

# The On-Track Gantry Series

Providing reliable and accurate extension of the robot's working area



The On-Track Gantry series offers a cost-effective solution when welding large objects. Various options such as multi-robot configurations are included.

With its outstanding rigid design the On-Track Gantry series offers a highly versatile and cost-effective welding solution. Ideal for welding large workpieces, or working at several stations along the floor. The floor track can be assembled from two and four-meter modules to any desired length.

Also available for multi-robot configurations, with several On-Track Gantries on the same track. In which case the robots can either work together or independent of each other.

All models are designed for the MOTOMAN arc welding robots AR1440 and AR2010.

#### **KEY BENEFITS**

- High accuracy
- Increased robot reach
- Easy maintenance
- Cost-effective

#### **OPTIONS**

- Homing pin kit
- Elevation floor spacers
- Customised cable chains



**OTG-Y** Extending the robot's working range in Y axis.

Z Y

**OTG-YZX** Extending the robot's working range in Y, Z and X axis.

All axes are servo powered and fully synchronised with the robot controller.



**OTG-YX** Extending the robot's working range in Y and X axis.



**OTG-YXZ** Extending the robot's working range in Y, X and Z axis.

# OTG-Y Application: long objects / multiple stations



### OTG-Y

On-Track Gantry for extending the robot's working range along the Y axis, with the robot mounted in a fixed position on the beam.

Height to beam (H)	4000, 4500 mm
Beam (X)	2000, 2500, 3000 mm
Track length (L)	8–24 m*
Travel	L –1840 mm

\* in 2 meter steps



- Automatic lubrication
- Bracket for wire barrel
- Bracket for power source

Technical data			OTG-Y
Y-axes [track]	Motor power		3.7 kW
	Gear ratio	reducer	35 : 1
	Maximum speed	50 % duty cycle	0.5 m/s
	Travel at	0.5 / 1.0 / 2.0 / 4.0 m	1.300 / 1.865 / 2.720 / 4.400 s

# OTG-YX Application: lengthwise and sideways



### OTG-YX

On-Track Gantry for extending the robot's working range along the Y and X axis, with a fixed robot distance from the floor.

Height to beam (H)	4000, 4500 mm
Stroke (X)	2000, 2500, 3000 mm
Track length (L)	8–24 m*
Travel	L –1840 mm

\* in 2 meter steps



- Automatic lubrication
- Bracket for wire barrel
- Bracket for power source

Technical data			OTG-YX
Y-axes [track]	Motor power		3.7 kW
	Gear ratio	reducer	35 : 1
	Maximum speed	50 % duty cycle	0.5 m/s
	Travel at	0.5 / 1.0 / 2.0 / 4.0 m	1.300 / 1.865 / 2.720 / 4.400 s
X-axes [beam]	Motor power		2.0 kW
	Gear ratio	reducer	7:1
	Maximum speed	50 % duty cycle	1.0 m/s
	Travel at	0.5 / 1.0 / 2.0 m	0.940 / 1.910 / 1.970 s

# OTG-YZX Application: limited ceiling height



## OTG-YZX

On-Track Gantry for extending the robot's working range along the Y, Z and X axis. Ideal for a building with a limited ceiling height.

Height to beam (H)	4000, 4500 mm
Stroke (X)	2000, 2500, 3000 mm
Stroke (Z)	1000, 1500, 2000 mm
Track length (L)	8–24 m*
Travel	L –1840 mm

\* in 2 meter steps



- Automatic lubrication
- Bracket for wire barrel
- Bracket for power source

Technical data			OTG-YZX
Y-axes [track]	Motor power		3.7 kW
	Gear ratio	reducer	35 : 1
	Maximum speed	50 % duty cycle	0.5 m/s
	Travel at	0.5 / 1.0 / 2.0 / 4.0 m	1.300 / 1.865 / 2.720 / 4.400 s
X-axes [beam]	Motor power		2.0 kW
	Gear ratio	reducer	7:1
	Maximum speed	50 % duty cycle	1.0 m/s
	Travel at	0.5 / 1.0 / 2.0 m	0.940 / 1.910 / 1.970 s
Z-axes [elevation]	Motor power		3.7 kW
	Gear ratio	reducer	38.5 : 1
	Maximum speed	50 % duty cycle	0.4 m/s
	Travel at	0.5 / 1.0 / 2.0 m	2.435 / 3.870 / 6.760 s

# OTG-YXZ Application: reach inside objects

### OTG-YXZ

On-Track Gantry for extending the robot's working range along the Y, X and Z axis. Specially designed for easy access and to reach deep within objects.





4000, 4500 mm
2000, 2500, 3000 mm
1000, 1500, 2000 mm
8–24 m*
L –1840 mm

\* in 2 meter steps

- Automatic lubrication
- Bracket for wire barrel
- Bracket for power source

Technical data			OTG-YXZ
Y-axes [track]	Motor power		3.7 kW
	Gear ratio	reducer	35 : 1 / 35 : 1
	Maximum speed	50 % duty cycle	0.5 m/s
	Travel at	0.5 / 1.0 / 2.0 / 4.0 m	1.300 / 1.865 / 2.720 / 4.400 s
X-axes [beam]	Motor power		2.0 kW
	Gear ratio	reducer	7:1
	Maximum speed	50 % duty cycle	1.0 m/s
Z-axes [elevation]	Motor power		3.0 kW
	Gear ratio	reducer	35 : 1
	Maximum speed	50 % duty cycle	0.4 m/s
	Travel at	0.5 / 1.0 / 2.0 m	1.215 / 2.090 / 2.985 s

# DESIGN FEATURES



Cable chain kits can be mounted on etiher side of the gantry pillar as shown in this multi-robot configuration.



### Carrier shelves

The gantry pillar carrier is equipped with three shelves that can be used for the welding power source, wire barrel and control cabinet:

• Reach 2010 mm

**MOTOMAN AR2010** 

• Repetitive accurary 0.03 mm

- 780 x 450 mm
- 710 x 600 mm
- 1310 x 715 mm



### More free space

With our standard floor washer the distance between the track bed and floor is 70 mm. For more free space you can use the 60 mm optional floor washer and have 105 mm free space instead.



Robotic welding technology that can solve your biggest challenges.







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