



SHOTBLASTING MACHINES

BLASTROOMS



CYM MATERIALES S.A.
INDUSTRIAL SOLUTIONS

BLASTROOMS

CYM Materiales SA manufactures shot blast rooms, an ideal solution for the treatment of those parts that, due to their size or complexity, cannot be processed in automatic turbine equipment.

These rooms, in whose interior one or more operators carry out the shot blasting process with pressure equipment and abrasive impulsion control, allow the treatment of a wide variety of parts for the removal of all types of coatings and contaminants (old paint, flakes, foundry sands, among others). In addition, the shot blasting process improves the visual appearance of the treated part and provides an ideal roughness profile for the application of paints or any other type of coating.

The design and technology of our rooms allow us to adapt to the specific needs of each customer:

- Modular structure of easy assembly.
- Manual or automatic abrasive recovery system.
- Conveyors for parts: aerial, rollers or carts for heavy structures.

Guaranteeing the safety of the personnel throughout the process, our equipment has a dead man safety system with automatic cut-off and the special clothing required for the shot blasting process.

Our shot blasting rooms guarantee the care of the environment, obtaining optimum quality results without emitting any type of dust pollution or contaminants and with a low noise level.

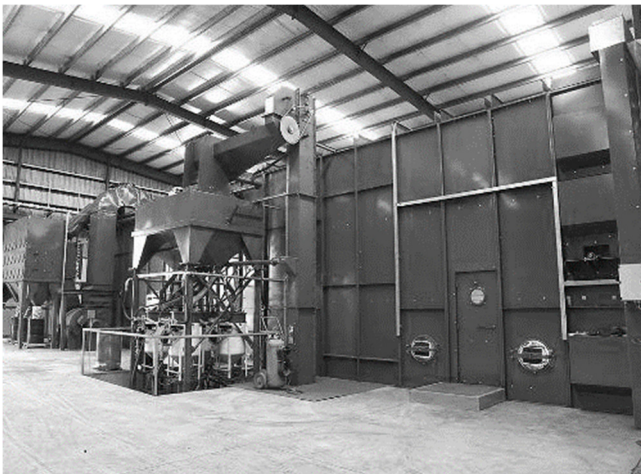


MAIN FEATURES

- Versatile system that allows processing parts of various sizes and complexities.
- Ideal complement to process parts that due to their complexity or size cannot be processed in automatic turbine shot blasting equipment.
- It replaces the unhealthy and precarious sandblasting installations, being these installations suitable for sharing space and productive time with any type of industrial process.
- With a correct operation of the equipment, there are no health problems for the personnel or damage to the installations.
- Suitable to work in line with paint booths.
- Does not pollute the environment.

INDUSTRIES

- Welded structures, profiles and plates.
- Pipes, spools and wind towers.
- Rolling equipment, truck trailers and semi-trailers, railroad cars, mining hoppers, etc.
- Agricultural machinery.
- Electrical transformers.
- Stainless steel parts for the food industry, sanitary industry, etc.
- Large castings and forgings.
- Oil, gas, water, etc. cylinders and tanks.
- Ships and their components.
- Aircraft and their components.
- Cleaning and surface preparation of all types of metallic parts.



CONSTRUCTION FEATURES

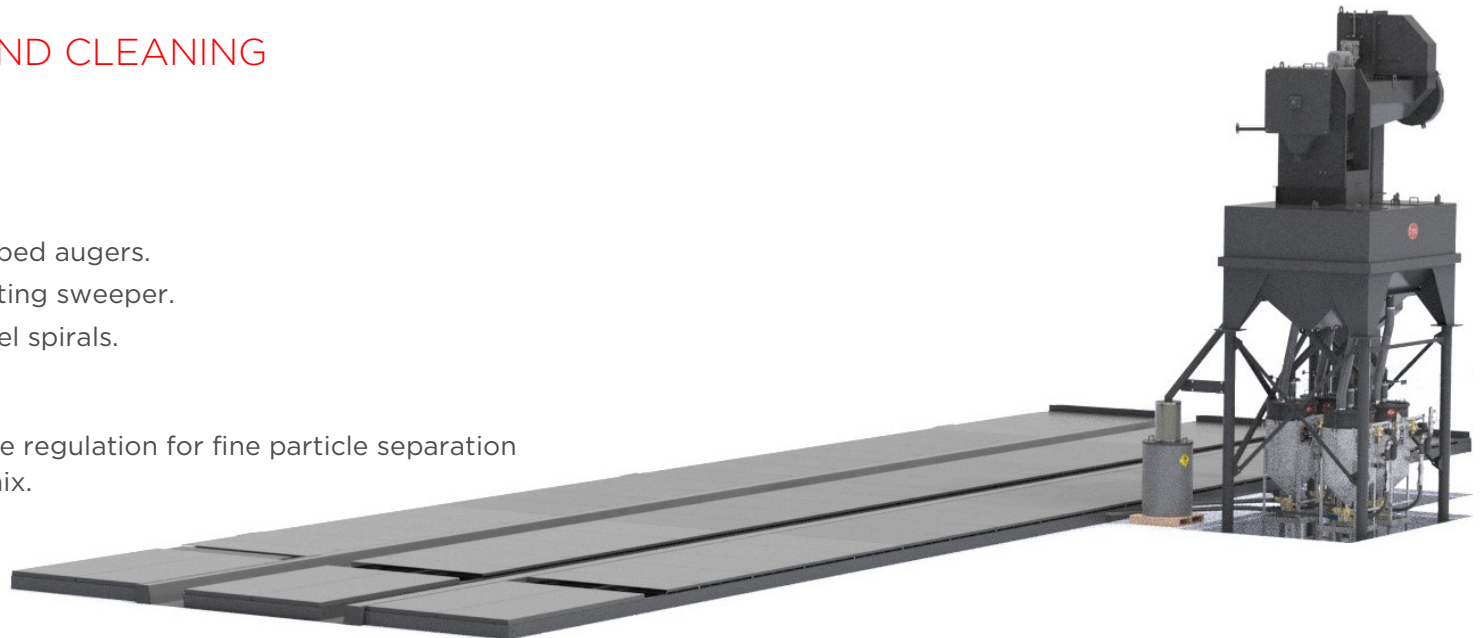
MAIN CABINET

- Adaptable dimensions according to the needs of each user.
- They can be manufactured in different materials,
 - Modular panels in steel plate.
 - Masorny
 - Taking advantage of existing installations.
- Swing, sliding or roll-up curtain type doors.
- Internal lining of the blasting chamber made of high wear-resistant rubber.
- Lighting is provided from the outside of the room with LED lamps, through laminated glass sealed to the ceiling.



ABRASIVE RECIRCULATION AND CLEANING

- Four abrasive recovery options.
 - Manual recovery with side hopper
 - Manual recovery with central auger
 - Manual recovery with +, H, T, etc. shaped augers.
 - 100% automatic recovery with oscillating sweeper.
- Shot distribution auger with hardened steel spirals.
- Bucket elevator: SAE1035 cast buckets.
- High efficiency abrasive purifier and simple regulation for fine particle separation maintains a constant working operating mix.
- Abrasive accumulation silo.



BLAST POTS

- Manufactured under ASME Boller & Pressure Vessel Code.
- Section VIII. with compressed air and abrasive circuits designed for high levels of performance and safety.
- Two working pressure options; 7 Kg/cm2 and 10 Kg/cm2.
- Remote control system with electric or pneumatic drives, giving the operator greater freedom of movement, maximum work safety and abrasive savings. Thanks to its "dead man" system, all air and abrasive projection is stopped when the operator stops pulling the trigger or releases the hose.
 - Cutting system with tank depressurization (D and DE) allowing automatic abrasive refilling when working with accumulation silos.
 - Dual tank depressurization cutting system (DD and DDE) that allows either blasting or torch blasting from the same end of the hose.
 - Pinch cutting system (P and PE) with double effect that minimizes the wear of the cutting hose.
- Sieve sieve with hermetic cover.

Models	Load Capacity		Optional	Max. working pressure (Kg/cm2)	Outputs	
	Lts	Shot (Kgs)	Grids and covers		Cant.	Type of Control
CY-70	70	300	CYT08054 CYT08054T	7	1	D DE DD DDE P PE
CY-150	170	700	CYT08052 CYT08052T		1	
CY-500	500	2000	CYT08053 CYT08053T		1 o 2	
CY-550	500	2000	-	10		

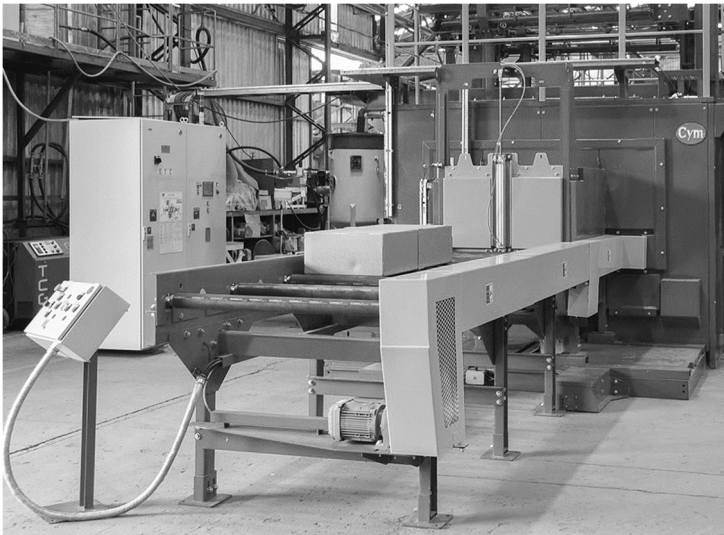
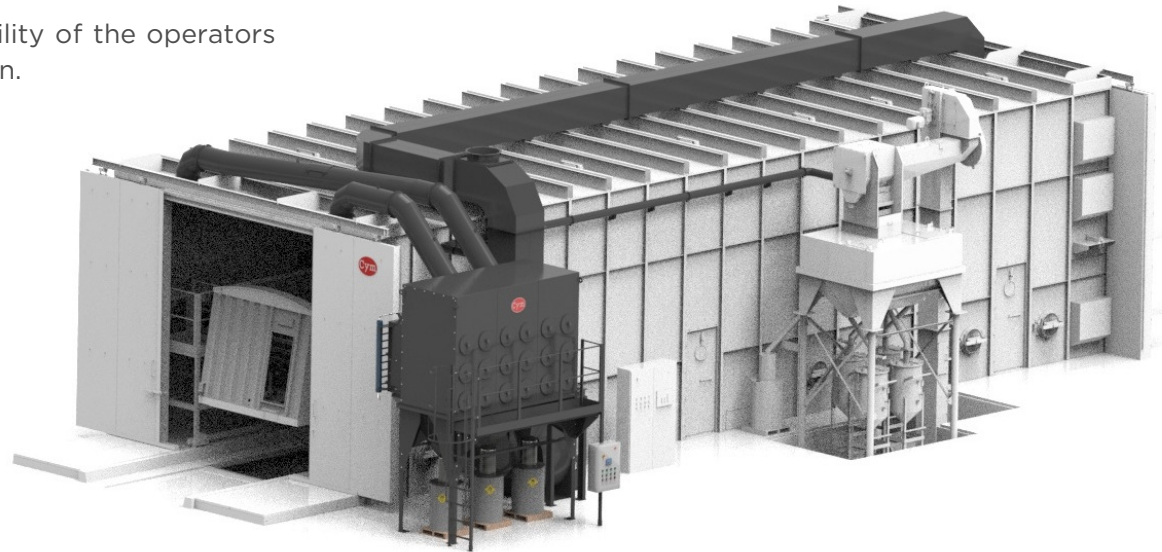
OPERATOR PROTECTION

- CE class positive pressure equipment.
- Helmet and protection layer built with abrasion resistant and easily replaceable materials, with internal air circulation.
- Double sealed protection lens.
- Filter suitable for human respiration with disposable cartridge, with three filtering stages and deodorized with activated carbon.



DUST COLLECTOR

- Permanently renews the air inside the room, improving the visibility of the operators and preventing dust from escaping in the vicinity of the installation.
- Structure made of SAE 1010 steel 3.2 mm thick.
- Particulate emission less than 5 mmg/Nm³.
- Efficiency: ≥ 0.5 microns in 99.9%.
- Easy replacement of filter elements.
- Continuous filter element cleaning system - Pulse jet.
- Pressure differential manometer.
- Ducts.
 - To be connected to the blasting room.
 - For air recirculation working as a closed circuit.

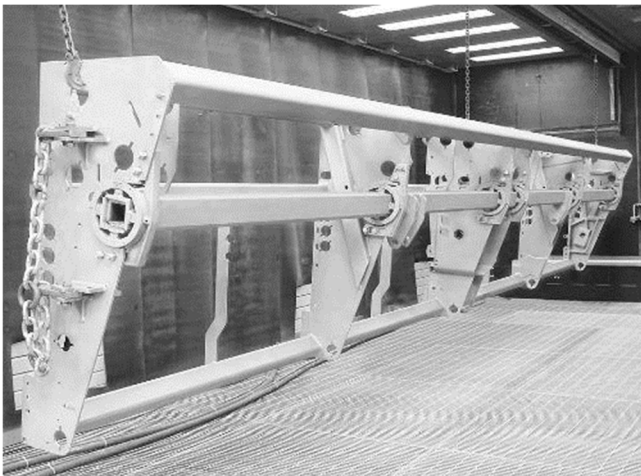


ELECTRICAL COMPONENTS

- Control panel for power and operation of the equipment.
- Manufactured according to IEC, Nema, UL standards, as required.
- Optional
 - Motion sensors components.
 - Air conditioning.
 - Soft starters.
 - Remote programming communication.
 - Safety beacons.
 - zas de seguridad.

OPTIONAL / ACCESSORIES

- Nozzle handling systems for automatic shot blasting processes.
- Parts movement systems.
 - Overhead conveyor.
 - Trolleys with manual or electric translation.
 - Mobile parts support trolley with turntable for processing heavy parts.
 - Roller conveyors or parallel wheels.
- Room with sliding roof for loading with overhead crane.
- Platforms for work at height with lateral displacement, lifting or fixed.
- Platforms for equipment maintenance.
- Kit for noise reduction.
 - Room made with double wall and intermediate acoustic panels.
 - Silencer for dust extractor air outlet.
- Air dehumidifiers



APPLICATIONS

- Removal of rust and flakes on metallic surfaces.
- Preparation of surfaces for application of all types of coatings.
- Removal of all types of paint, liquid or powder.
- Removal of burrs, foundry sand, forging lamellae and machining marks.
- Decorative finishing on stainless steel, aluminum and other non-ferrous metals.
- Etching of glass, stone and metals.
- Cleaning of injection or extrusion molds.
- Shot peening processes.



AVERAGE PRODUCTION FOR LONG VENTURI NOZZLES

The following reference table details the estimated productions of long Venturi blasting nozzles, according to the type of surface to be treated and the final blasting condition.

Degree of Cleanliness Surface conditions		Production per blasting nozzle diameter M2/hour					
		12.5	11	9.5	8	6.4	4.8
Metal blanco SA3	Loose sapwood	24.5	19.0	13.8	9.3	5.8	3.0
	Hard sapphire	20.0	16.1	11.3	7.9	4.7	2.5
	Hard oxide	12.0	9.0	6.6	4.7	2.8	1.5
	Multi-layered	9.5	7.2	5.2	3.7	2.3	1.2
Semi White Metal SA 2 ½	Loose sapwood	26.0	19.7	14.9	10.0	5.9	3.3
	Hard sapphire	21.3	16.8	11.6	8.2	6.0	2.6
	Hard oxide	12.8	10.0	7.0	5.9	3.0	1.6
	Multi-layered	10.0	8.0	5.6	4.0	2.4	1.3
Commercial Metal SA 2	Loose sapwood	62.5	49.0	35.1	24.6	15.0	8.0
	Hard sapphire	41.9	32.2	23.3	16.0	10.0	5.0
	Hard oxide	31.1	24.2	17.2	11.9	7.0	3.8
	Multi-layered	20.6	15.9	11.3	7.8	4.7	2.5

Note: The productions of the different nozzles referenced in the table are estimates. They may change according to the type of abrasive used, operator's skills, etc.

COMPRESSED AIR CONSUMPTION

By blasting nozzle size without considering wear.

Model	Diam.	Air Comp. (*)	
		CFM	M3/min
3	4.8	45	1.27
4	6.4	81	2.29
5	8.0	137	3.87
6	9.6	198	5.59
7	11.2	254	7.17
8	12.7	338	9.54

Note: (*) Compressed air consumption per blasting nozzle at working pressures of 7 kg/cm² / 100 PSI without considering wear.



CYM MATERIALES S.A.

INDUSTRIAL SOLUTIONS



ADMINISTRATION AND FACTORY

Brig. Estanislao Lopez N° 6
[S2108AIB] Soldini - Santa Fé - Argentina

☎ +54 341 490 1100

📞 +54 9 341 515-0249

✉ info@cym.com.ar

www.cym.com.ar

BUENOS AIRES OFICCE

Eizaguirre 1073

[B1754FLA] San Justo - Buenos Aires - Argentina

☎ +54 11 3979-4111

📞 +54 9 11 3345-8578

📞 +54 9 11 2630-8077

✉ cymba@cym.com.ar