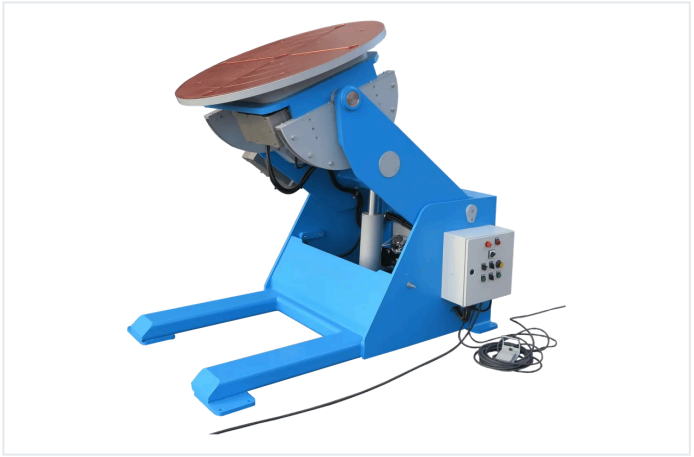
3

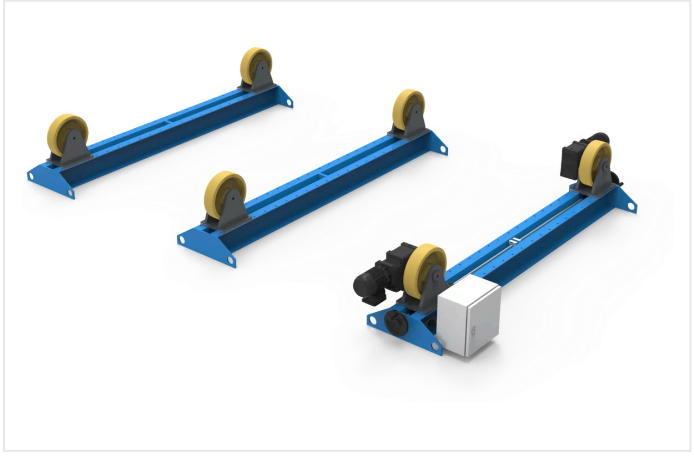
Positioning Equipment

Welding positioners, turntables and turning rolls for partial or full automation of welding – from 100 kg tabletop units to 100 t turning rolls.

3.1 Welding Positioners and Turntables • VM • WP • WP-D • WP-H **30**

3.2 Turning Rolls • ON • ON-SP • ON-VV **35**





3.1 Welding Positioners and Turntables

VM 100 • WP • WP-D • WP-H

Universal devices for partial or full automation of welding. From the VM 100 turntable (100 kg) to 3-axis WP-D positioners with hydraulic lift up to 50 t. **Best price-to-torque ratio**

Applications Vessels, pipes, flanges and connections.

Description

VM turntables and WP positioners are universal devices for partial or full automation of welding. They are intended for rotating and positioning workpieces – vessels, pipes, flanges, connections and the like. Welding can be done manually or, with a holder for a machine torch (option), automatically. The positioners simplify circumferential welding and help reduce production costs. The tables can be tilted (except the WP-H).

Standard features

- Robust, heavy-duty housing
- Brushes for connecting the ground cable of the welding power source
- Rotation left/right with linear speed adjustment
- Control box with start/stop foot switch

Options

- Torch holder with positioning elements
- 3-jaw chuck and flange
- Wired or wireless remote control
- Speed control with foot switch
- Stand for a working height of 800 mm
- Automatic welding 360° + overlap
- Segment welding (NC program)
- Touchscreen
- Centre bore in the work plate (depending on type)

Types

VM 100 • page 31

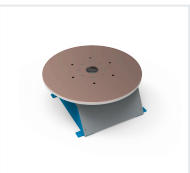
A basic and simple turntable for light loads up to 100 kg. Ideal for small workpieces and a cost-effective choice. Motorized rotation, manual tilting.

WP 200, 400, 800 • page 32

Welding positioners for medium loads from 200 kg to 800 kg. Robust construction for reliability and durability. Motorized rotation; tilting motorized or manual.

WP 1.500 – 5.000 and WP-D 1.500 – 50.000 • page 33

2-axis WP positioners (without hydraulics) and 3-axis WP-D positioners for large loads from 1.5 to 50 tonnes. WP-D have motorized rotation and tilting; the lifting axis is hydraulic.



WP-H • horizontal rotary table • page 34

A horizontal rotary table for workpieces that do not require tilting. Load capacity is customized for each order. Single motor, optionally with soft start.

3.1 VM 100

Welding Positioners and Turntables

VM 100

VM 100 (with torch holder)

VM 100 (with chuck)

Technical data

		VM 100
Load capacity	kg	100
Work plate diameter	mm	400
Plate bore diameter	mm	option
Rotation speed	rpm	0.3 – 6
Tilt	°	0 – 90
Max. welding current	A	300
Rated voltage	V	230
Frequency	Hz	50
Rotating torque	Nm	60

Description

A basic and simple turntable (welding positioner) designed for light loads up to 100 kg. Ideal for small workpieces and a cost-effective choice. Rotation is motorized, while tilting is manual.

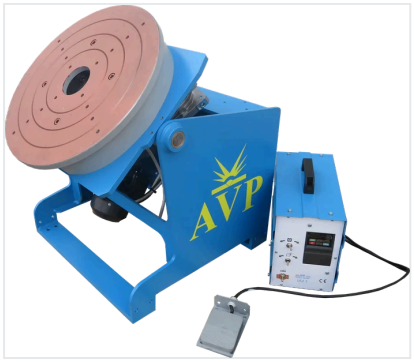
- Tilting clamping plate 0° – 90°
- Rotation left/right; adjustable rotation speed
- Control in a closed housing; foot switch to start the movement

Options

- Torch holder with positioning elements
- 3-jaw chuck and flange
- Wired or wireless remote control
- Speed control with foot switch
- Centre bore in the clamping plate
- 360° + overlap control
- Numerical programming, touchscreen

3.1 WP 200, 400, 800

Welding Positioners



WP 400

WP 800 (remote control with touchscreen)

These welding positioners suit medium loads from 200 kg to 800 kg. Rotation is motorized, while tilting can be motorized or manual.

- Rotation left/right; adjustable speed
- Control in a closed housing; foot switch to start the movement

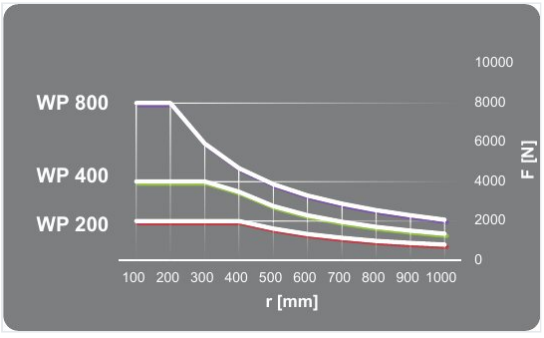
The same options are available as for the VM 100.

Technical data

		WP 200	WP 400	WP 800
Load capacity	kg	200	400	800
Work plate diameter	mm	500		800
Rotation speed	rpm	0.1 – 2		0.1 – 1.5
Rated power	kW	0.5	0.6	0.8
Tilt	°	105		120
Bore diameter	mm	/	Ø70	Ø80
Rated voltage	V/Hz	230 / 50		
Dimensions	mm	600 × 600 × 1,000		1,200 × 1,200 × 900
Rotating torque	Nm	620		1,200
Tilting torque	Nm	800	1,250	2,500

*The positioner must be fixed to the floor with anchor bolts to prevent tipping when the table is tilted. Leg extensions are available.

Load diagram

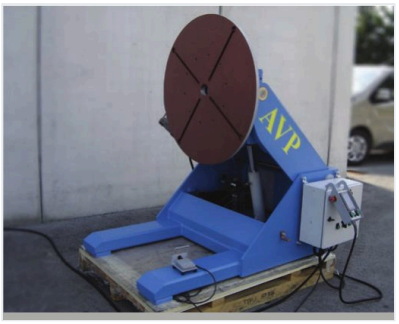


Load diagram: force F [N] versus distance r [mm]

3.1 WP and WP-D

1.5 – 50 t welding positioners

WP 5.000 (2-axis)



WP-D 1.500 (3-axis)

WP-D 6.000 (3-axis)

Description

WP positioners are 2-axis (without hydraulics) and WP-D positioners are 3-axis welding positioners, designed for handling large loads. WP-D have motorized rotation and tilting, while the lifting axis is hydraulic. They are available for loads from 1.5 to 50 tonnes.

WP = 2-axis (max. 5,000 kg) ***WP-D = 3-axis, hydraulic lift***

Technical data

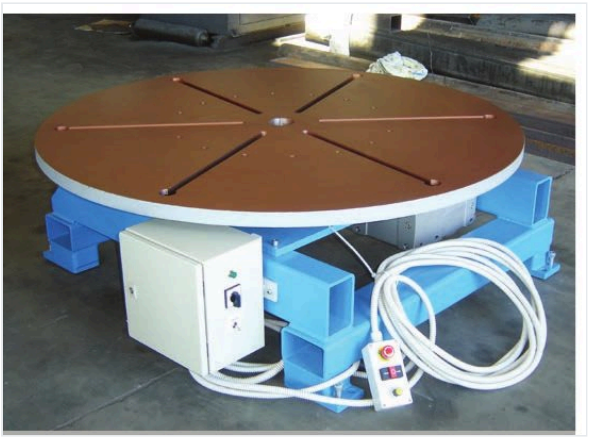
		WP / WP-D 1.500	WP / WP-D 3.000	WP / WP-D 5.000	WP-D 10.000	WP-D 50.000
Load capacity	t	1.5	3.0	5.0	10.0	50.0
Tilting torque	Nm	4,500	15,000	25,000	50,000	250,000
Rotating torque	Nm	3,000	9,000	15,000	30,000	150,000
Work plate diameter	mm	Ø1,000	Ø1,200	Ø1,500	Ø2,000	Ø4,000
Rotation speed	rpm	0.1 – 1	0.08 – 1	0.06 – 0.6	0.04 – 0.5	0.02 – 0.2
Max. welding current	A	600	600	600	600	600
Tilt	°			0 – 120		

Product codes: WP 1.500, WP 3.000 and WP 5.000 (2-axis), WP-D 1.500 to WP-D 50.000 (3-axis). For detailed dimensions or drawings please contact us.

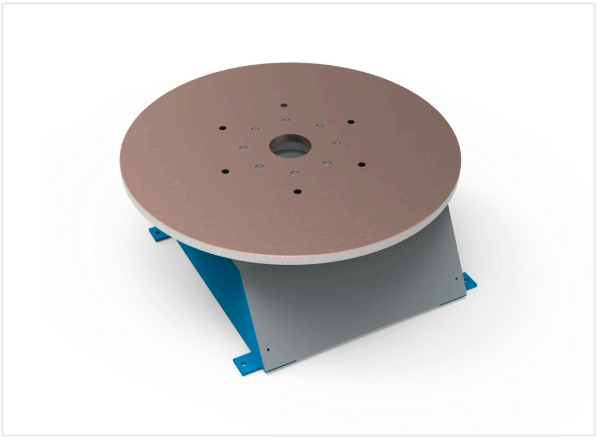
3.1 WP-H

Horizontal rotary table

A horizontal rotary table for workpieces that do not require tilting. Load capacity is defined for each order. It has a single motor, optionally with soft start.



WP-H 3.000



WP-H 400

Selecting a positioner

	Load capacity	Axes	Rotation	Tilt
VM 100	up to 100 kg	Rotation + tilt	Motorized	Manual, 0° – 90°
WP 200 – 800	200 – 800 kg	Rotation + tilt	Motorized	Motorized or manual
WP 1.500 – 5.000	1.5 – 5 t	2-axis	Motorized	Motorized
WP-D 1.500 – 50.000	1.5 – 50 t	3-axis, hydraulic lift	Motorized	Motorized
WP-H	Per order	Rotation only	Motorized, single motor	–

Options and accessories

Positioners can be supplied with the following options:

- Torch holder with positioning elements
- 3-jaw chuck and flange
- Wired or wireless remote control
- Speed control with foot switch
- Stand for a working height of 800 mm
- Automatic welding 360° + overlap
- Segment welding (NC program)
- Touchscreen
- Centre bore in the work plate (depending on type)

Torch holder

3-jaw chuck