



## **ABRASIVE BLAST ROOMS WITH PNEUMATIC OR MECHANICAL RECOVERY SYSTEM**

International Surface Technologies (IST) is a leading manufacturer and installer of abrasive blast rooms in North America. Our turnkey sandblasting solutions provide a safe and effective sandblasting environment, allowing you to operate independently of outdoor weather conditions, whatever your requirements or the size of the parts to be sandblasted.

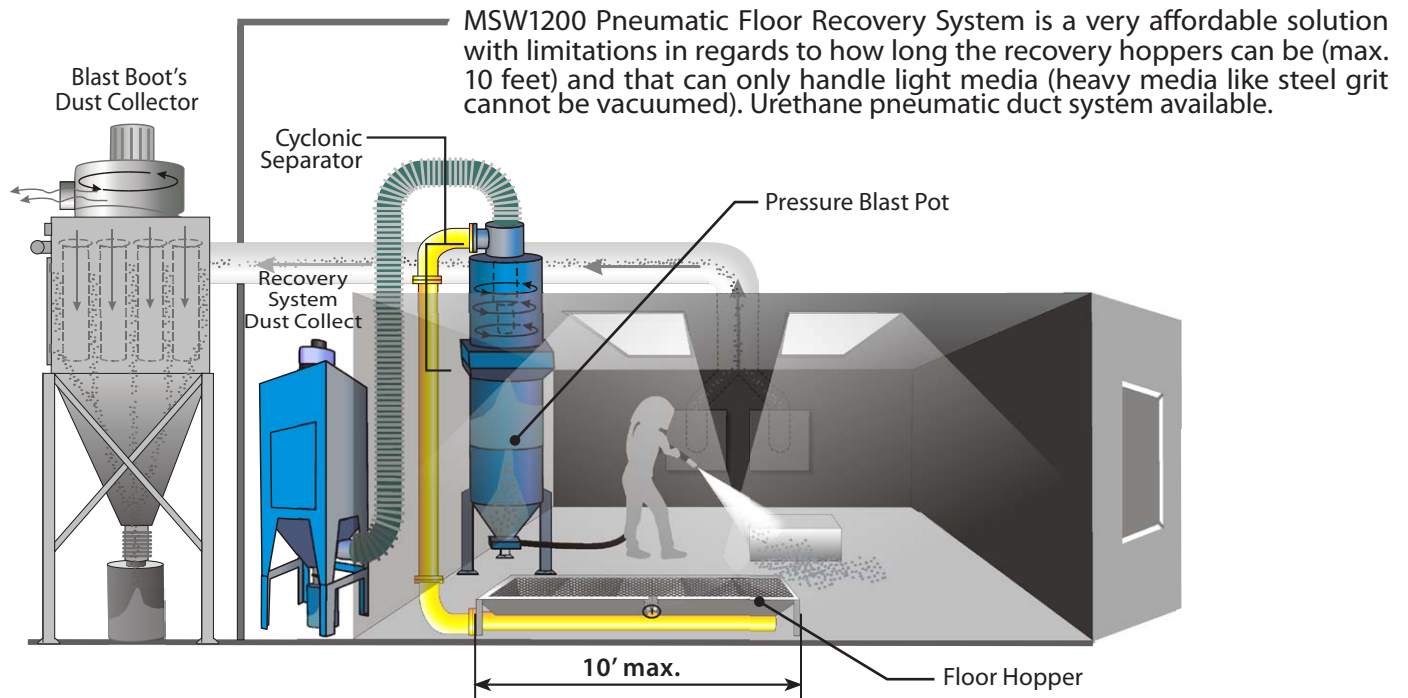
All our rooms are equipped with a dust collector adapted to the size of the room, floor hoppers and an abrasive recovery system allowing you to operate in a healthy environment and achieve substantial cost savings in your abrasive consumption (recovery rates of more than 95% can be achieved). Our equipment is compatible with most popular media, such as glass beads, aluminum oxide, GMA Garnet, steel shot, and steel grit.



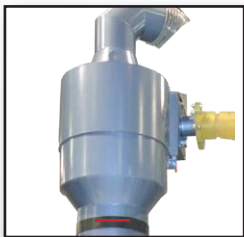


## PNEUMATIC RECOVERY SYSTEM – MSW1200

### HOW IT WORKS



### KEY POINTS



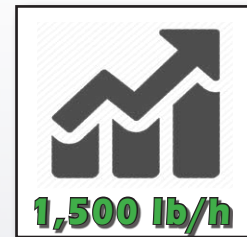
100% adjustable  
cyclonic separator



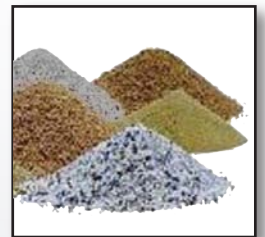
Dust collector  
DCM230



Pneumatic recovery  
system with floor  
hoppers

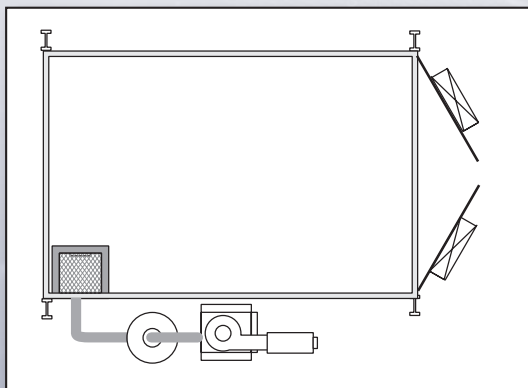


Recovery system  
capacity

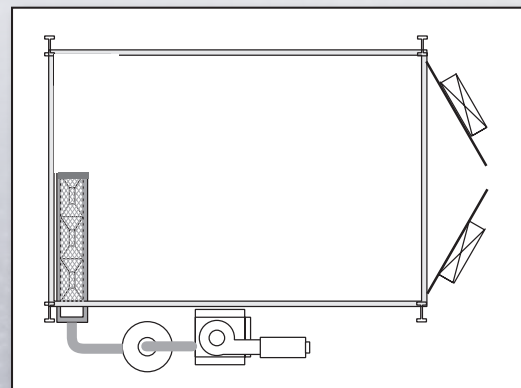


Light abrasive only

### RECOVERY HOPPERS LAYOUTS AVAILABLE



Corner shoot / Shoveling



Single in ground pneumatic through

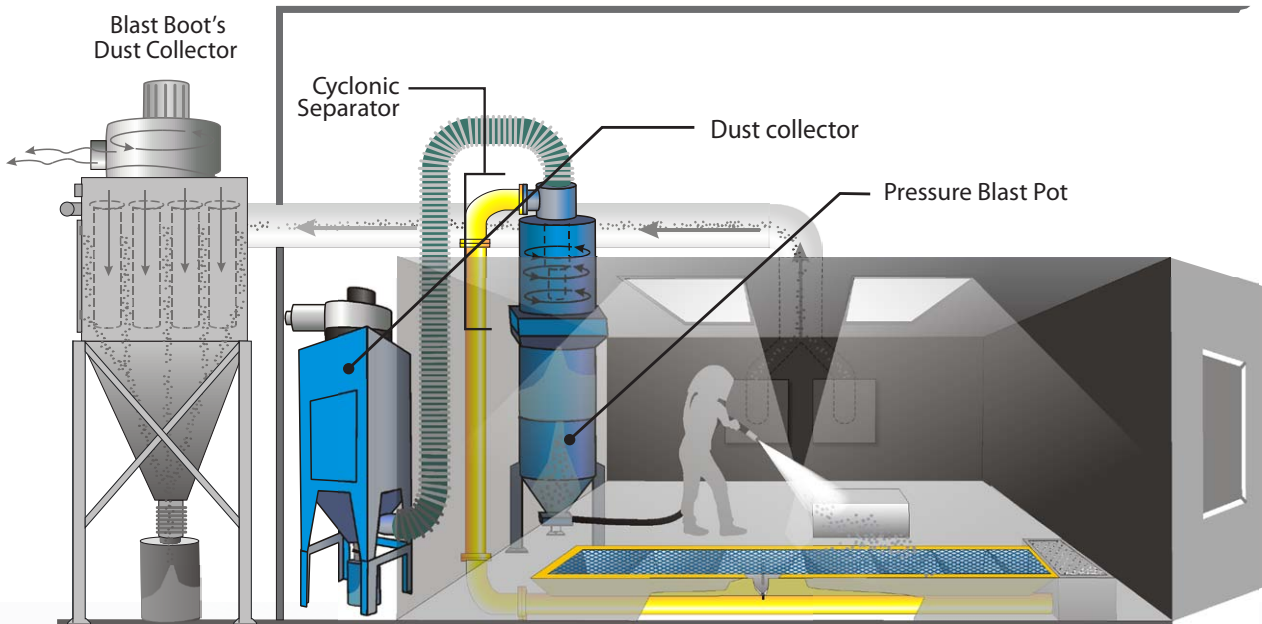




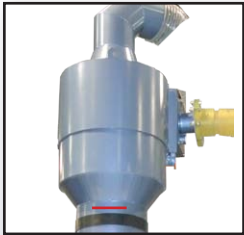
## PNEUMATIC RECOVERY SYSTEM - MRS200

### HOW IT WORKS

MRS200 Pneumatic Floor Recovery System is an efficient and inexpensive solution for recovering used abrasive with minimal effort from the operator. This system is equipped with a high-efficiency impeller dust collector (DCM200), it can handle all major light-to-heavy abrasives available in the market and it offers various floor hoppers layouts. Urethane pneumatic duct system.



### KEY POINTS



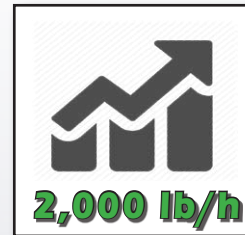
100% adjustable  
cyclonic separator



High efficiency  
dust collector  
DCM200



Pneumatic recovery  
system with floor  
hoppers



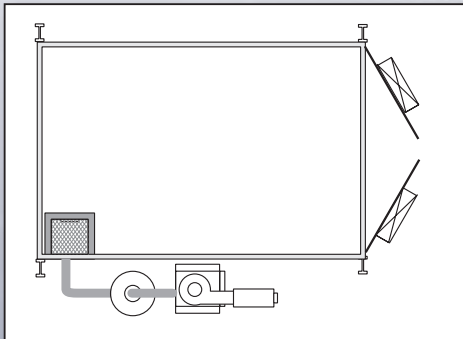
Recovery system  
capacity



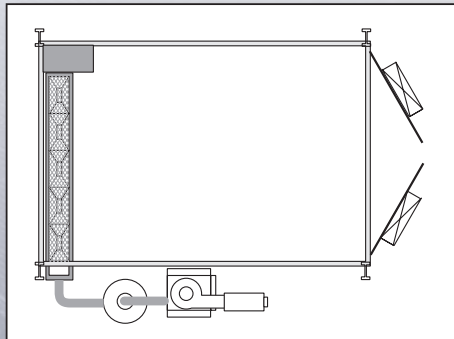
Can handle  
most abrasives\*

\* Except steel grit GH-36 or bigger and steel shot S-230.

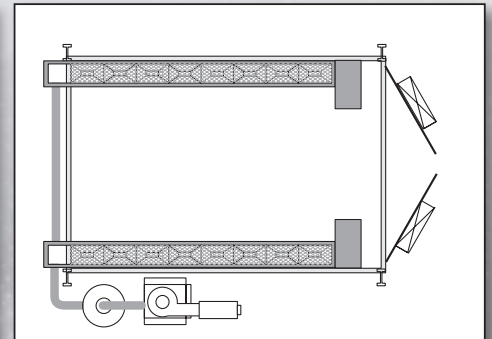
### FLOOR HOPPERS LAYOUTS AVAILABLE



Corner shoot / Shoveling



Single in ground pneumatic through



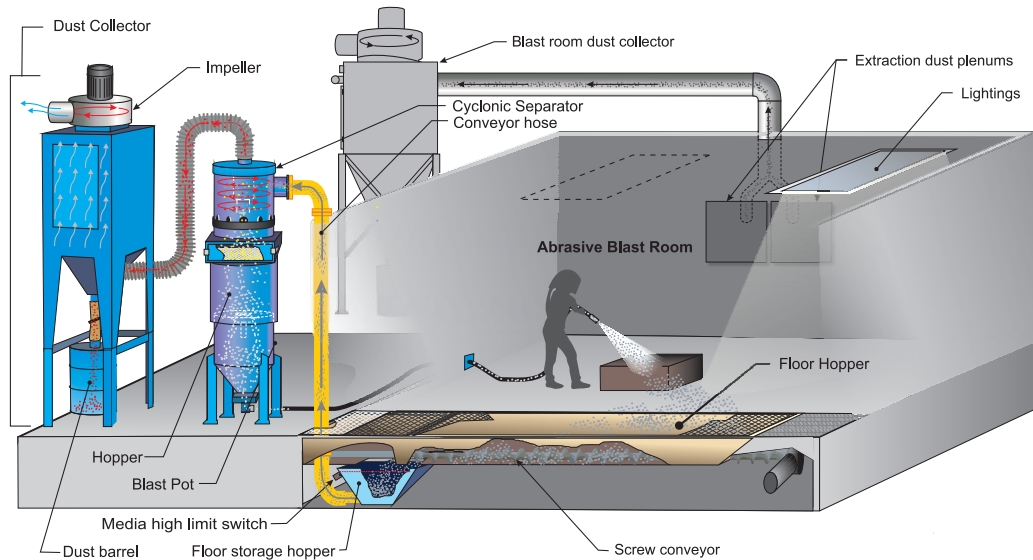
Double in ground pneumatic through



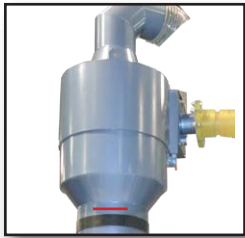
## HYBRID PNEUMATIC AND MECHANICAL RECOVERY SYSTEM

### HOW IT WORKS

Hybrid Pneumatic Floor Recovery System is an efficient and inexpensive solution for recovering used abrasive with minimal effort from the operator. This system is equipped with a high-efficiency impeller dust collector (DCM200), it can handle all major light-to-heavy abrasives available in the market and it offers various floor hoppers layouts. Urethane pneumatic duct system.



### KEY POINTS



100% adjustable  
cyclonic separator



High efficiency  
DCM200 dust collector



Screw conveyor  
recovery system &  
floor hopper



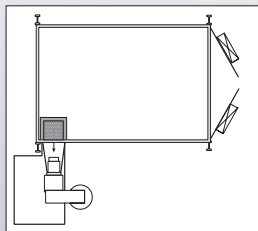
Recovery system  
capacity



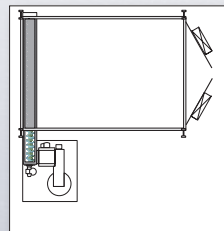
Can handle  
most abrasives\*

\* Except steel grit GH-36 or bigger and steel shot S-230.

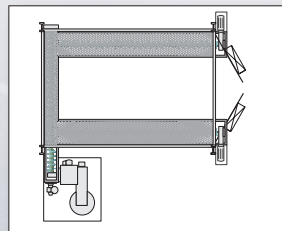
### CHOICE OF FLOOR HOPPERS



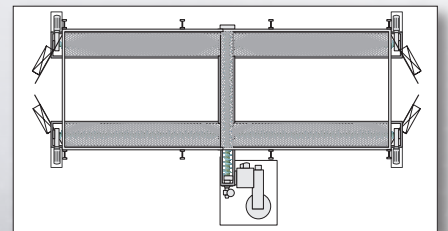
Corner shoot /  
Shoveling



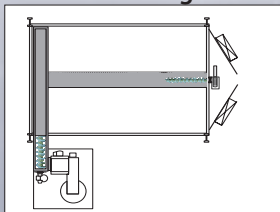
With simple screw



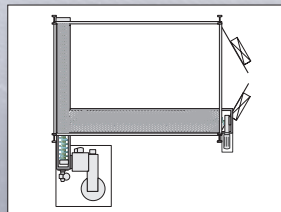
"U"-shaped



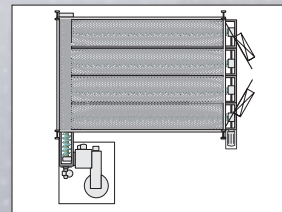
"H"-shaped



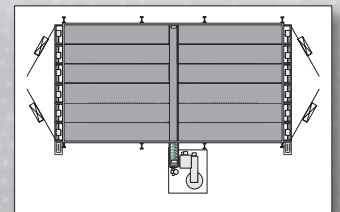
"T"-shaped



"L"-shaped



Complete single floor



Full double floor

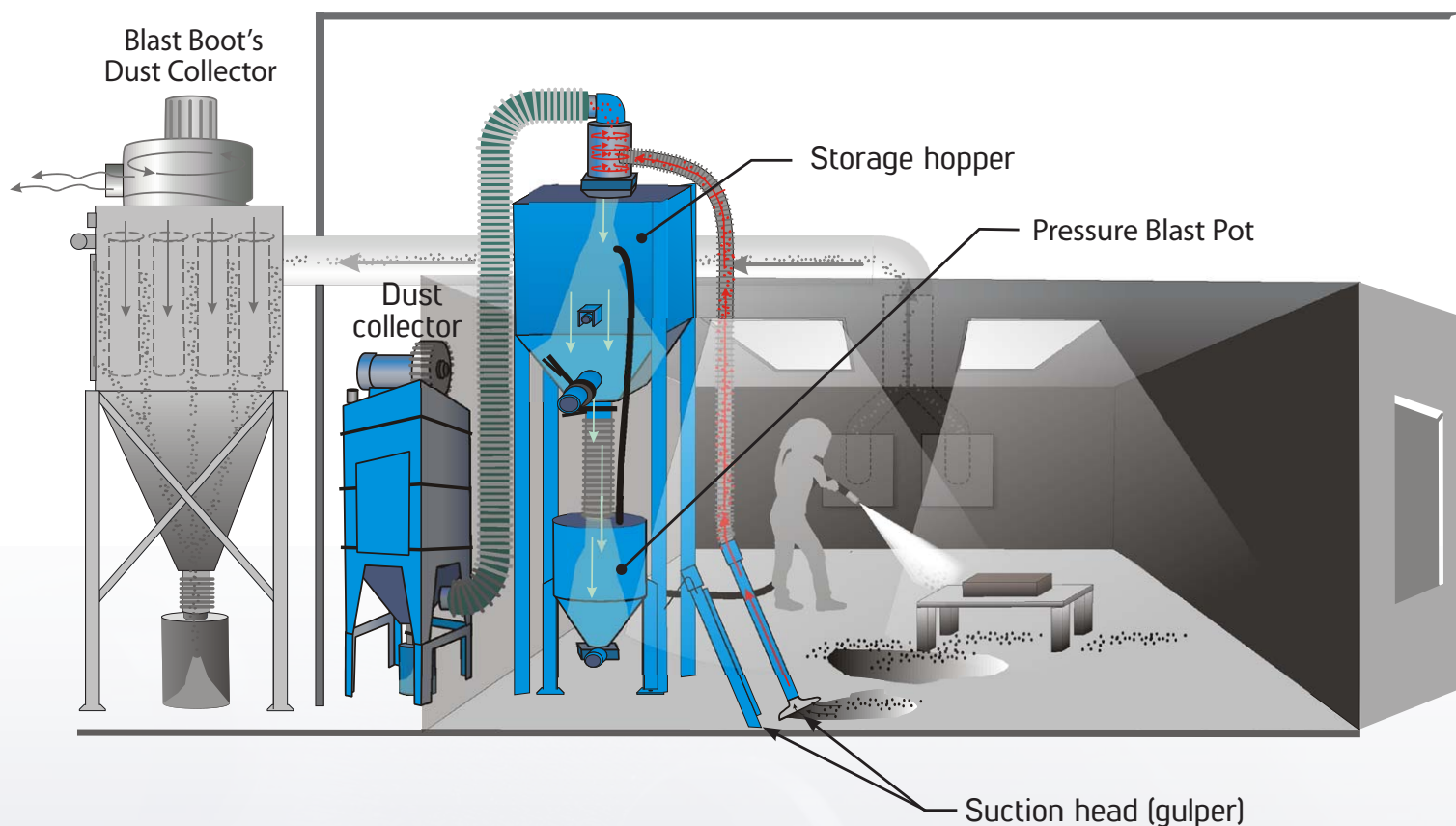




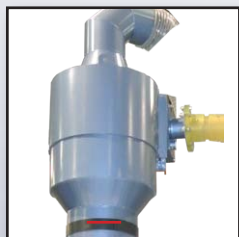
## PNEUMATIC ABRASIVE BLAST ROOMS – MRS500

### HOW IT WORKS

MRS500 Vacuum Recovery System is an inexpensive and easy-to-implement solution that is ideal for collecting residual abrasive from large tanks and hard-to-spill reservoirs. This system uses no floor hopper which requires less care and maintenance.



### KEY POINTS



100% adjustable  
cyclonic separator



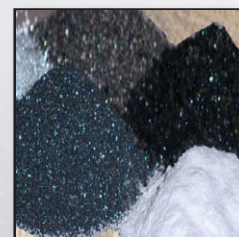
High efficiency  
dust collector  
DCM200 with  
20 hp impeller



Vacuum recovery  
system using handy  
suction head (gulper)



Recovery system  
capacity



Can handle  
most abrasives\*

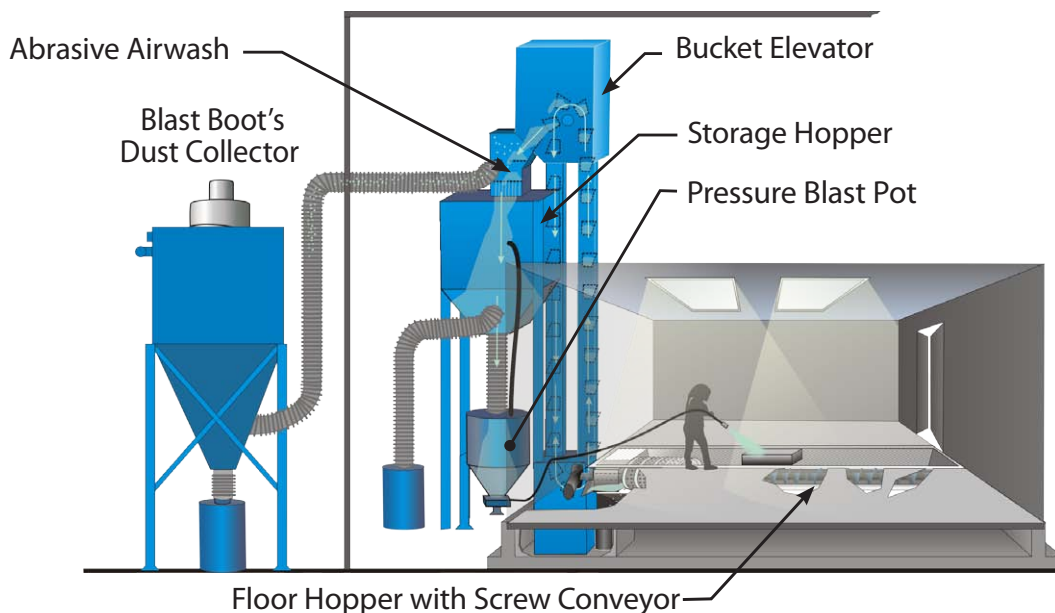
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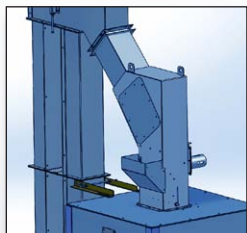
## MECHANICAL ABRASIVE BLAST ROOM (SCREW)

### HOW IT WORKS

The Mechanical Recovery System uses screw conveyors and a bucket elevator to convey abrasive residues into the recovery system. It is the ideal solution for maximizing the operator performance along with minimizing required care and maintenance of the system components. This system is suitable for large or small rooms, and offers flexibility in terms of recovery speed and floor layouts.



### KEY POINTS



100% adjustable  
abrasive air wash



Screw conveyor  
recovery system



Bucket elevator

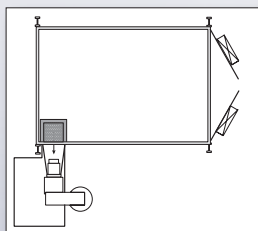


Recovery system  
capacity

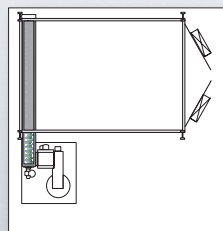


Can handle all  
types of abrasives

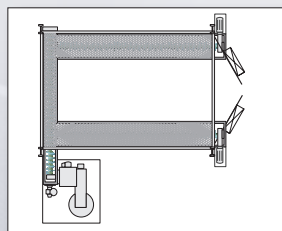
### CHOICE OF FLOOR HOPPERS



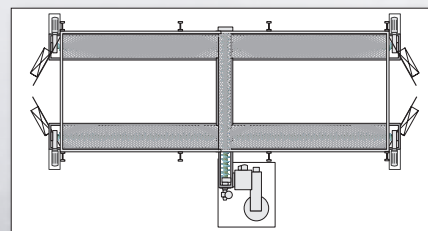
Corner shoot /  
Shoveling



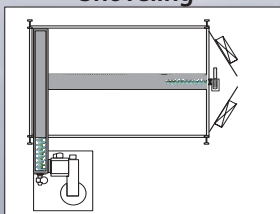
With simple screw



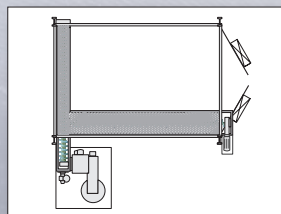
"U"-shaped



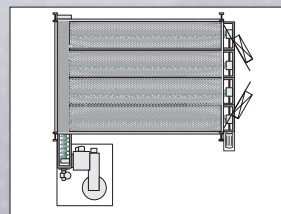
"H"-shaped



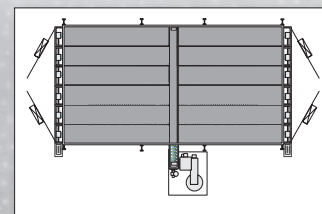
"T"-shaped



"L"-shaped



Complete single floor



Full double floor

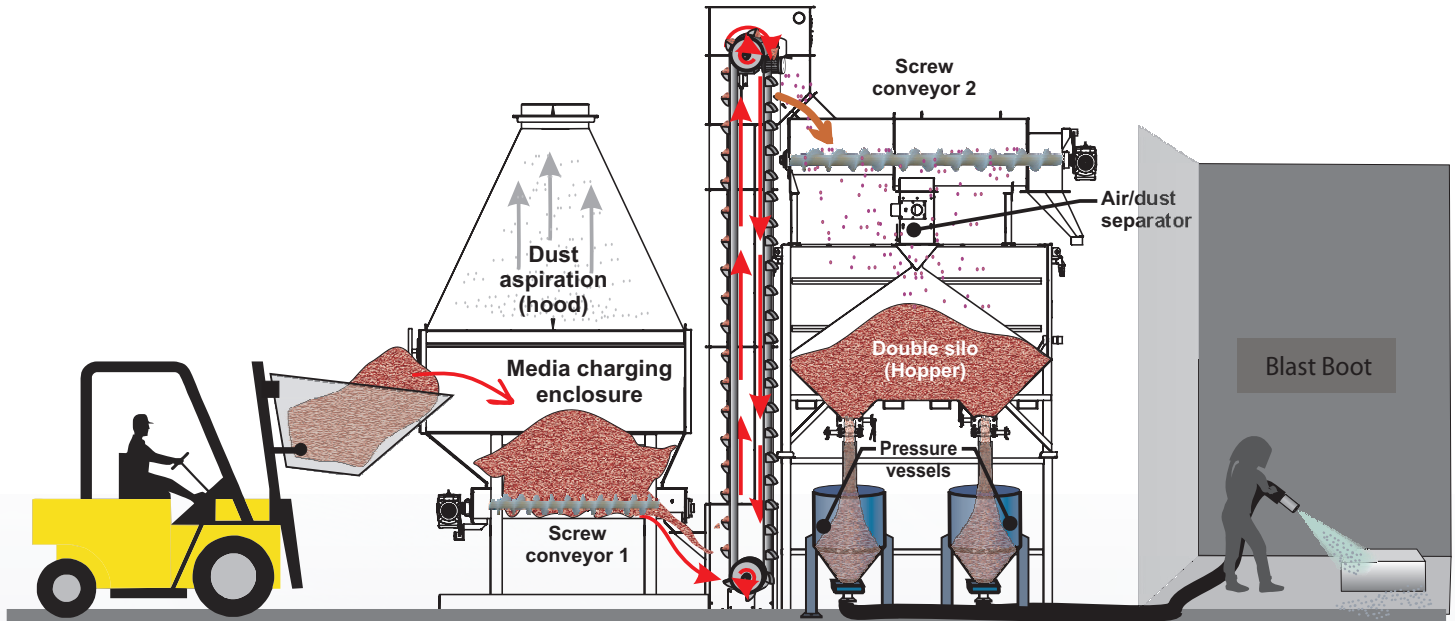




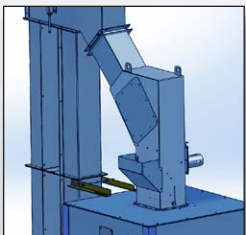
## MECHANICAL LOADING RECOVERY SYSTEM

### HOW IT WORKS

The mechanical loading recovery system is the ideal solution for extremely large abrasive blast rooms with limited budgets or to maximize productivity in facilities where excavation is not allowed. Abrasive residues must be loaded mechanically in a discharge hopper in order to be recovered by the system. It is a high-efficiency system that is also inexpensive to implement and to maintain since it has only few mechanical components.



### KEY POINTS



100% adjustable  
abrasive air wash



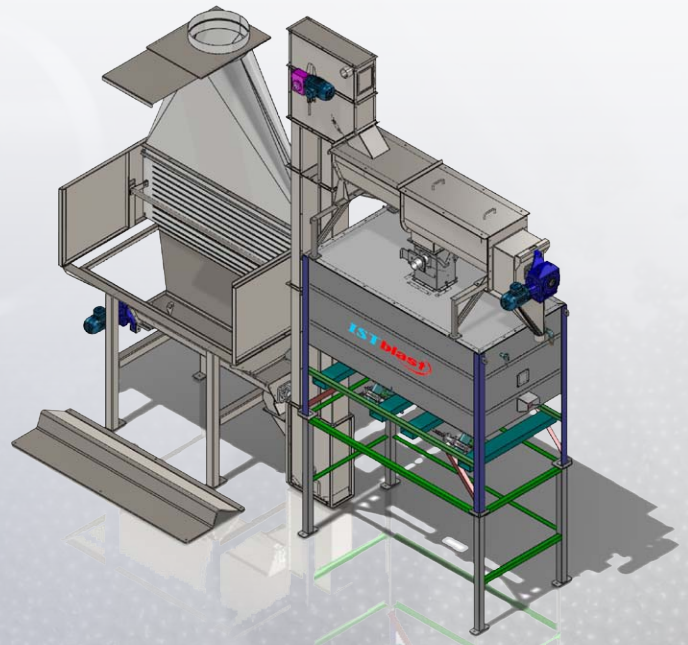
Bucket elevator



Recovery system  
capacity



Can handle all  
types of abrasives



Discharge hopper integrated to the recovery system

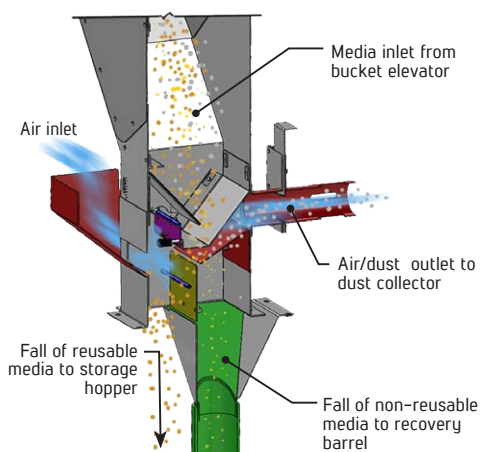


## MEDIA RECOVERY SYSTEM

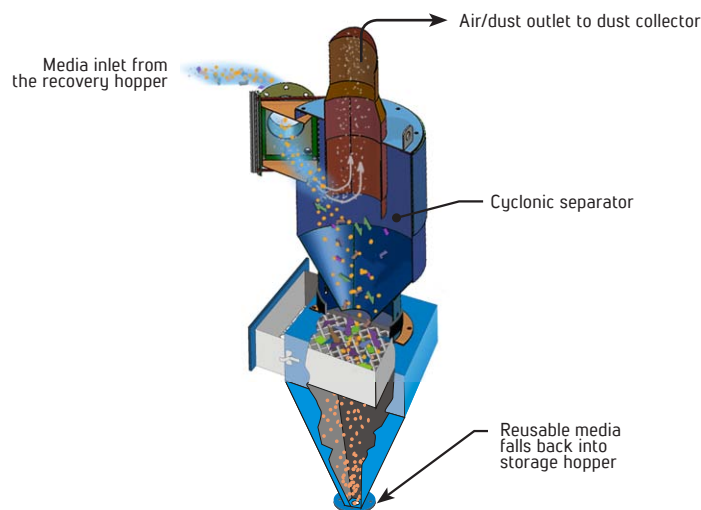
All our abrasive blast rooms are delivered with a media recovery system. Following the blasting process, residual abrasives accumulated can be vacuumed, swept or shoveled into the recover pit.

Collected used abrasive is conveyed to an adjustable abrasive separator to be cleaned and recycled. Reusable abrasive is then returned to the pressure vessel to be used again, while dust and fine particles are evacuated to the filtration system.

### AIR WASH (MECHANICAL)



### CYCLONIC SEPARATOR (PNEUMATIC)



## SELECTION OF FLOOR HOPPERS CONFIGURATIONS

The recovery system is determined by the type of abrasive used (screw conveyor versus vacuum recovery) and your needs in terms of production and budget. Complete floor hoppers are more expensive, but provide an automatic and continuous recycling of the abrasive without the need to sweep manually. Partial floor hoppers and corners require the operator to sweep the abrasive into the floor hopper. If lift trucks are required in the room, a grating that can withstand very heavy loads must be provided accordingly.

INSTALLATION SORT	PROS	CONS
<b>HOPPERS INTEGRATED TO THE FLOOR</b> 	<ul style="list-style-type: none"> <li>○ Easy and fast room cleaning by simply sweeping the abrasive into the recovery pit</li> </ul>	<ul style="list-style-type: none"> <li>○ Excavation is required</li> </ul>
<b>HOPPERS ABOVE GROUND</b> 	<ul style="list-style-type: none"> <li>○ No excavation required</li> <li>○ Very cheap to implement</li> </ul>	<ul style="list-style-type: none"> <li>○ Abrasives need to be manually shoveled into the recovery pit</li> <li>○ Loss of productivity</li> </ul>
<b>FULL FLOOR</b> 	<ul style="list-style-type: none"> <li>○ Automatic and continuous recycling of abrasive, without the need to sweep or shovel</li> </ul>	<ul style="list-style-type: none"> <li>○ More expensive to implement and maintain</li> </ul>
<b>PARTIAL FLOOR</b> 	<ul style="list-style-type: none"> <li>○ Less expensive to implement and maintain</li> </ul>	<ul style="list-style-type: none"> <li>○ Floor hoppers need to be loaded manually by the operator</li> <li>○ Loss of productivity</li> </ul>
<b>MECHANICAL LOADING</b> 	<ul style="list-style-type: none"> <li>○ Less expensive to implement and maintain</li> <li>○ No excavation required</li> </ul>	<ul style="list-style-type: none"> <li>○ Hopper needs to be loaded mechanically with a loader</li> <li>○ Loader is required</li> </ul>





## SECURITY EQUIPMENT

IST provides a 4-stage filtration system to provide breathable air to the operator's hood, eliminating air contaminants such as oil vapors, hydrogen gases, rust and other potentially hazardous contaminants to provide pure compressed air of respirable quality.

This system is equipped with an air supply detector and a carbon monoxide detector which continuously monitors and samples the air supplied in accordance with OSHA standards.

### 4-STAGE AIR BREATHING SYSTEM & RADEX AIR PURIFIER



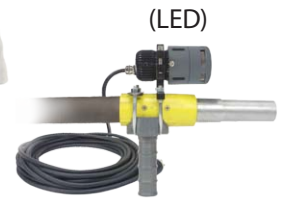
### BREATHABLE AIR HOOD



### SANDBLASTING SUITS



### BLAST LIGHT



## 3-AXIS BLASTING ELEVATION SYSTEM

BL lifts can replace ladders for working in elevation and provide increased safety and productivity.



### **KEY POINTS:**

- Customizable raised-platform heights up to 20 feet
- Operator platform capacity 500 lb
- Pneumatic/hydraulic power unit
- Operator controls on front rail of platform
- Requires a clean, dry air supply of 80 scfm @ 100 psi with dew point @ 40° F
- Travel Speeds: X-Axis up to 40 fpm, Y-Axis and Z-Axis up to 15 fpm
- 1 and 2 axis models available
- Extended reach model available

### ROLL-UP DOOR SYSTEM

Durable roll-up rubber doors designed to withstand harsh environment and requiring minimal maintenance.



### CONTROL PANEL

Main control panel with HMI and emergency stop button



### HMI TOUCH PANEL

(Human Machine Interface)





## CHOICE OF PRESSURE VESSELS

We offer different options and configurations of pressure vessels to accommodate your needs and maximize your productivity.



Specifications	PPB 646	PPB 1046
Loading capacity (A.S.M.E.)	6.5 cu.ft.	10 cu.ft.
Tank diameter	24"	24"
Media loading (abrasive)	600 lb.	1,000 lb.
Lenght x height x width	32" x 50" x 35"	32" x 66" x 35"
Weight	350 lb.	575 lb.
Number of operators	1	1 or 2

### CONFIGURATION OPTIONS

Pressure hold system	Pressure release system
<ul style="list-style-type: none"> <li>✓ No depressurization when blasting operations stop</li> <li>✓ Reduces air consumption</li> <li>✓ Convenient for frequent start/stop operations</li> <li>✓ Even abrasive flow when starting operations</li> </ul>	<ul style="list-style-type: none"> <li>✓ Pressure vessel automatically depressurizes when blasting operation stop</li> <li>✓ Automatic filling of the pressure vessel, without any intervention</li> <li>✓ Less wear-and-tear for the abrasive metering valve</li> <li>✓ Simplified and cheaper maintenance</li> </ul>

### Double Control system

- ✓ Combined system offers the advantages of both configurations without the disadvantages.

## UPGRADE KIT

**Maxblast**  
series

## UPGRADE TO MAXBLAST FOR MORE POWER AND BLASTING SURFACE



Coupling



Automatic Air Valve

Maxblast upgrade kit includes an automatic air valve and fitting that allows you to install a 1½" blast hose which increases air pressure at the nozzle, reduces pressure losses and increases operator productivity.

### BENEFITS OF MAXBLAST

- Reduction of pressure losses from 24% to 27%
- Increased in productivity (blasting time) from 36% to 40%

### ALARM & EXIT DOOR

Audible alarm located on the inside wall and emergency exit above the side door



### DEPRESS SWITCH

Allows the operator to fill the pressure vessel without leaving the blast rooms



### RUBBERIZED WALL PANELS

Tightly sealed rubberized wall panels protecting the inside of the abrasive blast rooms which are lightened by high efficiency LED lighting system.



### LIGHTING SYSTEM

High efficiency LED lighting



Hermetic sealing







## AIR & ABRASIVE CONSUMPTION

### PRESSURE

Opening	psi <sup>1</sup>	30	40	50	60	70	80	90	100°
1/8"	cfm <sup>2</sup>	8	10	11	13	15	17	19	20
	lb/h <sup>3</sup>	55	69	84	97	110	127	140	154
3/16"	cfm <sup>2</sup>	18	22	26	30	33	38	41	45
	lb/h <sup>3</sup>	130	160	170	192	220	243	268	297
1/4"	cfm <sup>2</sup>	34	41	47	54	61	68	74	81
	lb/h <sup>3</sup>	219	276	302	351	398	460	504	556
5/16"	cfm <sup>2</sup>	53	65	77	89	101	113	126	137
	lb/h <sup>3</sup>	410	495	526	601	680	756	832	910
3/8"	cfm <sup>2</sup>	76	91	108	126	143	161	173	196
	lb/h <sup>3</sup>	570	710	750	860	970	1080	1184	1296
7/16"	cfm <sup>2</sup>	100	124	147	170	194	217	240	254
	lb/h <sup>3</sup>	770	840	1008	1160	1320	1476	1630	1782
1/2"	cfm <sup>2</sup>	137	165	195	224	252	280	309	338
	lb/h <sup>3</sup>	1015	1230	1305	1500	1700	1890	2088	2277
5/8"	cfm <sup>2</sup>	212	260	308	356	404	452	504	548
	lb/h <sup>3</sup>	1325	1600	1875	2140	2422	2690	2973	3250

## RECOVERABLE BLASTING MEDIA



### SPHERICAL SHAPED MEDIA

Ceramic Beads



Glass Beads



Stainless Shot



Steel Shot



### ANGULAR SHAPED MEDIA

Aluminium Oxide



Ceramic Grit



Crushed Glass



Garnet



Plastic Media



Silicon Carbide



Stainless Grit



Steel Grit



Walnut Shells



## MEDIA GUIDE

	Glass Beads	Ceramic Grit	Stainless Cut Wire	Steel Shot	Steel Gri	Alumi-nium Oxide	Silicon Carbide	Garnet	Crushed Glass	Plastic Media	Walnut Shells
Finishing	YES	YES	YES	YES	YES	YES	YES	YES	YES	NO	NO
Cleaning/Removal	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Peening	YES	YES	YES	YES	NO	NO	NO	NO	NO	NO	NO
Surface Profiling (Etch)	NO	NO	YES	NO	YES	YES	YES	YES	YES	YES	YES
Working Speed	MED.	MED.	MED.	MED.	MED.-HIGH	HIGH	VERY HIGH	HIGH	HIGH	MED.-HIGH	LOW-HIGH
Recyclability	HIGH-LOW	HIGH	HIGH	VERY HIGH	VERY HIGH	MED.-HIGH	MED.-LOW	MED.	MED.-LOW	MED.	LOW
Probability of Metal Removal	VERY LOW	VERY LOW	VERY LOW	VERY LOW	MED.	MED.-HIGH	MED.-HIGH	MED.	LOW-MED.	VERY LOW	VERY LOW
Hardness, MOH Scale (Rockwell RC)	5.5	7 (57-63)	6-7.5 (35-55)	6-7.5 (35-55)	8-9 (40-66)	8-9	9	8	5.5	3-4	1-4.5
Bulk Density (lb/cu.ft.)	100	150	280	280	230	125	95	130	100	45-60	40-80
Mesh Size	30-440	8-46	20-62	8-200	10-325	12-325	36-220	16-325	30-400	12-80	MANY
Typical Blast Pressure	20-55	20-90	20-90	20-90	20-90	20-90	20-90	30-80	20-50	20-60	10-40
Shapes : ● or ▲	●	●	●	●	▲	▲	▲	▲	▲	● or ▲	▲

\* Above information is intended as a general reference guide



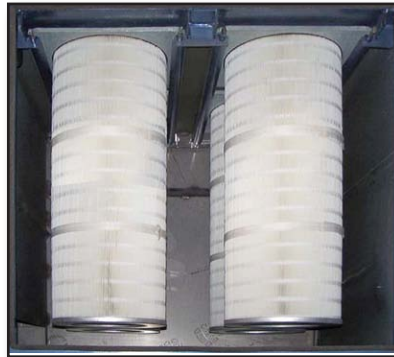
## **BLAST ROOM DUST COLLECTORS**

**IST offers a wide selection of fully equipped blast room dust collectors with up to 50,000 cfm in capacity.**

Our vertical design and pulsation system provide a more efficient means to remove dust from cartridges, eliminating uneven dust accumulation associated with horizontally mounted cartridges.



DCM 3,000 to 50,000



Simple and safe cartridge replacement system requiring no tools.



Automatic Pulse Cartridge Cleaner. A light illuminates to indicate when the cartridges must be replaced.



Optional screw conveyor to collect dust inside the building

## **DIFFERENT TYPES OF DUST EXTRACTION DUCTINGS**

