

Products

REVOLVING STAGE





TURNTABLE MODULAR SYSTEM

Aluminium frame design and panels for variable turntables.

1. VENTUM-S TURNTABLES ROTATING RING DESIGN

The system:

The Ventum-S rotating ring turntables develop the modular system principle even further in a logical way.

The example of the 8.0 m turntable illustrates the modular system very well: a turntable with a diameter of 8.0 m can also be used for 4.0 m and 6.0 m sizes. Turning rings, which expand the 4.0 m inner ring, can be used separately and combined with each other.

Key parameters:

- > Height: 166.6 / 200 mm
- > Load rating: 2.5 kN/m²
optionally up to 5.0 kN/m²
- > Type of drive: for outer drive system

Dimensions:

- > Diameter: 4.0 / 5.0 / 6.0 / 7.0 ... 14.0 m
- > Turning rings: from Ø4.0 m
at 1.0 m-intervals
- > Height: 0.166 / 0.200 m

We can provide special dimensions for the intervals, if required.



↑ Turntable Ø4.0 m



↑ Turning ring Ø4.0 m expanded to Ø6.0 m

Turning ring options:

- > Ø4.0 m expanded to Ø6.0 m
- > Ø4.0 m expanded to Ø8.0 m
- > Ø6.0 m expanded to Ø8.0 m

There are therefore six turntable options with a Ventum-S 8.0 m turntable.

TURNING RING TURNTABLE Ø8 M
IN THE SIX DESIGN OPTIONS



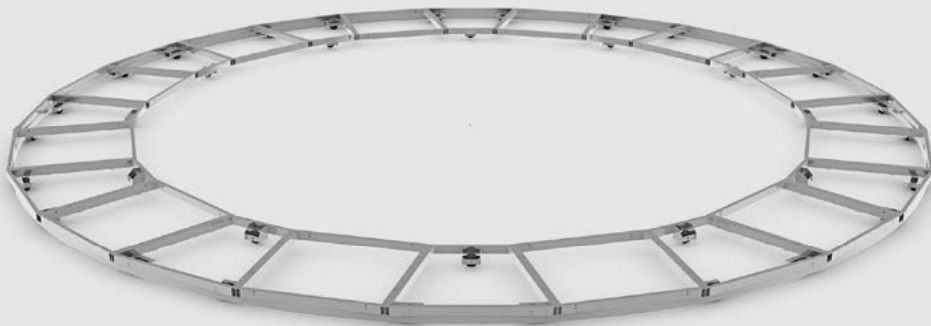
Turntable: Ø4.0 m



Turning ring: Ø4.0 expanded to Ø6.0 m



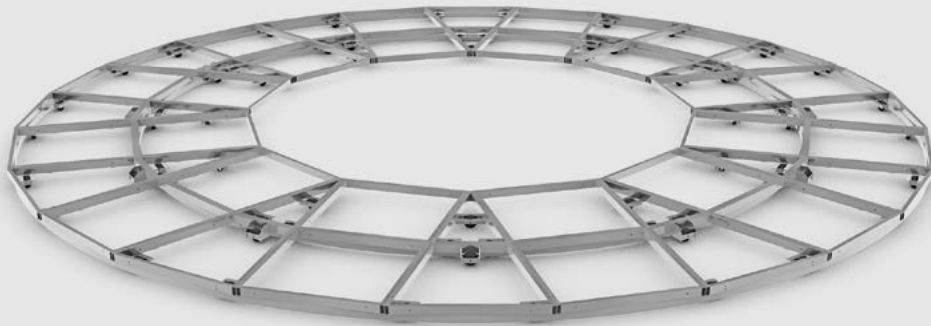
Turntable: Ø6.0 m



Turning ring: Ø6.0 expanded to Ø8.0 m



Turntable: Ø8.0 m



Turning ring: Ø4.0 expanded to Ø8.0 m

Ventum-S turntables Bridge design

The system:

Turntables can be created from bridge structural elements in the Ventum-S modular system. The combination of bridge units with turning centres, wheel sockets and matching parts enables you to use the bridge structural elements that you already own in an ideal manner and generates 50% lower costs than a new aluminium structure. This supplements your use of basic bridge structural elements and allows you to create turntables with the desired diameters.

Dimensions:

- > Height: 200 mm
- > Diameter: on request

Key parameters:

- > Load rating: 2.5 kN/m²
optionally up to 5.0 kN/m²
- > Type of drive: outer drive system,
Mecanum scenery wagon



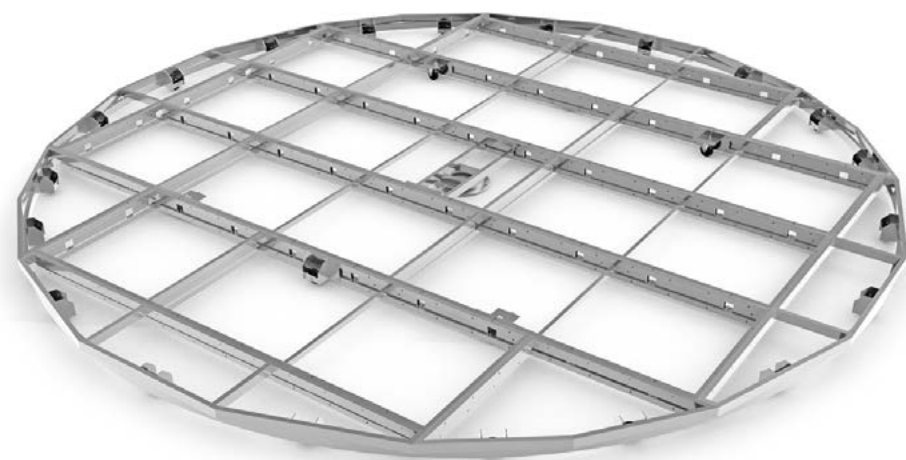
↑ Turning centre turntable, bridge design



↑ Matching part for turntable, bridge design



↑ Matching part for turntable, bridge design



↑ Turntable, bridge design

2. TURNTABLE PANEL

Turntable panel for rotating ring design:

The floor panels are segmented in line with the basic structure and designed with several corners at the crossover areas of the rotating rings. The outer ring for the turntable configuration is round in each case.

The floor panels are equipped with a direct vertical mounting as a standard feature and are laid on the aluminium substructure.

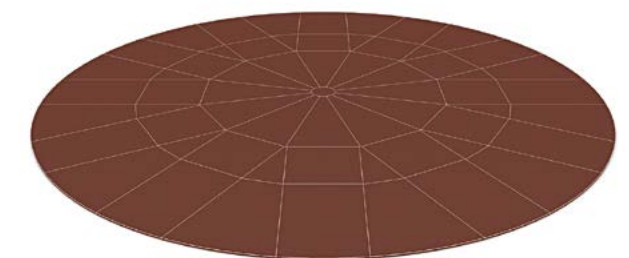
A locking device is available as an option.



↑ Panel for inner circle, rotating ring design



↑ Panel for attached ring, rotating ring design



↑ Complete panel, rotating ring design

Turntable panel, bridge design:

The floor panels are used in rectangular form in line with the dimensions of the bridge structural elements and are supplemented with rounded matching parts so that you create the diameters that you require.

The floor panels are equipped with a direct vertical mounting as a standard feature and are laid on the aluminium substructure.

A locking device is available as an option.

Surfaces:

- > Plywood – dark brown,
coated with phenol resin (ph)
- > Other coatings available on request

1. TURNTABLES, ROTATING RING DESIGN



Basic inner ring structure

ITEM	DESCRIPTION	OUTER DIAMETER	MATERIAL	WEIGHT
1	Basic inner ring structure	Ø4.0 m	AL (untreated)	136.5 kg

Polygon, solidly welded individual segments for assembly with screws; central support rotating ring; friction ring on the outer diameter; compatible with 4.0 m attached rings

Height for outer drive 141.6 mm / for inner drive 175 mm

Other diameters available on request!



Polygon, solidly welded individual segments for assembly with screws; friction ring with outer diameter; compatible with attached rings.

Other diameters available on request!

Complete basic structure

ITEM	DESCRIPTION	OUTER DIAMETER	MATERIAL	WEIGHT
1	Basic structure of turntable	Ø6.0 m (Ø4,0 m)	AL (untreated)	310.0 kg
2	Basic structure of turntable	Ø7.0 m (Ø4,0 m)	AL (untreated)	347.8 kg
3	Basic structure of turntable	Ø8.0 m (Ø4,0 m)	AL (untreated)	392.6 kg
4	Basic structure of turntable	Ø9.0 m (Ø4,0 / 6,0 m)	AL (untreated)	554.9 kg
5	Basic structure of turntable	Ø10.0 m (Ø4,0 / 8,0 m)	AL (untreated)	661.3 kg
6	Basic structure of turntable	Ø11.0 m (Ø4,0 / 8,0 m)	AL (untreated)	732.0 kg
7	Basic structure of turntable	Ø12.0 m (Ø4,0 / 8,0 m)	AL (untreated)	898.0 kg

TURNTABLES WITH BRIDGE DESIGN



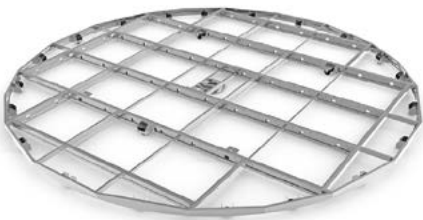
Basic structure of attached ring

ITEM	DESCRIPTION	INNEN- /OUTER DIAMETER	MATERIAL	WEIGHT
1	Basic structure of attached ring	Ø4.0 m expanded to Ø6.0 m	AL (untreated)	173.5 kg
2	Basic structure of attached ring	Ø4.0 m expanded to Ø7.0 m	AL (untreated)	211.3kg
3	Basic structure of attached ring	Ø4.0 m expanded to Ø8.0 m	AL (untreated)	256.1 kg
4	Basic structure of attached ring	Ø6.0 m expanded to Ø8.0 m	AL (untreated)	210.9 kg
5	Basic structure of attached ring	Ø6.0 m expanded to Ø9.0 m	AL (untreated)	248.9 kg
6	Basic structure of attached ring	Ø8.0 m expanded to Ø10.0 m	AL (untreated)	268.7 kg
7	Basic structure of attached ring	Ø8.0 m expanded to Ø11.0 m	AL (untreated)	339.4 kg
8	Basic structure of attached ring	Ø8.0 m expanded to Ø12.0 m	AL (untreated)	505.4 kg

Polygon, solidly welded individual segments for assembly with screws; friction ring with outer diameter; compatible with attached rings on the inner and outer diameters; usable as a separate turning ring

Height: for outer drive 141.6 mm / for inner drive 175 mm

Other diameters available on request!



Turntables with bridge design

ITEM	DESCRIPTION
1	Price available on request

Basic structure from bridge structural elements, equipped with turning centre, wheels and drive/control components, supplemented by polygon-shaped matching parts.

2. TURNTABLE PANELS

Panel for inner circle
(coated with phenol resin)



Plywood, coated dark brown with phenol resin (ph) on the outer diameter, rounded (r) as a separate turntable or polygon-shaped (m) for use with attached rings; segmented according to the basic structure; laid on top

Other diameters available on request!

ITEM	DESCRIPTION	OUTER DIAMETER	MATERIAL	WEIGHT
1	Panel for inner circle (m/ph)	Ø4.0 m	Plywood	193.9 kg
2	Panel for inner circle (r/ph)	Ø4.0 m	Plywood	201.5 kg

Panel for attached ring
(rounded/coated with phenol resin)



Plywood, coated dark brown with phenol resin (ph), polygon-shaped on the inner diameter, rounded (r) on the outer diameter for use as an end ring; segmented according to the basic structure; laid on top

Other dimensions available on request!

ITEM	DESCRIPTION	INNEN- /OUTER DIAMETER	MATERIAL	WEIGHT
1	Panel for attached ring (r/ph)	Ø4.0 m to Ø6.0 m	Plywood	256.7 kg
2	Panel for attached ring (r/ph)	Ø4.0 m to Ø7.0 m	Plywood	419.3 kg
3	Panel for attached ring (r/ph)	Ø4.0 m to Ø8.0 m	Plywood	605.7 kg
4	Panel for attached ring (r/ph)	Ø6.0 m to Ø8.0 m	Plywood	356.8 kg
5	Panel for attached ring (r/ph)	Ø6.0 m to Ø9.0 m	Plywood	568.7 kg
6	Panel for attached ring (r/ph)	Ø8.0 m to Ø10.0 m	Plywood	459.2 kg
7	Panel for attached ring (r/ph)	Ø8.0 m to Ø11.0 m	Plywood	723.9 kg
8	Panel for attached ring (r/ph)	Ø8.0 m to Ø12.0 m	Plywood	1,031.7 kg

Panel for attached ring
(polygon-shaped/coated with phenol resin)

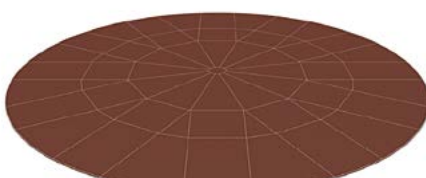


Plywood, coated dark brown with phenol resin (ph); polygon-shaped on the inner and outer diameters (m) for use with other attached rings; segmented according to the basic structure; laid on top

Other diameters available on request!

ITEM	DESCRIPTION	INNEN- /OUTER DIAMETER	MATERIAL	WEIGHT
1	Panel for attached ring (m/ph)	Ø4.0 m to Ø6.0 m	Plywood	249.9 kg
2	Panel for attached ring (m/ph)	Ø4.0 m to Ø7.0 m	Plywood	410.9 kg
3	Panel for attached ring (m/ph)	Ø4.0 m to Ø8.0 m	Plywood	596.3 kg
4	Panel for attached ring (m/ph)	Ø6.0 m to Ø8.0 m	Plywood	346.4 kg
5	Panel for attached ring (m/ph)	Ø6.0 m to Ø9.0 m	Plywood	556.6 kg
6	Panel for attached ring (m/ph)	Ø8.0 m to Ø10.0 m	Plywood	451.3 kg
7	Panel for attached ring (m/ph)	Ø8.0 m to Ø11.0 m	Plywood	710.6 kg
8	Panel for attached ring (m/ph)	Ø8.0 m to Ø12.0 m	Plywood	1,005.7 kg

Complete panel
(coated with phenol resin)

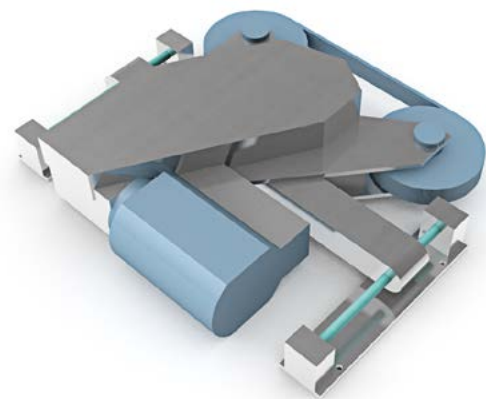


Plywood, coated dark brown with phenol resin (ph), rounded on the outer diameter; segmented according to the basic structure; laid on top

Other diameters available on request!

ITEM	DESCRIPTION	OUTER DIAMETER	MATERIAL	WEIGHT
1	Panel for turntable (ph)	Ø6.0 m	Plywood	450.6 kg
2	Panel for turntable (ph)	Ø7.0 m	Plywood	613.1 kg
3	Panel for turntable (ph)	Ø8.0 m	Plywood	799.5 kg
4	Panel for turntable (ph)	Ø9.0 m	Plywood	1,011.9 kg
5	Panel for turntable (ph)	Ø10.0 m	Plywood	1,241.5 kg
6	Panel for turntable (ph)	Ø11.0 m	Plywood	1,514.1 kg
7	Panel for turntable (ph)	Ø12.0 m	Plywood	1,821.9 kg

TURNTABLE DRIVE SYSTEMS



External 1.5 kW drive modules:

The external drive modules have been specially developed for Ventum-S turntables. The drives are assembled very easily. To start operating the unit, the drive module is fixed to the stage floor by screws and is then pressed on to the turntable's friction ring using a spring adjustment. An oscillating bearing evens out any uneven elements on the running surface and ensures uniform contact pressure. External drives can be used both for complete turntables and also for turning rings that run separately. Pressure rollers are mounted for turning rings in order to guide the turntable in its position.

- High torque servo motor even at low speed
- dynamic total load 3.0 t (dead weight + payload)

Key parameters:

- › Power voltage: 230 V, 400 V - at 50 Hz
- › Max. peripheral force: 1000 N
- › Height: 166.6 mm, 141.6 mm
Can be inserted in substructure without a panel
- › Drive system: S 1 (permanent drive)
- › Number of drives: depends on dynamic load rating

POSITIONING CONTROL

- Angle of rotation preselectable
- Preselectable rotation time
- Breakpoints and duration can be preselected
- Continuous operation can be preselected
- analogue and digital display of the relative position
- digital display of the absolute position
- analogue and digital speed display
- Rotational speed can be preselected (continuously 0 – 1m/s)
- 90 driving sets with 9 individual drivings each can be saved
- You can switch to manual operation and return to the sequence at any time
- Saving on external data carriers possible (USB)
- ready for touring
- Can be used on different diameters
- Calibration to the respective turntable circumference
- Several drive modules can be coupled in terms of control technology



PLANNING WORK

Notes:



Our engineers are available to provide product-related planning with the VENTUM-S modular system and special designs:

Phone: **+49 351 4940359**

E-Mail: info@ventum-s.com



Papiermühlengasse 12 – 14 · 01159 Dresden
Telefon: +49 351-49 40 359 · Fax: +49 351-49 01 993
info@ventum-s.com · www.ventum-s.com

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