



VAT3

VERO-S tombstones

Tombstones with VERO-S interface for fast exchange of clamping devices and increased machine running times

VERO-S tombstones from SCHUNK are ready for application with the VERO-S NSE-T3 138-V1 quick-change pallet modules. These tombstones can be equipped with clamping devices from the huge SCHUNK modular system within a very short time. This has the positive effect of drastically reducing the set-up times while increasing machine running times. The VERO-S tombstones are available as double angled, triangle and octangle tombstones each with 400 x 400 mm or 500 x 500 mm pallet size. With one central connection per module row, the modules can be quickly and easily unlocked.



Advantages – Your benefits

- + VERO-S interface**
Fast exchange of clamping devices with extremely high repeat accuracy
- + 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.



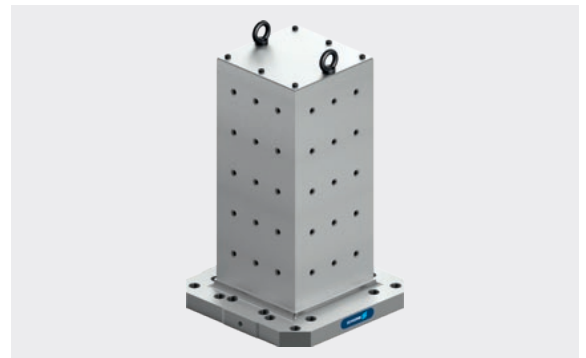
Triangle tombstones

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

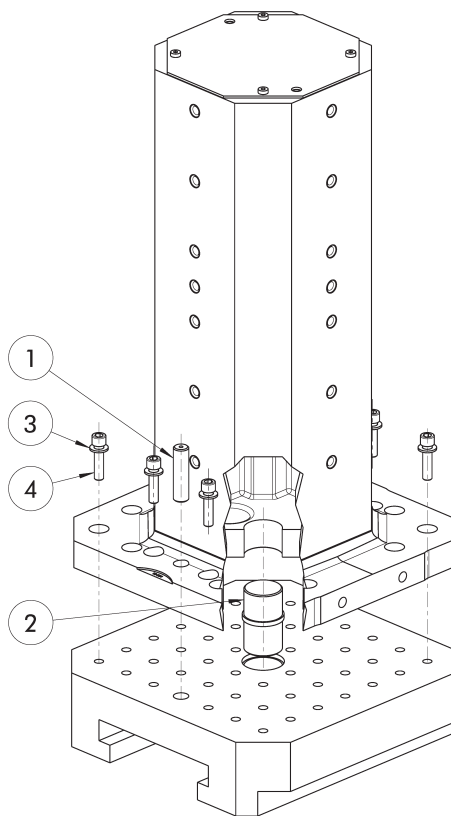
Octagonal or also cross tombstones mean that clamping devices can be mounted from four to eight sides. These tombstones are available with VERO-S tombstone modules, rough clamping surfaces, bore hole grid of 50 mm, and a reduced bore hole grid especially for SCHUNK clamping devices.



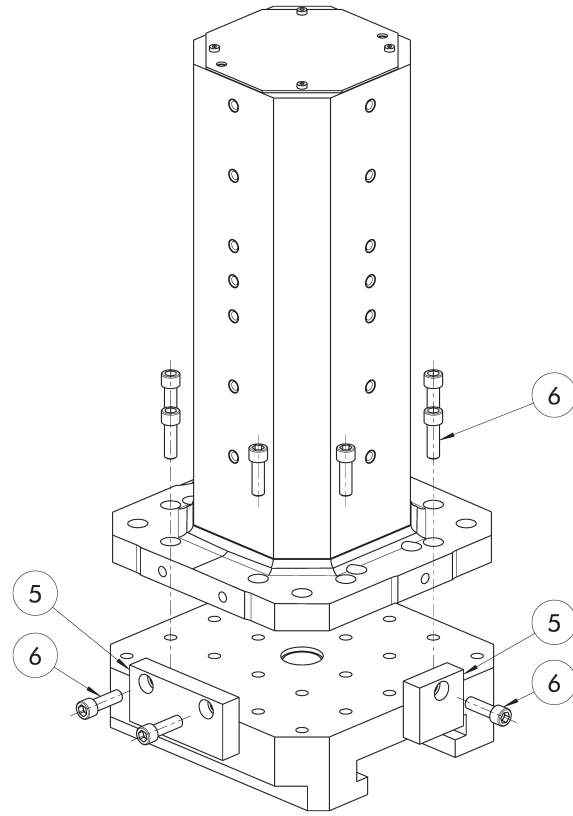
Positioning on the machine table

- 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

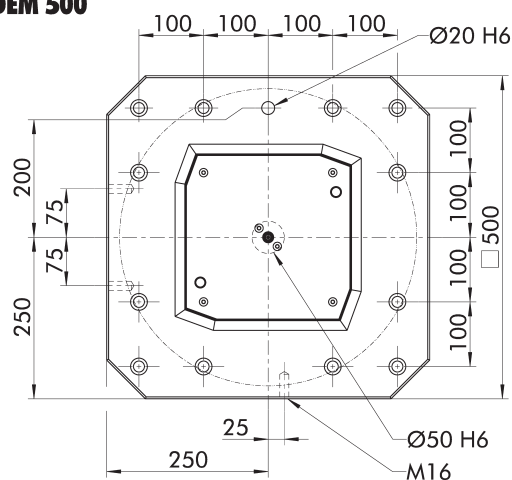


Subject to technical changes.

- 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

- 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.
- Dimensions apply to all tombstones listed in this chapter.



Double angle tombstone

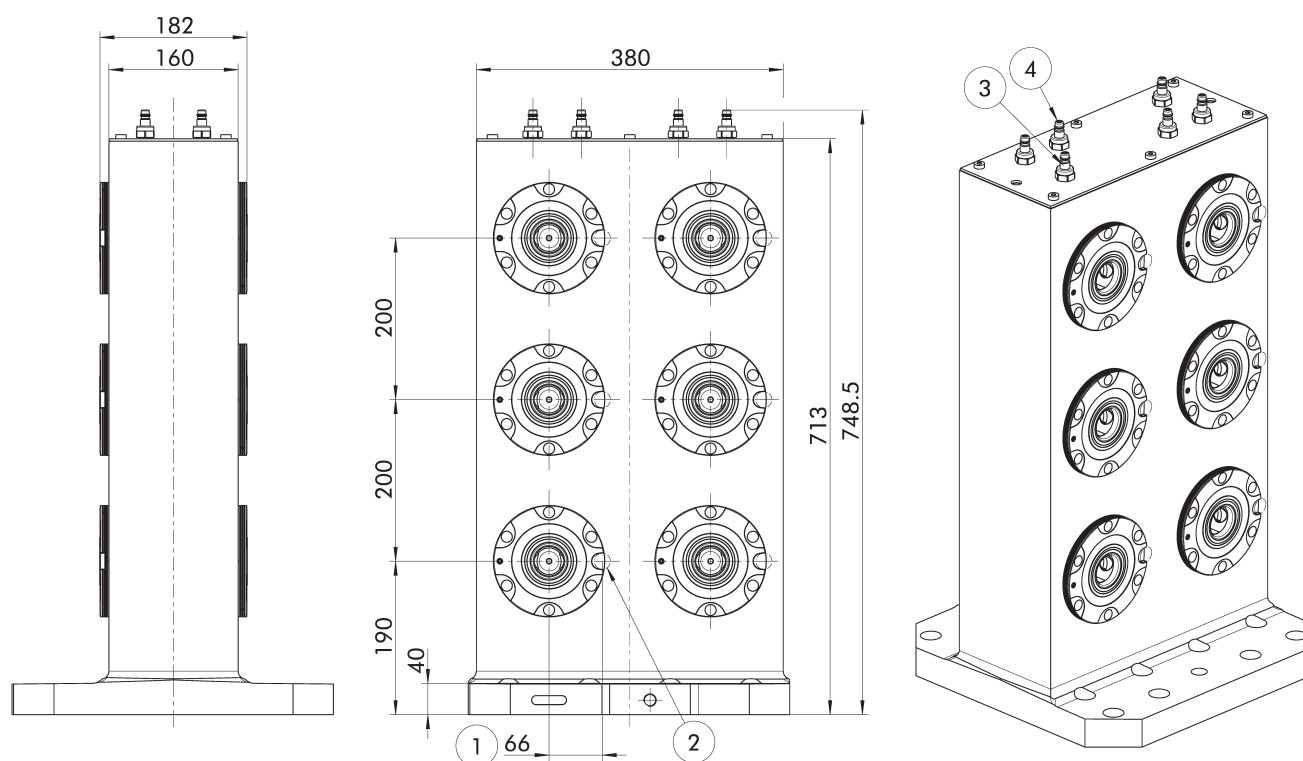
With VERO-S NSE-T3 138-V1 modules

Scope of delivery

Tombstone, cover, shipping screws, operating manual; without clamping pins, without locking coupling

Technical data

Description	ID	Pallet size	Pull-down force	Pull-down force with Opening pressure turbo	Opening pressure	Weight
		[mm]	[kN]	[kN]	[bar]	[kg]
VAT3-DW 400	1334327	400 x 400	7	24	6	206
VAT3-DW 500	1334328	500 x 500	7	24	6	228



Tombstone interface to machine table see page 8.
Subject to technical changes.

- ① Clearance 66 ±0.01 mm for indexing pin IXB V1
- ② Fitting groove for positional alignment of the clamping pallet
- ③ G1/8 air connection open modules once per clamping side
- ④ G1/8 air connection, turbo function

Triangle tombstone

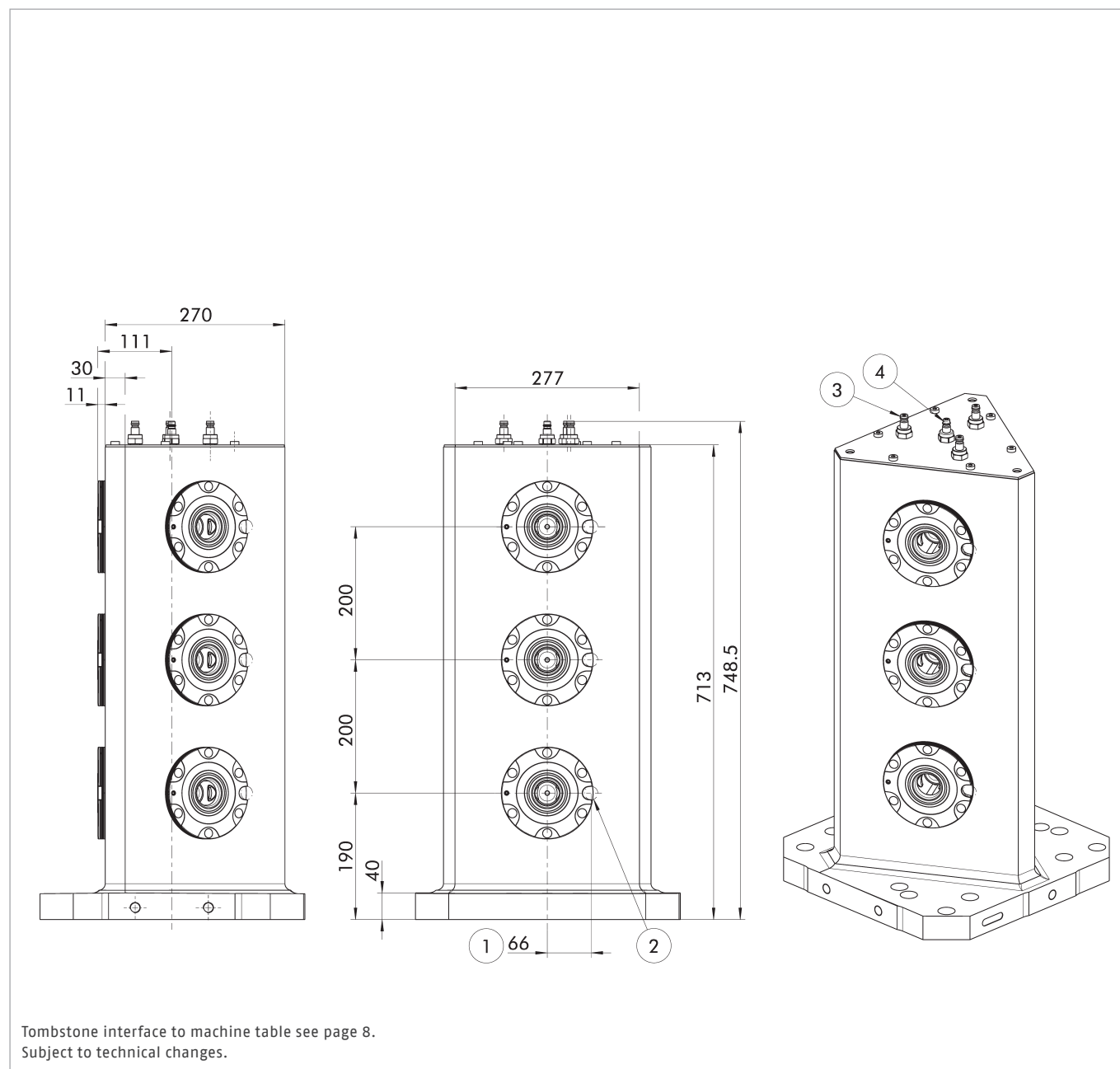
With VERO-S NSE-T3 138-V1 modules

Scope of delivery

Tombstone, cover, shipping screws, operating manual; without clamping pins, without locking coupling

Technical data

Description	ID	Pallet size	Pull-down force	Pull-down force with Opening pressure turbo	Opening pressure	Weight
		[mm]	[kN]	[kN]	[bar]	[kg]
VAT3-DR 400	1334351	400 x 400	7	24	6	183.4
VAT3-DR 500	1334352	500 x 500	7	24	6	202



- ① Clearance 66 ±0.01 mm for indexing pin IXB V1
- ② Fitting groove for positional alignment of the clamping pallet
- ③ G1/8 air connection open modules once per clamping side
- ④ G1/8 air connection, turbo function

Octangle tombstone

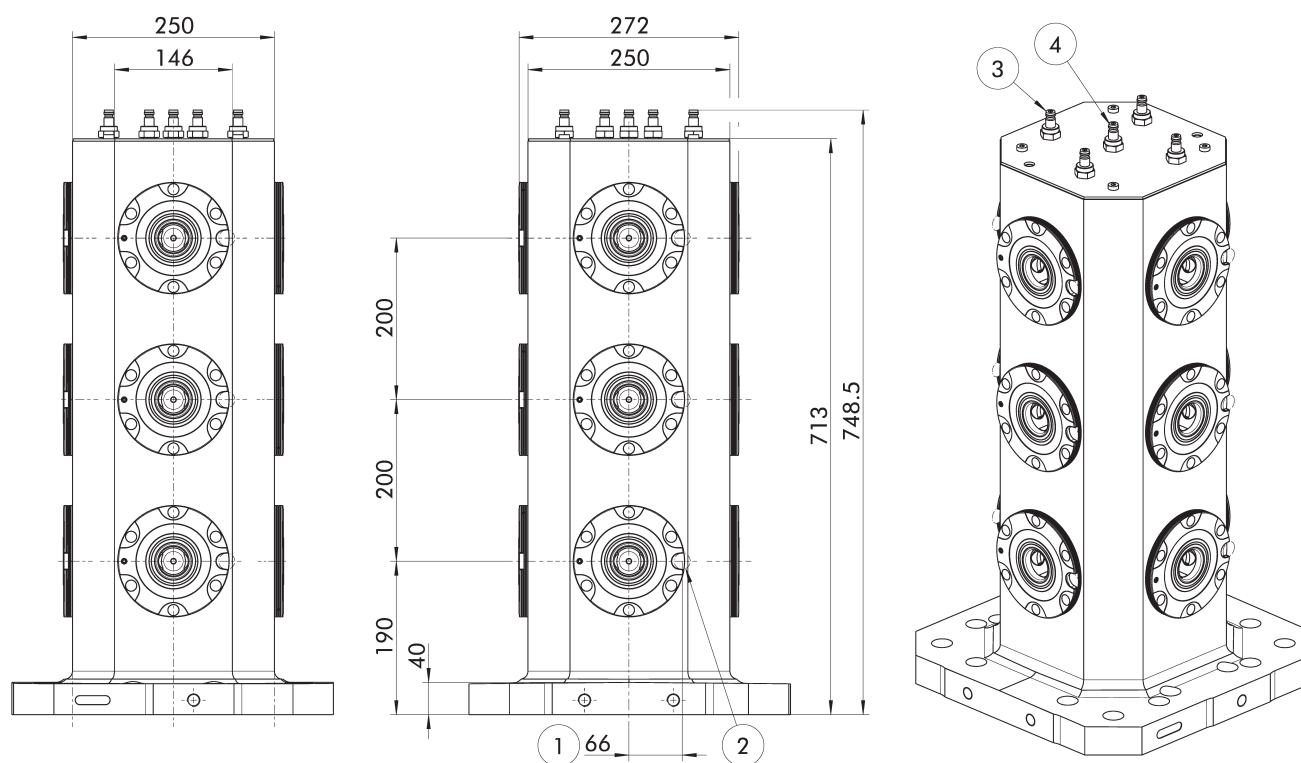
With VERO-S NSE-T3 138-V1 modules

Scope of delivery

Tombstone, cover, shipping screws, operating manual; without clamping pins, without locking coupling

Technical data

Description	ID	Pallet size	Pull-down force	Pull-down force with Opening pressure turbo	Opening pressure	Weight
		[mm]	[kN]	[kN]	[bar]	[kg]
VAT3-AE 400	1334353	400 x 400	7	24	6	182
VAT3-AE 500	1334354	500 x 500	7	24	6	208



Tombstone interface to machine table see page 8.
Subject to technical changes.

- ① Clearance 66 ±0.01 mm for indexing pin IXB V1
- ② Fitting groove for positional alignment of the clamping pallet
- ③ G1/8 air connection open modules once per clamping side
- ④ G1/8 air connection, turbo function



**H.-D. SCHUNK GmbH & Co.
Spanntechnik KG**

Lothringer Str. 23
D-88512 Mengen
Tel. +49-7572-7614-1300
Fax +49-7572-7614-1039
CMM@de.schunk.com
schunk.com