNK clamping devices.



Cube Tombstones

Cube tombstones mean that clamping devices can be mounted from four sides. These tombstones are available with rough clamping surfaces, bore hole grid of 50 mm and a reduced bore hole grid especially for SCHUNK clamping devices.



Octangle / Cross tombstones

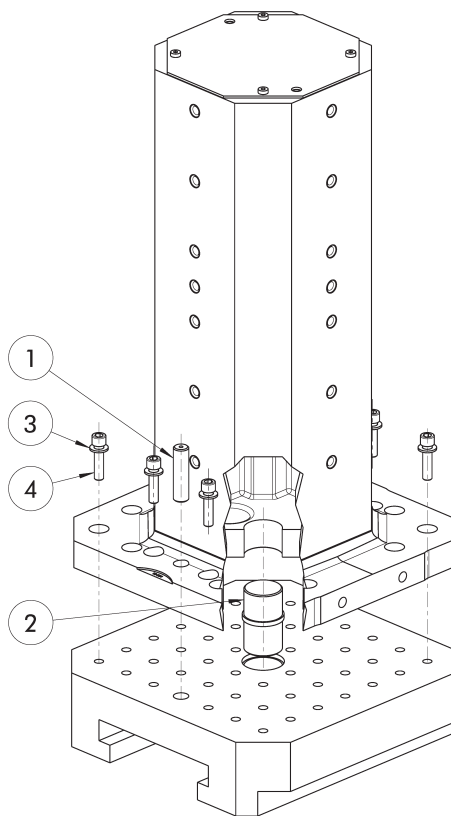
Octagonal or also cross tombstones mean that clamping devices can be mounted from four to eight sides. These tombstones are available with VERO-S tombstone modules, rough clamping surfaces, bore hole grid of 50 mm, and a reduced bore hole grid especially for SCHUNK clamping devices.



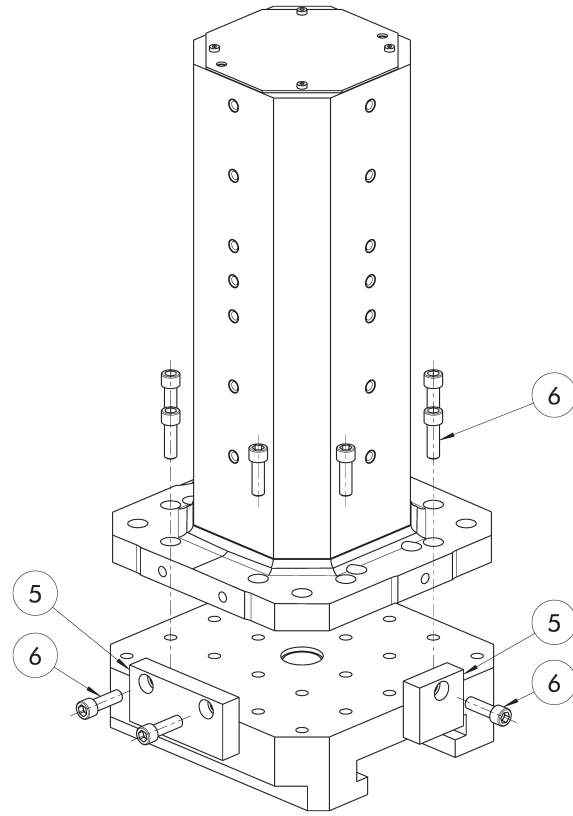
Positioning on the machine table

- All tombstones are prepared with standard interfaces and fit onto pallets of size 400 mm and 500 mm for machine tools according to DIN 55 201 and JIS 6337-1980. Other interfaces can be manufactured on request.
- Tombstones with base plate size 400 x 400 mm and 500 x 500 mm are positioned and aligned above the middle bore hole and position pin.
- Using the stop plates, the tombstones with edge locator stops (JIS 6337-1980 system) can be easily mounted on 500 x 500 mm machine tables. Exact alignment is carried out via the two positioning surfaces.

DIN 55 201



JIS 6337-1980



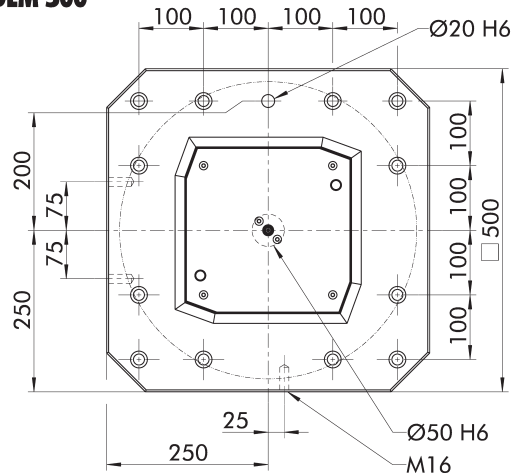
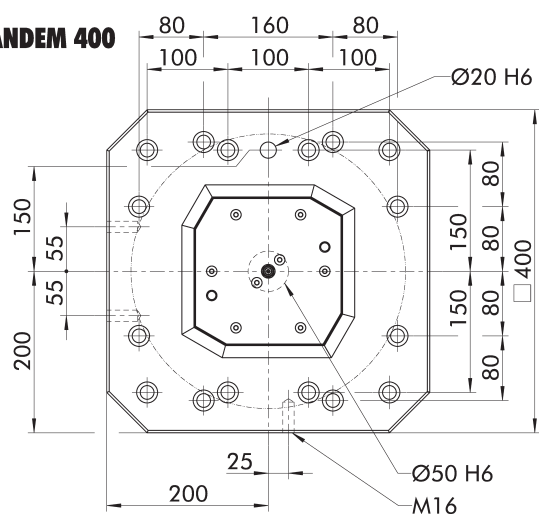
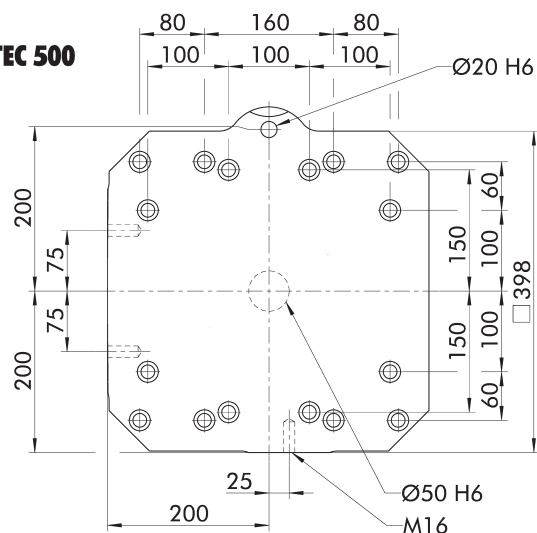
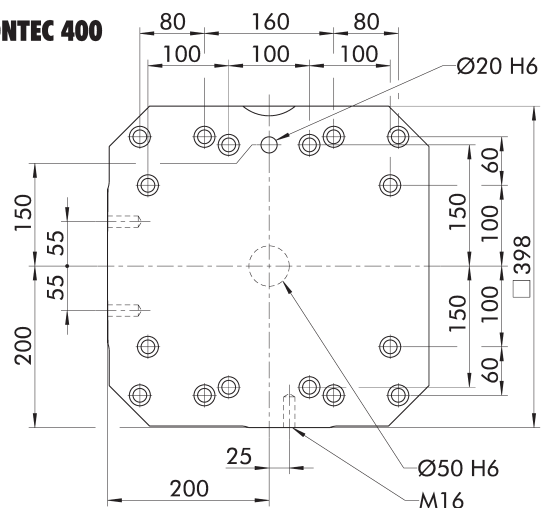
Subject to technical changes.

- ① Positioning pin for $\varnothing 20$ mm aligning bore
- ② Centering pins for middle bore $\varnothing 50$ mm
- ③ Washer DIN 125 A, M12

- ④ Cylindrical screw DIN EN ISO 4762, M12
- ⑤ Edge locator stops
- ⑥ Cylindrical screw DIN EN ISO 4762, M16

Interfaces

- The drawing shows all important connection and bore dimensions of tombstones with clamping vises from the KONTEC and TANDEM area.
- Connection dimensions for pallet sizes 400 x 400 mm and 500 x 500 mm.



Subject to technical changes.

Tombstone with NC vises KSG

Tombstone with four NC vises KONTEC KSG 125-390

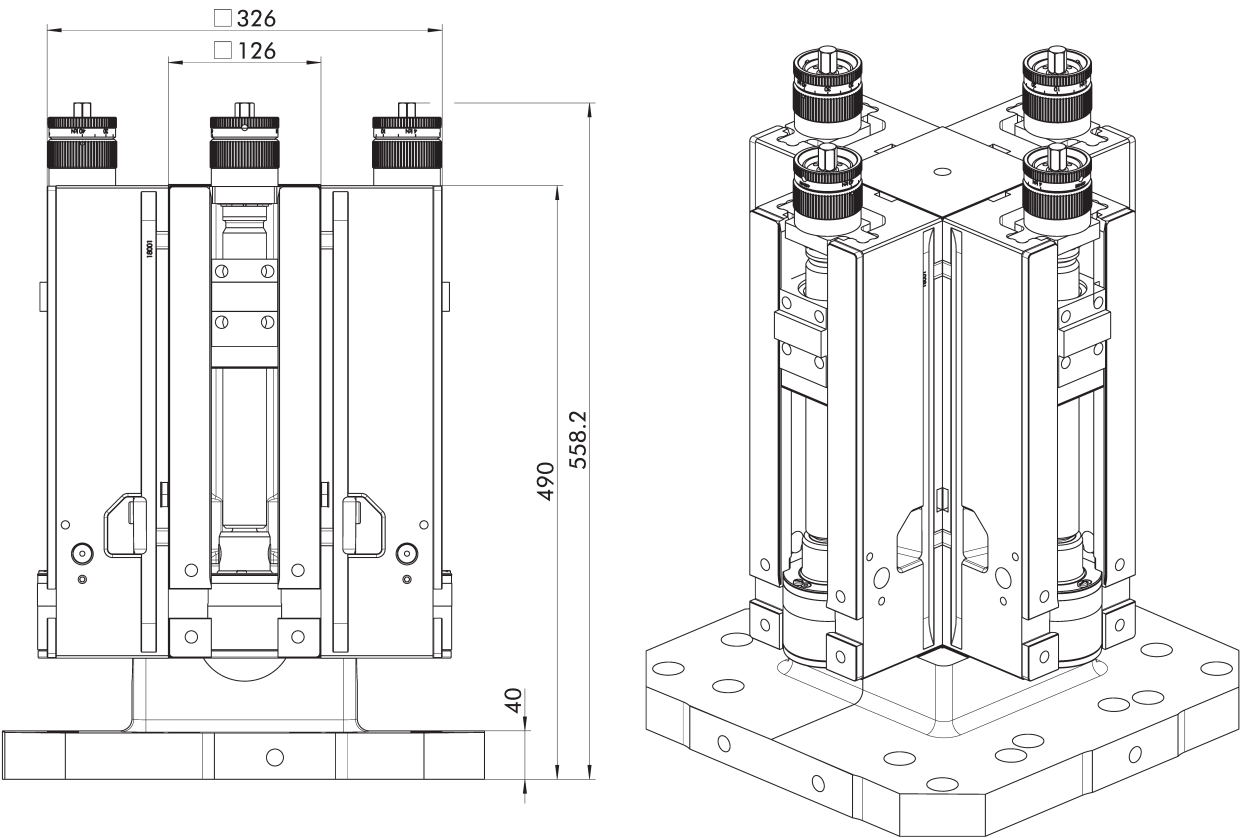
Scope of delivery

Tombstone, vise, shipping screw, operating manual; without system jaws

Technical data

Description	ID	Pallet size [mm]	Clamping force [kN]	Weight [kg]
SAT-KSG 125-390 4V 400 x 400	1352193	400 x 400	4 - 40	225
SAT-KSG 125-390 4V 500 x 500	1352194	500 x 500	4 - 40	225

For the positioning of pallet size 500 x 500 mm with edge locator stops, the two distance plates (ID 1395798 and ID 1395799) must be laterally mounted on the base plates (refer to page 3).



Subject to technical changes.

Tombstone with single-acting vises KSC-F

Tombstone with four single-acting vises KONTEC KSC-F 125-362

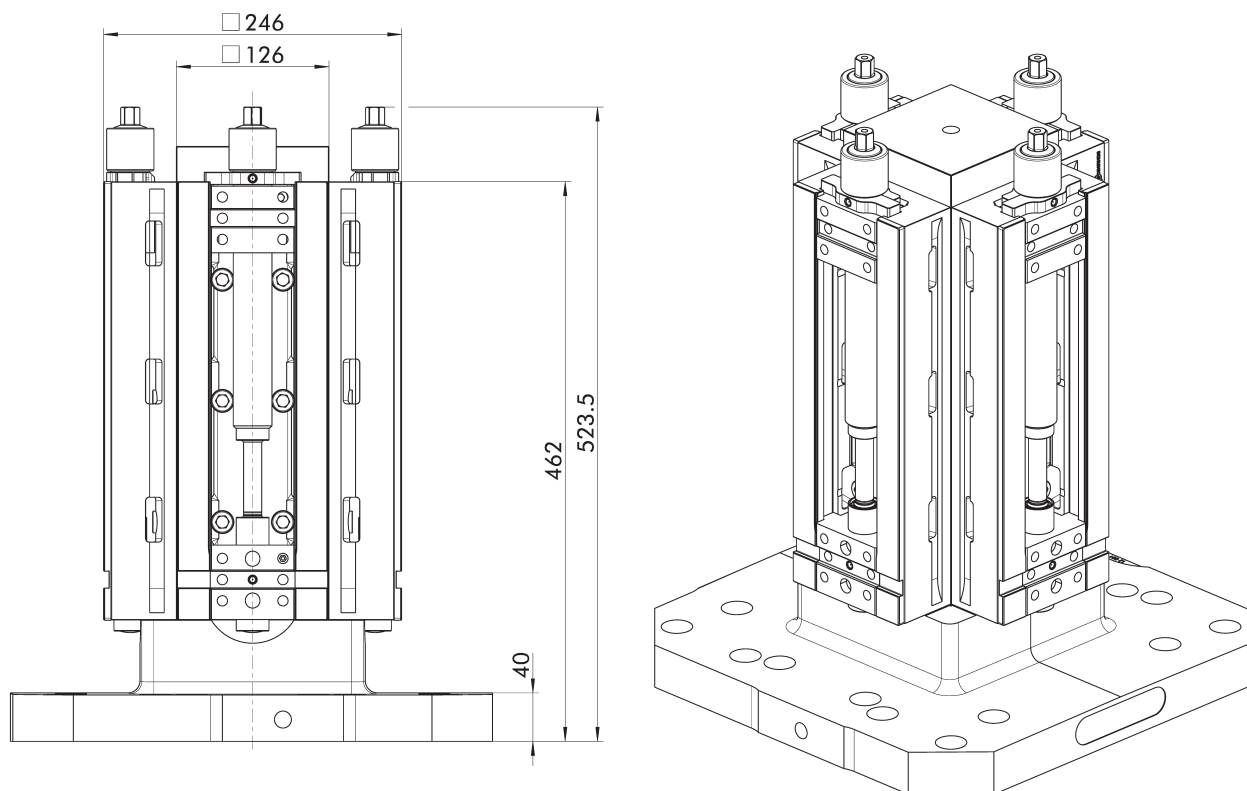
Scope of delivery

Tombstone, vise, shipping screw, operating manual; without system jaws

Technical data

Description	ID	Pallet size [mm]	Max. clamping force [kN]	Max. torque [Nm]	Weight [kg]
SAT-KSC-F 125-362 4V 400 x 400	1352187	400 x 400	40	90	160
SAT-KSC-F 125-362 4V 500 x 500	1352188	500 x 500	40	90	160

For the positioning of pallet size 500 x 500 mm with edge locator stops, the two distance plates (ID 1395798 and ID 1395799) must be laterally mounted on the base plates (refer to page 3).



Subject to technical changes.

Tombstone with double-acting vises KSC-D

Tombstone with four double-acting vises KSC-D 80-300

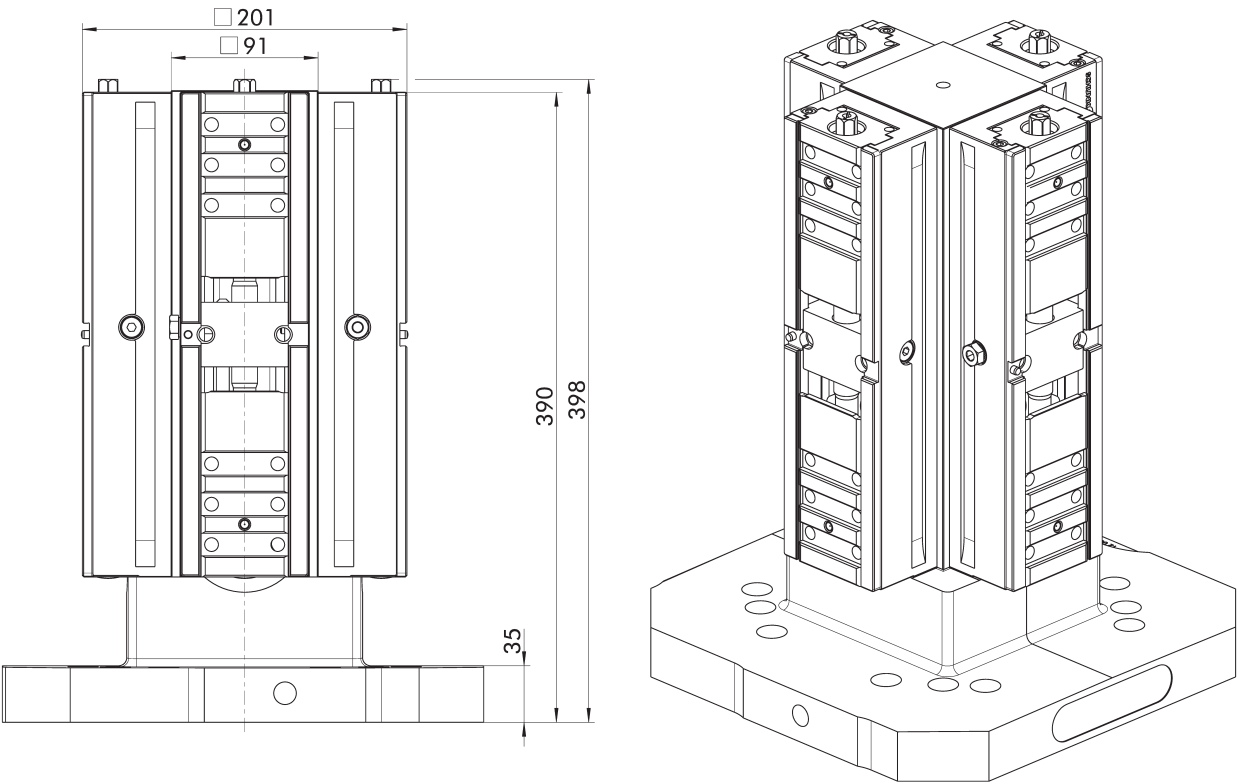
Scope of delivery

Tombstone, vise, shipping screw, operating manual; without system jaws

Technical data

Description	ID	Pallet size [mm]	Max. clamping force [kN]	Max. torque [Nm]	Weight [kg]
SAT-KSC-D 80-300 4V 300 x 300	1352145	300 x 300	25	90	76

For the positioning of pallet size 500 x 500 mm with edge locator stops, the two distance plates (ID 1395798 and ID 1395799) must be laterally mounted on the base plates (refer to page 3).



Subject to technical changes.

Tombstone with double-acting vises KSC-D

Tombstone with four double-acting vises KSC-D 125-390

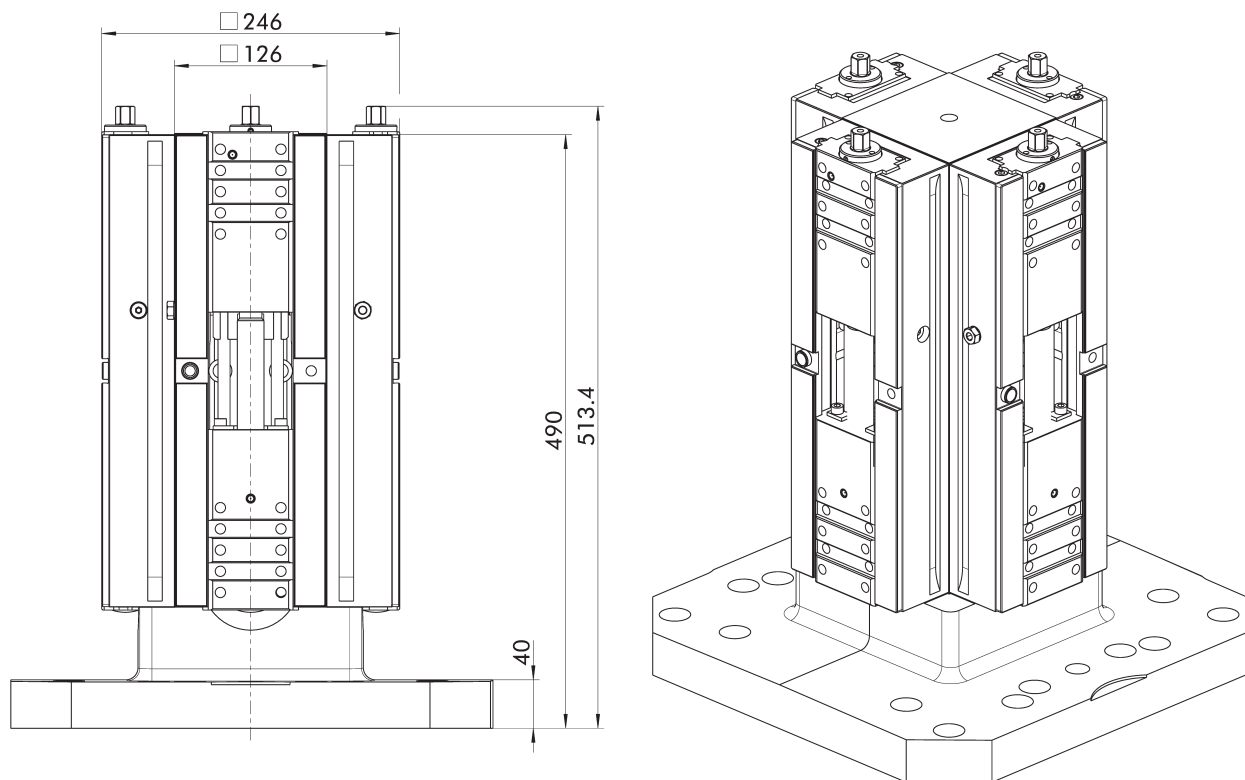
Scope of delivery

Tombstone, vise, shipping screw, operating manual; without system jaws

Technical data

Description	ID	Pallet size [mm]	Max. clamping force [kN]	Max. torque [Nm]	Weight [kg]
SAT-KSC-D 125-390 4V 400 x 400	1352155	400 x 400	40	100	170
SAT-KSC-D 125-390 4V 500 x 500	1352156	500 x 500	40	100	170

For the positioning of pallet size 500 x 500 mm with edge locator stops, the two distance plates (ID 1395798 and ID 1395799) must be laterally mounted on the base plates (refer to page 3).



Subject to technical changes.

Tombstone with double-acting vises KSC-D

Tombstone with four double-acting vises KSC-D 125-460

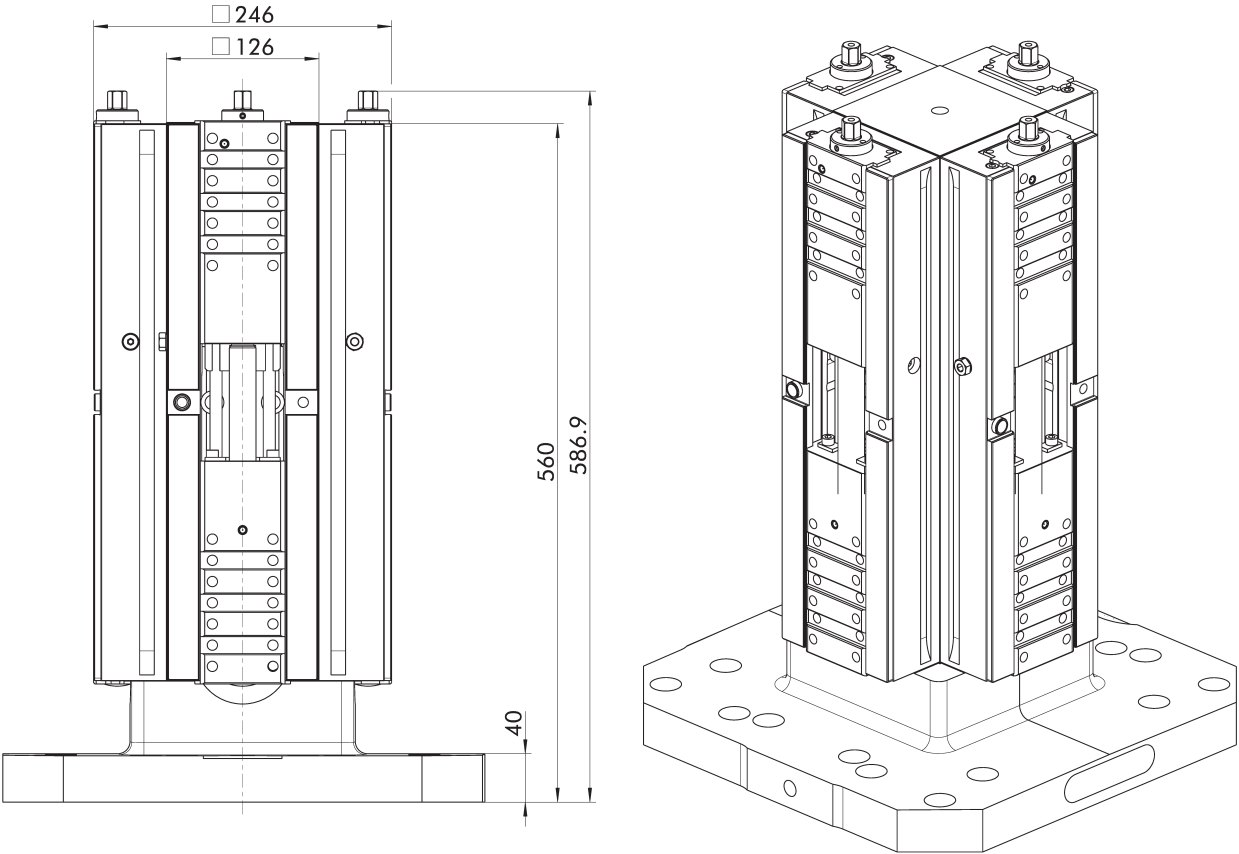
Scope of delivery

Tombstone, vise, shipping screw, operating manual; without system jaws

Technical data

Description	ID	Pallet size [mm]	Max. clamping force [kN]	Max. torque [Nm]	Weight [kg]
SAT-KSC-D 125-460 4V 400 x 400	1352163	400 x 400	40	100	190
SAT-KSC-D 125-460 4V 500 x 500	1352164	500 x 500	40	100	190

For the positioning of pallet size 500 x 500 mm with edge locator stops, the two distance plates (ID 1395798 and ID 1395799) must be laterally mounted on the base plates (refer to page 3).



Subject to technical changes.

Tombstone with double-acting vises KSC-D

Tombstone with four double-acting vises KSC-D 125-530

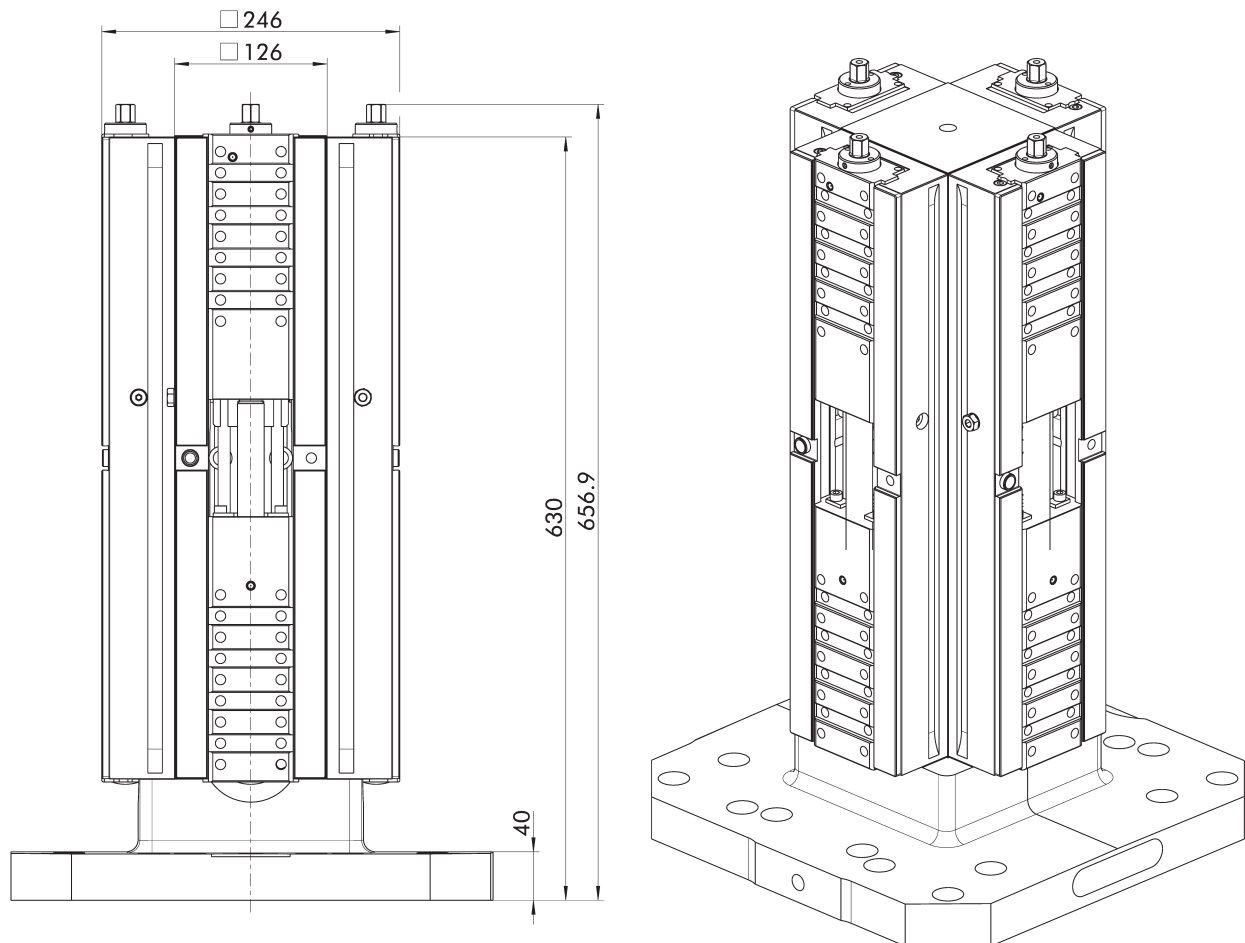
Scope of delivery

Tombstone, vise, shipping screw, operating manual; without system jaws

Technical data

Description	ID	Pallet size [mm]	Max. clamping force [kN]	Max. torque [Nm]	Weight [kg]
SAT-KSC-D 125-530 4V 400 x 400	1352171	400 x 400	40	100	210
SAT-KSC-D 125-530 4V 500 x 500	1352172	500 x 500	40	100	210

For the positioning of pallet size 500 x 500 mm with edge locator stops, the two distance plates (ID 1395798 and ID 1395799) must be laterally mounted on the base plates (refer to page 3).



Subject to technical changes.

Tombstone with clamping rails KSM2

Tombstone with four clamping rails KSM2 90-400

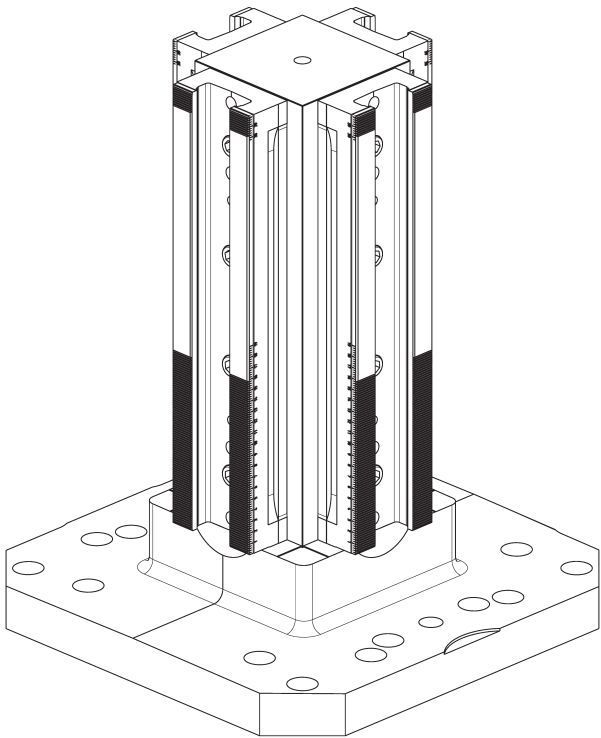
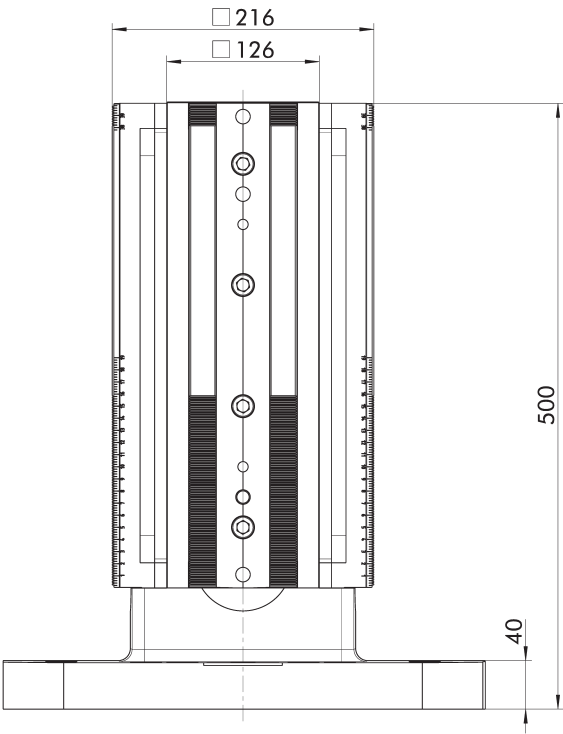
Scope of delivery

Tombstone, vise, shipping screw, operating manual; without system jaws

Technical data

Description	ID	Pallet size [mm]	Max. clamping force [kN]	Max. torque [Nm]	Weight [kg]
SAT-KSM2 90-400 4V 400 x 400	1346919	400 x 400	30	50	132
SAT-KSM2 90-400 4V 500 x 500	1346921	500 x 500	30	50	132

For the positioning of pallet size 500 x 500 mm with edge locator stops, the two distance plates (ID 1395798 and ID 1395799) must be laterally mounted on the base plates (refer to page 3).



Subject to technical changes.

Tombstone with clamping rails KSM2

Tombstone with four clamping rails KSM2 90-500

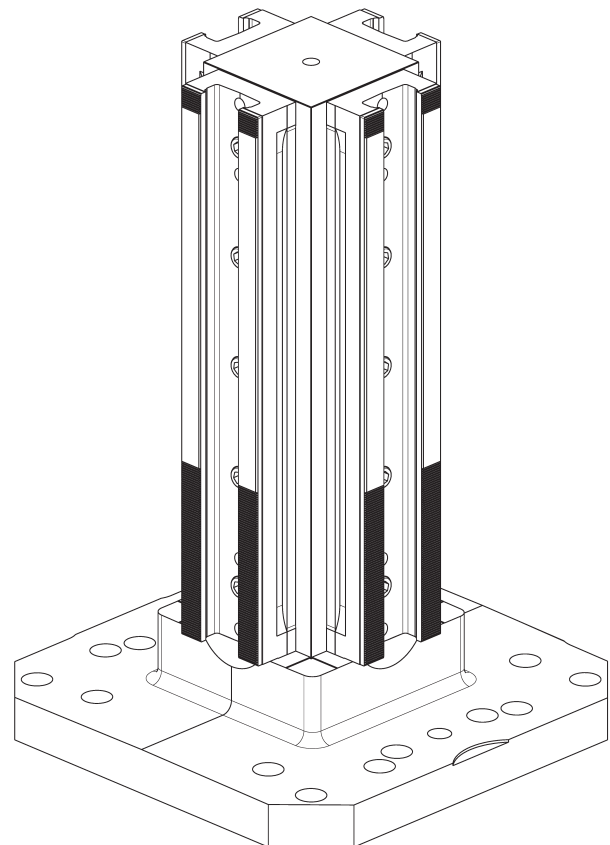
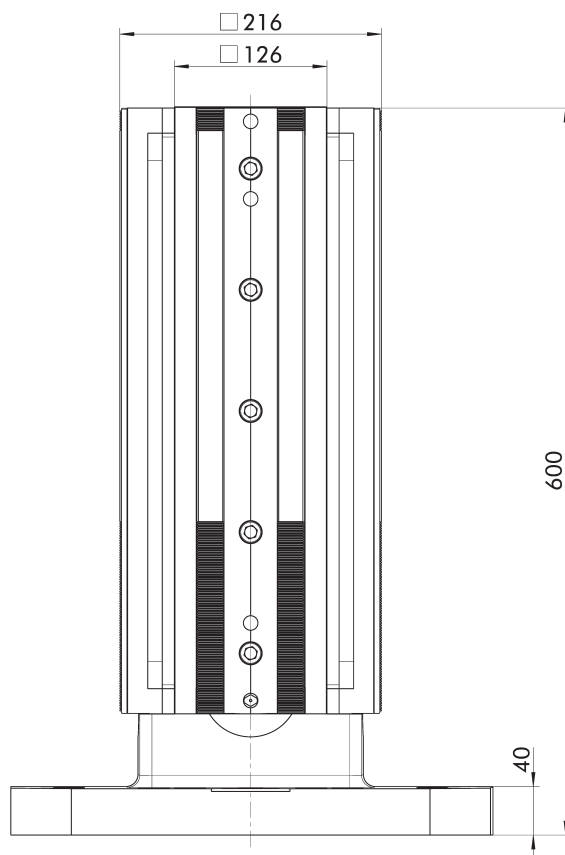
Scope of delivery

Tombstone, vise, shipping screw, operating manual; without system jaws

Technical data

Description	ID	Pallet size [mm]	Max. clamping force [kN]	Max. torque [Nm]	Weight [kg]
SAT-KSM2 90-500 4V 400 x 400	1346920	400 x 400	30	50	152
SAT-KSM2 90-500 4V 500 x 500	1346922	500 x 500	30	50	152

For the positioning of pallet size 500 x 500 mm with edge locator stops, the two distance plates (ID 1395798 and ID 1395799) must be laterally mounted on the base plates (refer to page 3).



Subject to technical changes.

Tombstone with clamping force blocks KSF3

Compact tombstones with twelve KSF3 100 clamping force blocks

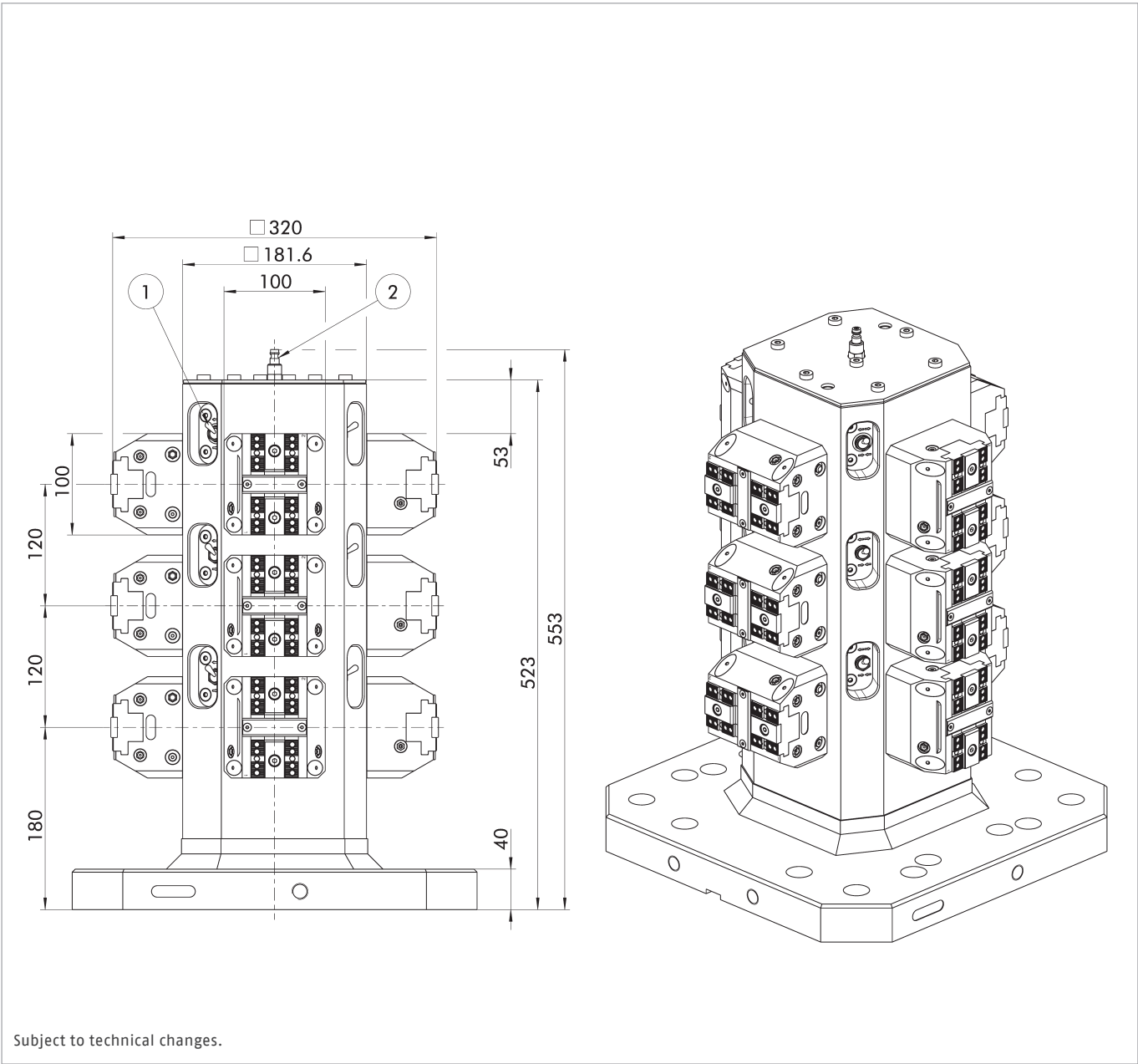
Scope of delivery

Tombstone, clamping force blocks, cover, shipping screws, operating manual; without system jaws

Technical data

Description	ID	Pallet size [mm]	Clamping force [kN]	Clamping force range [kN]	Opening pressure [bar]	Weight [kg]
SAT-KSF3 100 12V 400 x 400	0471550	400 x 400	7 - 12	7 - 12	6	160
SAT-KSF3 100 12V 500 x 500	0471551	500 x 500	7 - 12	7 - 12	6	188

The clamping force depends on the stroke due to the spring tension.
Max. clamping force is reached in the "open" condition, min. clamping force in the "closed" condition.



① 5/2-way control valve MTV 4, manually actuated control function for open/close of each clamping force block

② Central air connection G1/8 to supply all clamping force blocks

Tombstone with clamping force blocks KSF3

Compact tombstone with twelve KSF3 160 clamping force blocks

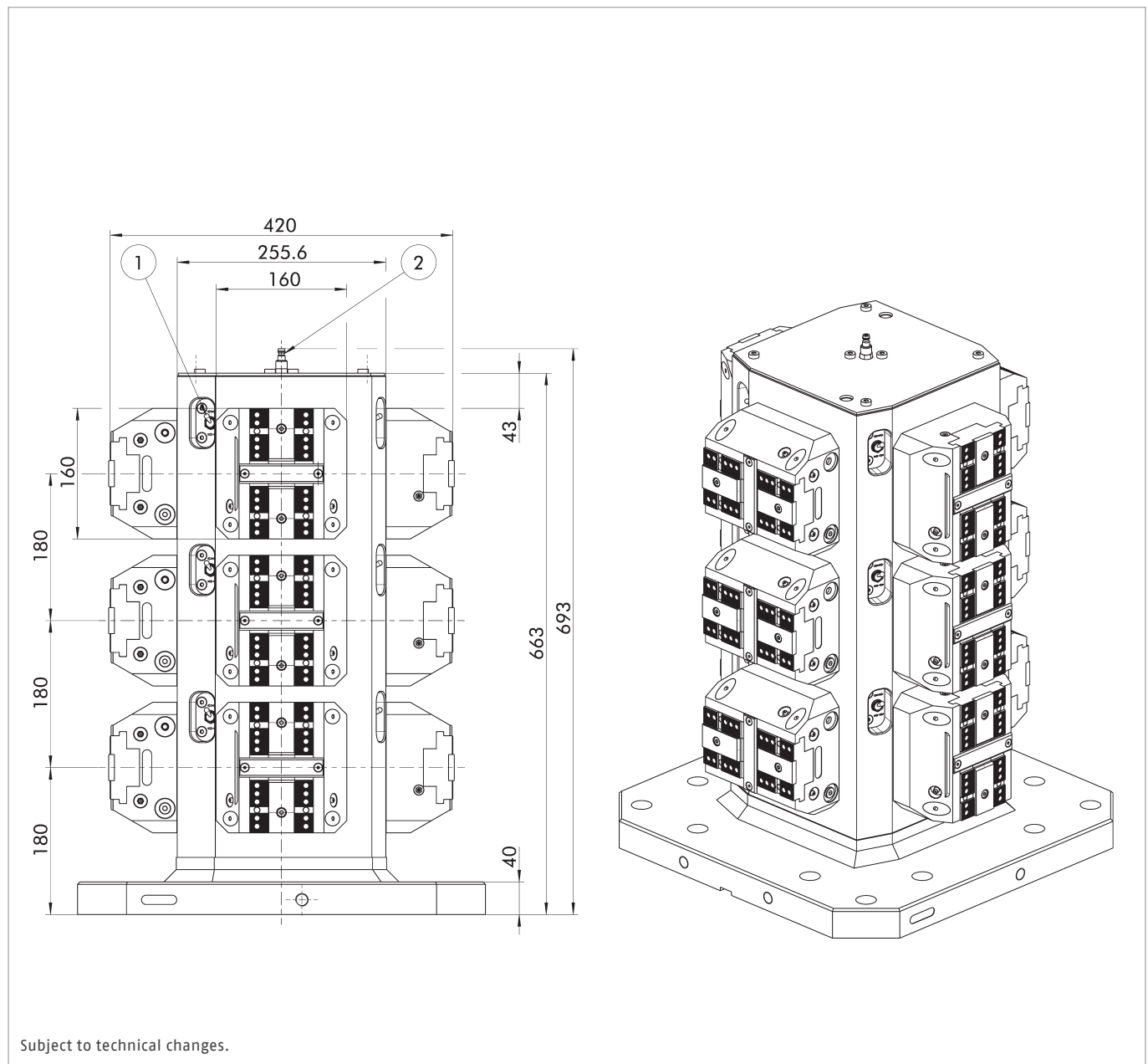
Scope of delivery

Tombstone, clamping force blocks, cover, shipping screws, operating manual; without system jaws

Technical data

Description	ID	Pallet size [mm]	Clamping force [kN]	Clamping force range [kN]	Opening pressure [bar]	Weight [kg]
SAT-KSF3 160 12V 500 x 500	0471555	500 x 500	20 - 30	7	6	355

The clamping force depends on the stroke due to the spring tension.
Max. clamping force is reached in the "open" condition, min. clamping force in the "closed" condition.



① 5/2-way control valve MTV 4, manually actuated control function for open/close of each clamping force block

② Central air connection G1/8 to supply all clamping force blocks



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