GEFERTEC

3DMP®

The arc series:
3D Metal Printers for Industrial Manufacturing

The **arc series** combines the technically mature and proven arc-welding method with the CAD drawings of the product designers and engineers in a completely new production system. Either 3 or 5 motion axes offer maximum flexibility in terms of the component volume and enable the additive production of high-quality metal parts.

Innovative features that inspire

- Process monitoring via camera
- Machine access at ground level with a sliding working table for easy loading and unloading by crane
- Actively cooled base plate
- Soundproof housing
- Integrated case ventilation and welding fume extraction
- User-friendly control unit
- High-end components of well-known manufacturers

Optional equipment

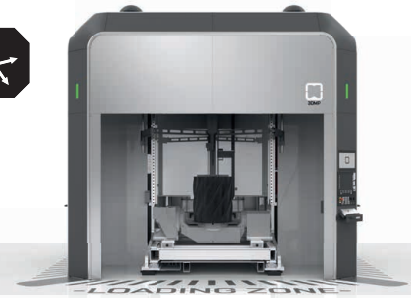
The **arc series** offers even more performance for your needs thanks to a range of optional equipment.

- Temperature tracking by integrated Sensortherm pyrometer
- **arc** cooling system for local cooling by cooling gas
- Automatic welding torch cleaning system
- Water-cooled inert gas cover for oxygen-sensitive materials

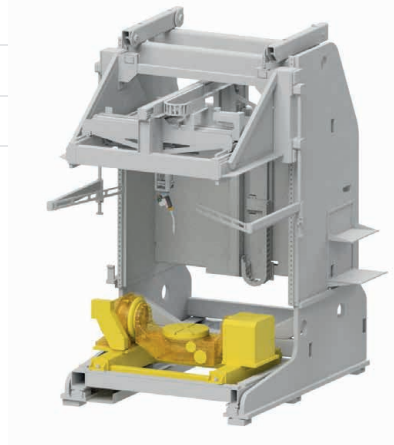
GEFERTEC arc603

Working space	
Travel path (x - y - z) in inch	43.3 - 55.1 - 61.6
Max. size of machined parts (x - y - z) in inch	43.3 - 55.1 - 61.6
Linear axes	
Linear speed (x - y - z) in ft/min	82 - 82 - 82
Unloading Travel System (y) in inch	57.1
Components	
Power source	Fronius TPS 4000 CMT with wire feed unit VR1550 and Robacta-torch with Fronius Explorer for complete process data acquisition
Control	SIEMENS 840Dsl
Interface	HMI via control panel and machine operating panel with additional industrial keyboard and monitor for process observation
Data acquisition	Process data acquisition via an integrated Beckhoff-Industry-PC and graphical user interface for parameter selection and adjustment
Electrical cabinet	2 control cabinet units for measuring and power electronics
Cooling	4 kW cooling capacity
Welding table	
Title	arc603-welding table with integrated cooling system
Max. dimension cooling plate (ø) in inch	59.1 x 59.1
Max. table payload in lb	6 613.9
Additional information/Local requirements	
Outer machine dimensions (depth x width x height) in inch	177.2 x 177.2 x 177.2
Power connection in A	1 x 63
Compressed air in MPa	1 x 0.6
Weight in lb	35 274 (mass with max. part weight)

GEFERTEC arc605

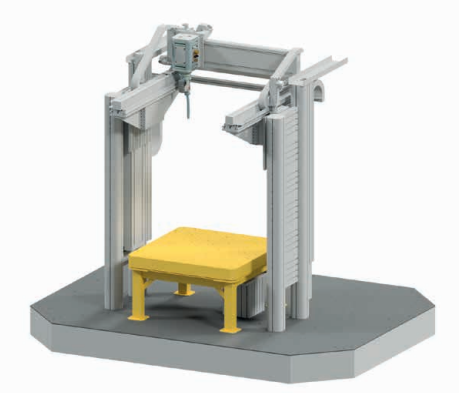


Working space	
Travel path (x - y - z) in inch	43.3 - 55.1 - 67.7
Max. size of producible parts (ø - z) in inch	35.4 - 27.6
Linear axes	
Linear speed (x - y - z) in ft/min	82 - 82 - 82
Unloading Travel System (y) in inch	57.1
Components	
Power source	Fronius TPS 4000 CMT with wire feed unit VR1550 and Robacta-torch with Fronius Explorer for complete process data acquisition
Control	SIEMENS 840Dsl
Interface	HMI via control panel and machine operating panel with additional industrial keyboard and monitor for process observation
Data acquisition	Process data acquisition via an integrated Beckhoff-Industry-PC and graphical user interface for parameter selection and adjustment
Electrical cabinet	2 control cabinet units for measuring and power electronics
Cooling	4 kW cooling capacity
Welding table	
Title	arc605-welding table with integrated cooling system
Max. dimension cooling plate (ø) in inch	31.5
Max. table payload in lb	925
Swiveling range in ° (degree)	–100/10
Rotating range in ° (degree)	360
Rotational speed A-axis in rpm	15
Rotational speed C-axis in rpm	36
Additional information/Local requirements	
Outer machine dimensions (depth x width x height) in inch	177.2 x 177.2 x 177.2
Power connection in A	1 x 63
Compressed air in MPa	1 x 0.6
Weight in lb	35 274 (mass with max. part weight)

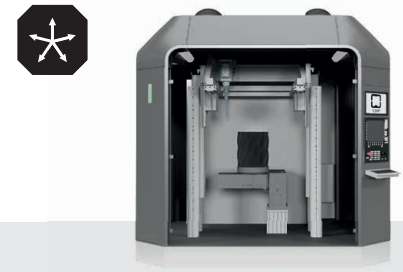


GEFERTEC arc403

Working space	
Max. linear way (x - y - z) in inch	31.5 - 35.4 - 39.4
Max. size of machined parts (x - y - z) in inch	31.5 - 35.4 - 39.4
Linear axes	
Linear speed (x - y - z) in ft/min	16.4 - 16.4 - 8.2
Components	
Power source	Fronius TPS 4000 CMT with wire feed unit VR1550 and Robacta-torch with Fronius Explorer for complete process data acquisition
Control	SIEMENS 840Dsl
Interface	HMI via control panel and machine operating panel with additional industrial keyboard and monitor for process observation
Data acquisition	Process data acquisition via an integrated Beckhoff-Industry-PC and graphical user interface for parameter selection and adjustment
Electrical cabinet	2 control cabinet units for measuring and power electronics
Cooling	4 kW cooling capacity
Welding table	
Title	arc403-welding table with integrated cooling system
Max. table payload in lb	1 763.7
Additional information/Local requirements	
Outer machine dimensions (depth x width x height) in inch	90.6 - 118.1 - 122.0
Power connection in A	1 x 63
Compressed air in MPa	1 x 0.6
Weight in lb	11 023.1 (mass with max. part weight)



GEFERTEC arc405



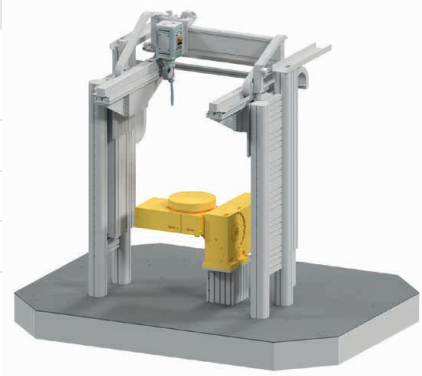
Available in 2 versions

Version 1	
Max. size of producible parts (ø - z) in inch	15.7 - 19.7
Max. table payload in lb	440.9

Version 2	
Max. size of producible parts (ø - z) in inch	27.6 - 11.8
Max. table payload in lb	330.7

For both versions:

Working space	
Travel path (x - y - z) in inch	31.5 - 35.4 - 39.4
Linear axes	
Linear speed (x - y - z) in ft/min	16.4 - 16.4 - 8.2
Components	
Power source	Fronius TPS 4000 CMT with wire feed unit VR1550 and Robacta-torch with Fronius Explorer for complete process data acquisition
Control	SIEMENS 840Dsl
Interface	HMI via control panel and machine operating panel with additional industrial keyboard and monitor for process observation
Data acquisition	Process data acquisition via an integrated Beckhoff-Industry-PC and graphical user interface for parameter selection and adjustment
Electrical cabinet	2 control cabinet units for measuring and power electronics
Cooling	4 kW cooling capacity
Welding table	
Title	arc405-welding table with integrated cooling system
Max. dimension cooling plate (ø) in inch	15.7
Swiveling range in ° (degree)	–90/5
Rotating range in ° (degree)	360
Rotational speed A-axis in rpm	21
Rotational speed C-axis in rpm	50
Additional information/Local requirements	
Outer machine dimensions (depth x width x height) in inch	90.6 - 118.1 - 122.0
Power connection in A	1 x 63
Compressed air in MPa	1 x 0.6
Weight in lb	11 023.1 (mass with max. part weight)



3DMP®

Next Level Production.

GEFERTEC

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