



ABRASIVE BLASTING MACHINE

APPLICATION OF ABRASIVE BLASTING & SHOT PEENING PROCESS



- Remove heat treat scale, rust, corrosion and paint.
- Remove residual film from moulds and dies.
- Remove slag, oxides and discolouration from weld joints.
- Cleaning and deburring of ferrous and non ferrous castings.
- To produce decorative matte or stain finish.
- To produce surface ideal for lubrication retention.
- To improve metal wear, finish and appearance.
- To prepare surface for pre-plate and pre-anodize.
- To prepare surface for coating and painting.
- To extruding and etching of rollers.
- Deflashing and deburring of thermoset plastic parts.
- Shot peening for producing residual compressive stresses.
- To improve strength, fatigue life and reduce corrosion.
- Shot peening blades, gears, spring and transmission components.

METHODS OF ABRASIVE BLASTING

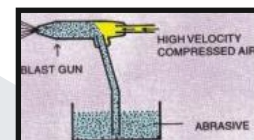
What are Super Blaster (SB), Pressure Blaster (PB) and Wet Blaster (WB) Machines ?

There are Basically three established methods of abrasive blasting i.e. INDUCTION - SUCTION (SUPER BLASTER), DIRECTOR PRESSURE (PRESSURE BLASTER) and SLURRY PUMPING (WET BLASTER).

These are briefly described below :

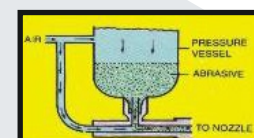
Induction -Suction

in this method abrasive is drawn from hopper into the blast gun by a partial vacuum created by high velocity airflow. This is useful for light-weight abrasive and cleaning of light corrosion.



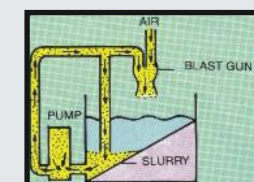
Direct Pressure

In this Method, abrasive is pressurised in a pressure vessel by compressed air and then for nozzle. it imparts high abrasive velocity and blasting is faster.



Slurry Pumping

in this method pump draws fine abrasive mixed in water (slurry) From Bottom of hopper and forces it to blast gun where compressed air is introduced to atomise the slurry. slurry impacted on the surface to be cleaned.



FINIMAC-Suction Blaster



Work on **INDUCTION-SUCTION** principle of abrasive delivery. the super blaster ensures continuous Working and no interruption in blasting cycle. Recommended for light and medium size components where surface is to be cleaned or deburred or to impart with fine matte finish. Useful for heat treatment shops, tool, die and mould makers and shot peening of light metal components etc. SB machines are incorporated With reclaimer which ensures uniform cleaning and finishing each time and in every next operation.this is achieved by an automatic system of abrasive cleaning and separation built into the reclaimier. Dust and debris are separated and only clean and sized abrasives are carried to blast gun-ensuring a homogeneous finishing.most cabinets of other make do not have the reclaimier as standard practice.



Options available on request

Rubber lining inside walls of cabinet.
Reversejet cartridge filter dust collector.
Higher output Blast Gun in place of standard.
Foot operated treadle switch for blasting ON/OFF.
Fitted with optional accessories

FINIMAC-Pressure Blaster

Works on direct pressure principle of blasting, the pressure blaster produces high abrasive velocity resulting to cleaning of job at faster rate. A pressure vessel directly bolted below hopper of cabinet has automatic abrasive refilling arrangement. A tubular fabric bag type dust collector with/generous filter area is attached with cabinet as standard feature for high efficiency of dust collection. A manual shaker is also provided for bag shaking.



PB is recommended for fast cleaning for removal of heavy rust and corrosion using coarse abrasive, it is most suitable for etching the surface needed for rubber-lining, FRP lining and metal spaying. casting and forgings are cleaned speedily. blast pressure can be controlled from 30 to 90 psig. almost all type of coarse and medium size abrasive can be used depending upon application.



Options available on request

- motorised bag shaking arrangement.
- reversejet cartridge filter dust collector.
- higher output blast gun in place of standard.
- foot operated treadle switch for blasting ON/OFF.
- fitted with optional accessories.

FINIMAC-Wet Blaster



Works on INDUCTION-SUCTION principle of blasting. The most important point in wet blasting is its ability to use very fine abrasive - as fine as 5 microns. fine abrasive particles are suspended in liquid, usually water and then pumped. to a nozzle as a slurry. At nozzle, the slurry is introduced into air-stream and propelled against job.the glandless slurry pump is used to feed the slurry at positive pressure into blast gun.the wetted parts of pump are the thermoset plastic material for corrosion resistance.WB machine is useful in tool room to remove feather burrs from multitooth cutting tools, such as, milling cutters, holes,broaches and taps eliminating hours of handhoning time. It deburrs intersecting holes in precision parts which are inaccessible by any other method.the finest machined surface can be super-finished without damage to sharp edges and exact tolerances.

Options available on request

- Higher capacity slurry pump for high output.
- Higher output Blast Gun in place of standard
- Foot operated treadle switch for blasting ON/OFF.
- Fitted With optional accessories.

OPTIONAL ACCESSORIES

To increase your production, use following accessories with the blast cabinet



Tumble Basket

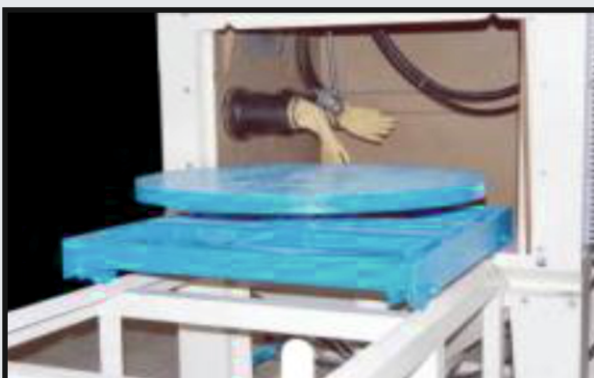
Tumble basket is mounted on side door to suit cabinet size. basket is easily removable when not needed. blast period is controlled by a timer. it is suitable for automatic batch blasting of smaller parts, such as balls, rings, screws, nuts, tools etc.

Tumble basket length / dia(mm) : 300/250 & 350/300
Load capacity (kg) : 20 & 25

Inside Turntable

The turntable is fixed inside the cabinet on bearing for easy and free manual rotation of jobs.

Turn table diameter (mm) : 500 & 700
Load capacity (kg) : 50

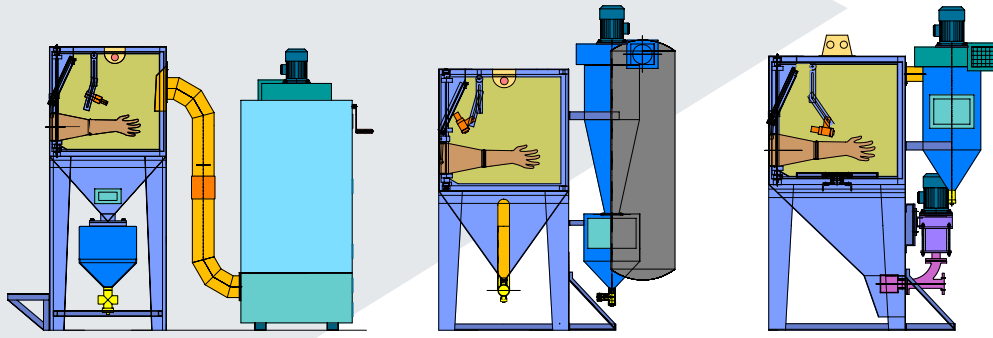


Workcar With Turntable & Mounted Track Extension

The turntable is fixed on workcar. the track extension is provided inside of cabinet to facilitate workcar movement. it is deal for handling large and heavy components.

Workcar Length (mm) : 600, 750 & 900
Track Extension Length (mm) : 1500

FINIMAC-CABINET TYPE ABRASIVE BLASTING MACHINE



PRESSURE BLASTER (PB)

SUPER BLASTER (SB)

WET BLASTER (WB)

CABINET SPECIFICATIONS

MODEL	PRESSURE BLASTER (PB)			SUPER BLASTER (SB)			WET BLASTER (WB)	
	PB-9182	PB-12090	PB-150120	SB-6060	SB-9182	SB-12090	WB-9182	WB-12090
Working Chamber mm								
Height A	775	900	900	600	775	900	775	900
Width B	910	1200	1500	600	910	1200	900	1200
Depth C	820	900	1200	600	820	900	820	900
Door Opening mm								
Width G	730	800	1100	500	730	800	730	800
Height H	675	800	800	500	675	800	675	800
Overall Dimension mm								
Height D	2130	2030	2080	1660	2120	2570	1940	2235
Width	1100	1365	1665	800	1070	1365	1070	1365
Depth P	2500	2430	2730	1500	1400	1700	1500	1700
Dust or Mist Collector or Reclaimer Fan Motor HP	1.0	1.0	1.5	0.5	1.0	1.5	0.5	1.0
Fan Capacity (M ³ /min)	14.16	14.16	22.66	5.66	11.32	16.98	5.66	11.32
Fan Capacity (CFM)	500	500	800	200	400	600	200	400
Filter Cloth Area (M ²)	7.5	7.5	10.0	1.0	2.0	4.0	---	---
Slurry Pump Motor (HP)	---	---	---	---	---	---	1.0	1.0
Airjet Orifice mm	---	---	---	*2,3	*3,4,5,5	3,*4,5,5	*3,4,5,5	*3,4,5,5
Blast Nozzle mm	*5,6	*5,6	*5,6	*6,8	*8,10,12	8,*10,12	*8,10,12	*8,10,12
Abrasive Storage Capacity Litres (CFT)	28(1.0)	42(1.5)	42(1.5)	28(1.0)	28(1.0)	42(1.5)	42(1.5)	42(1.5)
Pit Size mm								
Width	---	600	900	---	---	---	---	---
Length		2180	2530					
Depth		510	600					
Weight in Kg (approx.)	580	650	760	250	380	490	400	525
Abrasive Feed	Direct Pressure			Induction Suction			Glandless Pump	

* The size supplied unless other wise specified. All motors used are 415V/3P/50Hz. specifications are for guidance & subject to change without notice.

AIR REQUIREMENT CHART	Air Consumption in	Air Consumption in Cub.M / min. (Cub.ft./min.)		
	Cub.M / min. (Cub.ft./min.)	4.92 (70)	5.63 (80)	6.33 (90)
Nozzle size 5 mm (PB)	0.93 (33)	1.08 (38)	1.16 (41)	
6 mm (PB)	1.73 (61)	1.93 (68)	2.10 (74)	
Air orifice Size 2 mm (SB, WB)	0.40 (14)	0.45 (16)	0.54 (19)	
3 mm	0.54 (19)	0.59 (21)	0.68 (24)	
4 mm	0.85 (30)	0.96 (34)	1.05 (37)	
5.5 mm	1.67 (59)	1.87 (66)	2.07 (73)	

We suggest air compressor to be of 20% excess capacity.

HEAD OFFICE & FACTORY WORKS:

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