



# METALCOAT

## Shot Blasting Machine

For Surface Preparation



Suction Blaster



Portable Blaster



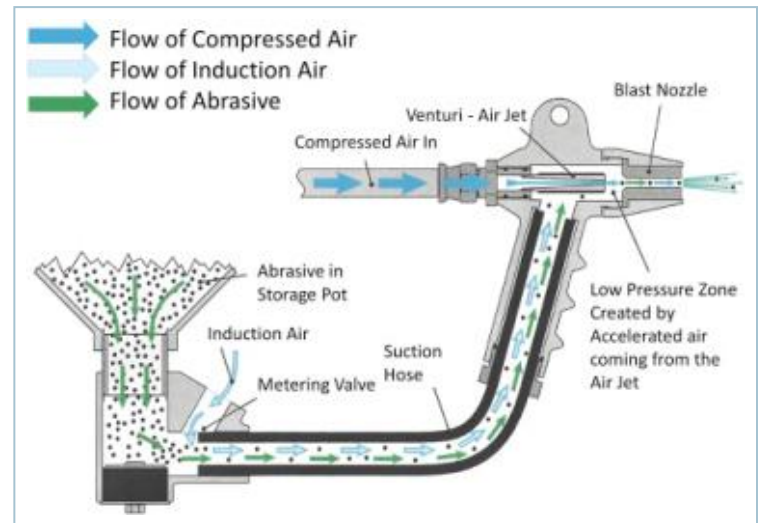
Pressure Blaster

Shot blasting is a method used to clean, strengthen (peen) or polish metal. Shot blasting is used in almost every industry that uses metal, including aerospace, automotive, construction, foundry, shipbuilding, railway and many more.

## Shot Blasting

Shot blasting is a technological process of removing various impurities from different surfaces by using abrasive. It is used for a surface protection and also prior-preparation of surfaces prior to further processing, such as painting, coating etc.

It is used in different industries, such as: automotive industry, metal-manufacturing industry, foundry, aviation industry, shipbuilding, production of various welded structures.



## Portable Blaster Machine

Portable blaster machines are used by middle and Large-sized industries like the Auto Repair industry, Paint Shops, Powder Coating Industry, Floor and Surface Cleaning Service Providers, and many more.

There are several types of media that can be used in sandblaster depending on the requirement and the surface that has to be smoothed, roughen or cleaned such as Sand, Aluminum Oxide, Copper Slag, Glass Beads, Steel shots, Steel Grits, and many other.

### Features:

- Automatic Filling Valve
- Tungsten Carbide Nozzle
- Blast Hose
- Abrasive On/Off Valve
- Abrasive Sieving
- Abrasive Tank Construction
- Automatic Exhaust Valve
- Air Filter & Pressure Gauge
- Ball Valve
- Continuous blast time of up to 45-50 minutes



Note: Shot blasting must be carried out with proper safety equipment in place and must be handled with care otherwise, it can cause anaphylactic shock to the operator or the person getting in contact.

# Portable Blaster Machine

## Applications (where it is use) :

- To blast clean the surface of floor tiles, slates, sand stone, marble chips for proper bonding with surface. Creating design, surface etching & engraving on different types of stones.
- Portability of machine helps it for cleaning huge monuments in a very less time.
- Site blasting of huge components like heavy structure, tanks, pressure vessels, bridges, towers, pipes etc. prior to repainting.
- Descaling, deburring & deflashing of forged and die-cast components.
- Removal of heat treatment scale, corrosion, rusting, scale formation, welding flux, carbon & minuscule in steel components.
- Steel fabrication can be de-scaled after welding or de-rusted, ready for painting on site using different media depending on finish required.
- Blast cleaning to remove scale, corrosion rust & paint from deck, hulls & super structure etc
- Widely used in handicraft industries to give new look to metal as well as wooden items.

## Technical Specification & Machine Selection:

Specification	MPB-150	MPB-301R	MPB-501R	MPB-601R	MPB-1001R
<b>Abrasive Capacity</b>					
Metallic (Kg.)	150	300	500	600	1000
Sand (Kg.)	65	130	230	275	460
Volume (Liters)	42	85	142	172	284
<b>Overall Dimensions Approx</b>					
Height (mm)	1110	1290	1370	1500	1610
Diameter (mm)	360	460	615	615	760
Weight (Kg.)	95	140	180	200	245
<b>Blast Nozzle Tungsten Carbide lined</b>					
Orifice mm (Standard Size)	6	6	8	10	10
Blast Hose ID (mm)	19	19	25	25	32
Blast Hose Length (Meter)	5	5	7.5	10	10
Recommended Air Hose ID (mm)	19	19	25	25	32
Approx Cleaning Rate (Sq. Mtr./Hour)	3 - 4	5 - 9	11 - 15	15 - 19	15 - 19
Compressed Air Requirement (M/min.)	1.2	2.4	3.8	7.1	7.1
Recommended Abrasive size (BS Mesh)	30 - 80	25 - 80	16 - 80	16 - 80	12 - 80
Remote Control Operation	No	Yes	Yes	Yes	Yes

Note: All specifications are approximate and are subject to change without notice.

# Operator Safety Wears

## Safety Helmet

Light weight & comfortable with excellent vision. Rubberised FRP helmet provides the operator's head protection from safety crash and impact of abrasive and still allows a clear view through easily replaceable lens. It provides breathing air to operator to protect him from dust inhalation.



## Air Breather

This is installed in between compressed air line originating from fitting to the operators helmets. Activated charcoal is contained in the breather unit which separates the oil traces from the compressed air and clean compressed air is fed to the operator's helmet.



## Helmet Air Conditioner

Air from the air breather is fed to the helmet air conditioner and air is contained before it is fed to the helmet for breathing. It has also a regulator knob so that the operator can regulate the temperature of air fed to the helmet. It is self driven and doesn't need external power.



## Operator's Suit

### Gum Boot & Hand Gloves

A cotton fabric suit provides safety to operator's body against impact of flying abrasives and dust.



A pair of gum boots provides safety to operator's feet & ensures compliance to industrial safety regulation.

A pair of Hand Gloves provides safety to operator's hand and ensures compliance to industrial safety regulation.



## Air Filter

Air Filter is designed to remove oil mists, water vapor and particulate up to 0.5 microns from breathing air. Air from compressor enters the filter through either of the two inlet ports. Moisture is removed by expansion in the outer chamber & drain out through a pet cock at the bottom of the unit.



Note: Sand blasting must be carried out with proper safety equipment in place and must be handled with care otherwise, it can cause anaphylactic shock to the operator or the person getting in contact.

## Air Blast Cabinets

Air blast cabinets can take the form of a blast cabinet, the blast media is pneumatically accelerated by compressed air and projected by nozzles on to the component.

We manufacture Blasting Cabinets, which works on the principle of direct pressure blasting, induction-suction blasting and slurry pumping. The blasting is done via Guns, as the abrasives are introduced using compressed air. This whole process is carried out in closed chambers ensuring safety and dust free blasting. The cabinets are fabricated from heavy gauge mild steel, so it can withstand bombarding of abrasives.

The abrasives are recollected and re-circulated in the chamber. Dust bags are also provided, to separate dust and debris from abrasives. For the shaking of Dust Bags, manual and motorized shaking is used.

### Suction Blast Cabinets

It is based on the principle of Induction-Suction abrasive blasting. Best suitable for blast cleaning, de-burring, de-scaling, removing thin deposits on soft metal parts and de-flashing of plastic goods and molded components. It is also used to provide a matte finish. It is the simplest and most effective way for removing corrosion and old paint. The machine actuates by pressing the foot pedal, extracting air which mixes with the air and finally ejected via gun through nozzles.



### Pressure Blast Cabinets

It is based on direct pressure principle of blasting. The pressure blaster produces high abrasive velocity which results in completing the job at a faster rate. A pressure vessel, directly bolted below a hopper of a cabinet, has an automatic abrasive refilling arrangement. It is recommended for removing heavy and thick scales, de-burring and de-flashing is done by selecting medium and coarse grain.



## Air Blast Cabinets

Machines are used for:

- Cleaning of impurities
- Deburring
- Hardening, shot peening
- De-oxidation
- Grazing for esthetical purposes
- Paint removal
- Surface preparation before painting, rubber coating etc.

### Salient Features:

- Easy vision: We provide large window glass (protected by a wire screen assembly). Also, high illumination is used for clear visibility while blasting.
- Gasketed Doors are provided with locking systems and are easy in operation. Slider doors are also available.
- The stand on which operator stands, is designed for relaxing working. Also, foot switch is provided for operator for easy control.
- Generally, all cabinets are rubber lined.
- The operator can use both his hands via sealed hand holes for holding a gun, thus ensuring maximum safety.
- Simple in operation and ready to operate when connected to electrical and air supply. No erection required.
- Easy fitment of spares, whenever required.
- The environment is dust free because of dust collection assembly. Noise level is maintained at below 80 DBA. Also, proper ventilation is provided for easy visibility.

On request, these machines can be equipped with following options:



Tumble Basket



Inside Turn Table



Work Car with Turn Table  
and Mounted Track Extension

# Abrasive Media

Abrasive media for shot blasting equipment is used for a wide variety of applications including abrasive blasting, shot peening, deburring, polishing, and other surface finish processes. The abrasive media are available in a wide range of types, hardness, grit and mesh sizes.

## Application Area / To Be Used For:

- Cleaning
- Paint and Coating Stripping
- Deflashing
- Removing Machine Marks
- Edge Rounding
- Surface Preparation
- Scale and/or Rust Removal
- Non-Skid Coatings

### Aluminum Oxide Grit

Aluminum Oxide Grit is a sharp, long lasting abrasive media that is highly efficient and highly reusable. Harder than most blast media, Aluminum Oxide Blast Media, will clean and etch quickly on all type of surfaces.



Mesh Size: 12 - 240 | Size mm : 1.40 - 0.06

### Glass Bead

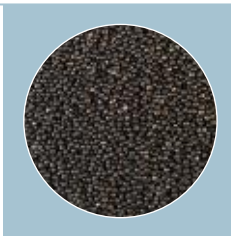
Glass Beads are a round, spherical media that produce a clean, bright, peened, satin finish, without dimensional change of the parts. It used for blasting, peening, honing, cleaning, and light deburring.



Mesh Size: 18 - 350 | Size mm : 0.85 - 0.04

### Steel Shot

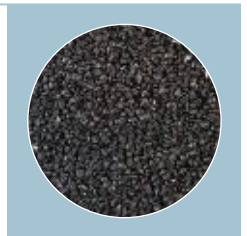
Steel Shot is ideal for peening applications to impart a clean, smooth finish. This dense, smooth media can be used up to 3,000 times and produces minimal dust during the blasting process.



Mesh Size: 8 - 52 | Size mm : 2.00 - 0.30

### Steel Grit

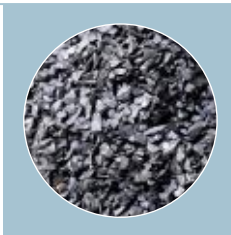
Steel Grit is an angular, carbon steel media designed for quick and effective removal of surface contaminants and coatings. Steel Grit is softer than other media and is less likely to fracture leaving an etched finish.



Mesh Size: 12 - 52 | Size mm : 1.40 - 0.30

### Chilled Iron Grit

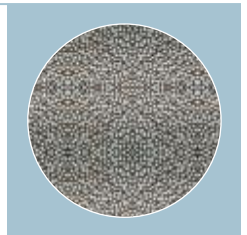
Chilled iron is a hard abrasive making it suitable for etching purposes, but less resistant to impact. It is suitable to be used in blast rooms for fast cleaning and edging.



Mesh Size: 8 - 120 | Size mm : 2.00 - 0.09

### Chilled Iron Shot

Chilled iron shots are round shape having white structure made from cast iron scrap. These are widely used for cleaning in foundries, in castings for sand removal, removing old paints, blasting of stone etc.



Mesh Size: 8 - 52 | Size mm : 2.00 - 0.30

## Cabinet Selection:

Specification	Suction Blaster (SB)			Pressure Blaster (PB)		
	SB-6060	SB-9182	SB-12090	PB-9182	PB-12090	PB-150120
Working Chamber Height (mm) Width (mm) Depth (mm)	600 600 600	775 910 820	900 1200 900	775 910 820	900 1200 900	900 1500 1200
Overall Dimensions: Height (mm) Width (mm) Depth (mm)	1660 800 1500	2120 1070 1400	2570 1365 1700	2130 1100 2500	2030 1365 2430	2080 1665 2730
Approx. Weight (Kgs.)	250	380	490	580	650	760
Nozzle Orifice (mm) *Standard size supplied unless ordered otherwise*	*6 8	*8 10, 12	*10 8, 12	*5 6	*5 6	*5 6
Injector orifice	*2 3	*3 4, 5.5	*4 3, 5.5	–	–	–
Abrasive Storage Capacity Ltrs.	28	28	42	28	42	42
Fan Capacity CFM	200	400	600	500	500	800
Compressed Air Required (cfm) at 5.63 Kg./Sq. Cm (80 psi)	25	25	35	–	–	–
Dust Collector/Mist Collector / Reclaimer Fan Motor HP	0.5	1.0	1.5	1.0	1.0	1.5
Production Output	Medium & Low			High & Medium		
Blasting Media Size	Medium & Fine			Coarse & Medium		
Blasting Surface	Thin & Deposits			Thick Deposits		
De-Flashing / De-Burring	Soft Metal Parts			Hard Metal Parts		

H.O. & Works:



**METALCOAT**



B-43, 44, 45, 46, Industrial Estate  
Jodhpur - 342 003 (Rajasthan) INDIA



+91 93140 28848  
+91 98290 27807



+91-291-2641325



info@metal-coat.com  
metalcoat291@yahoo.in



www.metal-coat.com