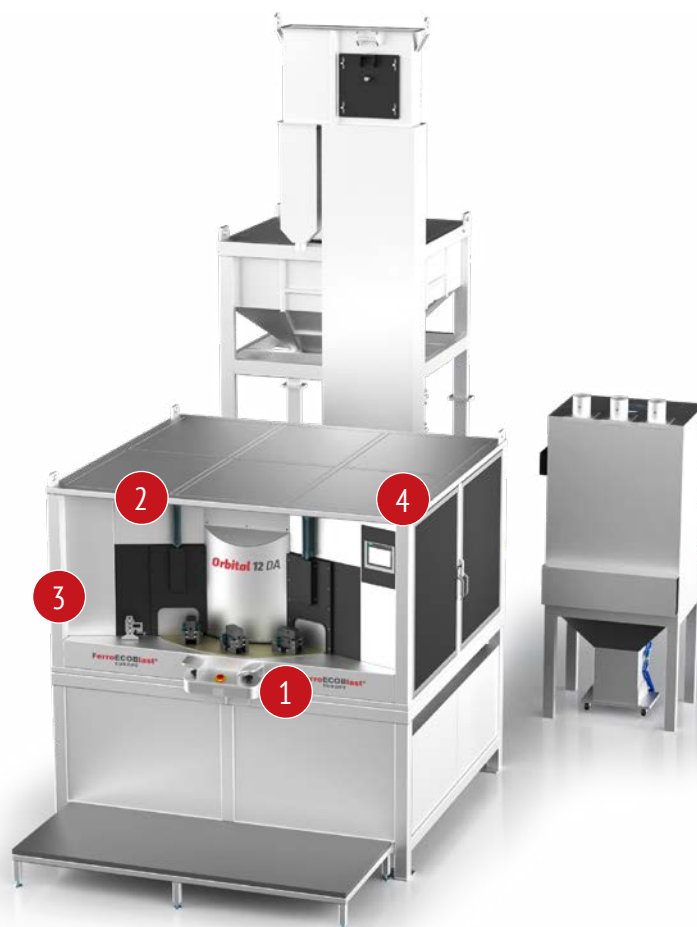


ORBITAL BLASTING SYSTEM

Automatic sandblasting systems for cylindrical, tubular and cast workpieces.

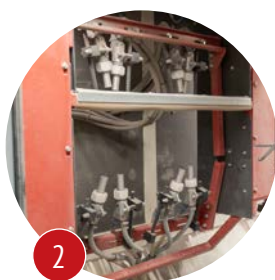
The ORBITALBLAST is a semi to fully automatic sandblasting system designed for high-throughput surface treatment of cylindrical, tubular, or symmetrical components such as water heaters, hydraulic cylinders, and pump housings.

Using an indexing satellite turntable, oscillating nozzles, and programmable recipes, it enables consistent external and internal blasting, even on complex shapes, with minimal operator intervention and high repeatability.



Indexed Satellite Table

6–16 station orbital table with automated rotation and positioning.



Oscillating Nozzle Arms

Up to 10 nozzles per system with adjustable angles and oscillation.



Flexible Loading Options

Manual fixture loading or robotic arms for full automation.



FerroSmartPanel

Integrated PLC/HMI with recipe selection, diagnostics, and remote access.

How it works

1. Loading

The operator (or robot) loads parts manually onto motorized satellites positioned on an indexing turntable. Custom nests ensure accurate positioning for each part type.
2. Program Selection

From the FerroSmartPanel, the operator selects a pre-set blasting recipe tailored to the part geometry. Parameters include nozzle angles, oscillation speed, and cycle time.
3. Blasting

The turntable indexes parts into the blasting chamber. Each station is equipped with oscillating nozzles (internal and/or external) that clean surfaces thoroughly from multiple angles. Satellite rotation ensures complete and uniform treatment.
4. Blow-Off & Recycling

After blasting, parts pass through a dedicated blow-off zone, where compressed air removes residual abrasive. Media is collected and separated via cyclone, returning clean media to the blasting generator.
5. Unloading

Finished parts rotate to the loading/unloading zone. Operators (or robots) remove completed components while new ones are simultaneously loaded, allowing continuous production.

Specification ORBITAL

* Please note: This is a sample specification. Each machine is custom-made, so the data may vary based on specific requirements and purposes.

	ORBITAL 2/6	ORBITAL 12	ORBITAL 16
Blast Chamber Size (L x W x H mm)	1200 x 1200 x 2500	1700 x 1700 x 2000	2000 x 2000 x 2200
Turntable Stations	6	12	16
Turntable Type	Indexing (3x120°)	Indexing (12x30°)	Continuous rotation
Satellite Drive	Motorized	Motorized	Motorized
Blast Nozzles (pcs)	8	8	10
Nozzle Manipulators	2 oscillating	5 X/Y, 6 single-axis	2-axis servo
Nozzle Angle/Position Adjust.	Manual	Manual	Manual
Blow-Off System	2 knife-type nozzles	6 fixed nozzles	5 fixed nozzles
Cycle Time (sec/tact)	~90	~25–40	~60
Robotic Loading Method	o	Manual / o robotic	•
Nozzle Control System	PLC	PLC	Siemens PLC
Media Recovery Type	Cyclone + hopper	Screw + air wash	Cyclone + filter
Filter Unit	CENTRO 4/6–500 ECO	CENTRO 4/2–300 ECO	CENTRO 4/6–500 ECO
Air Consumption (Nm³/min @ bar)	10–12 @ 6.0	~15 @ 6.0	~20 @ 6.0
Power Supply (kW)	4.0	7.5	up to 15.0

• - standard | o - optional | x - not available