



ABRASIVE BLAST ROOM MRS200 PNEUMATIC RECOVERY SYSTEM



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.



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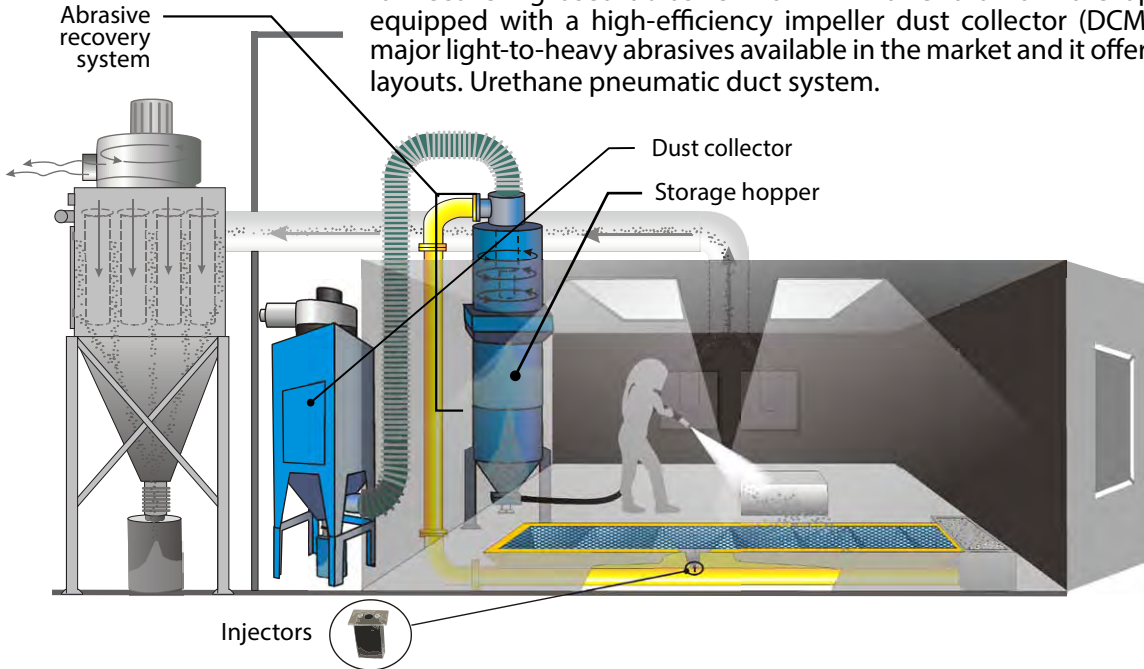
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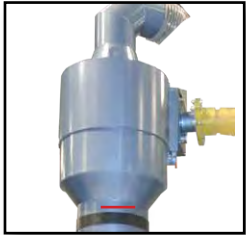
PNEUMATIC RECOVERY SYSTEM – MRS200

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



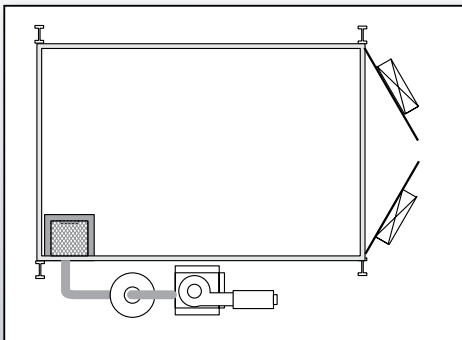
Recovery system
capacity



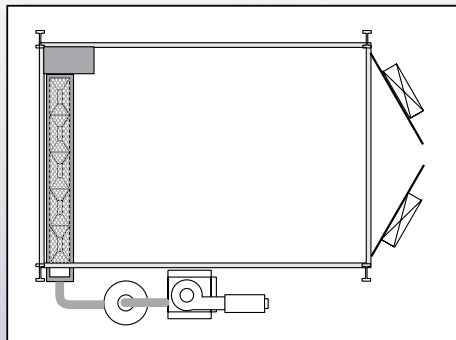
Can handle
most abrasives*

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

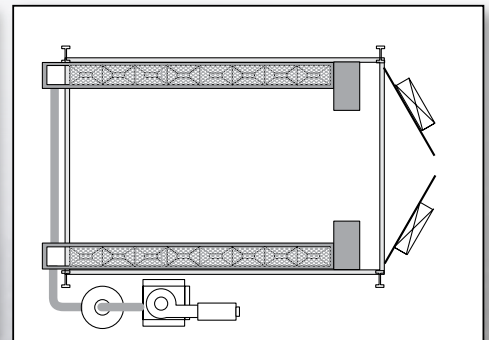
FLOOR HOPPERS LAYOUTS AVAILABLE



Corner shut / Shoveling



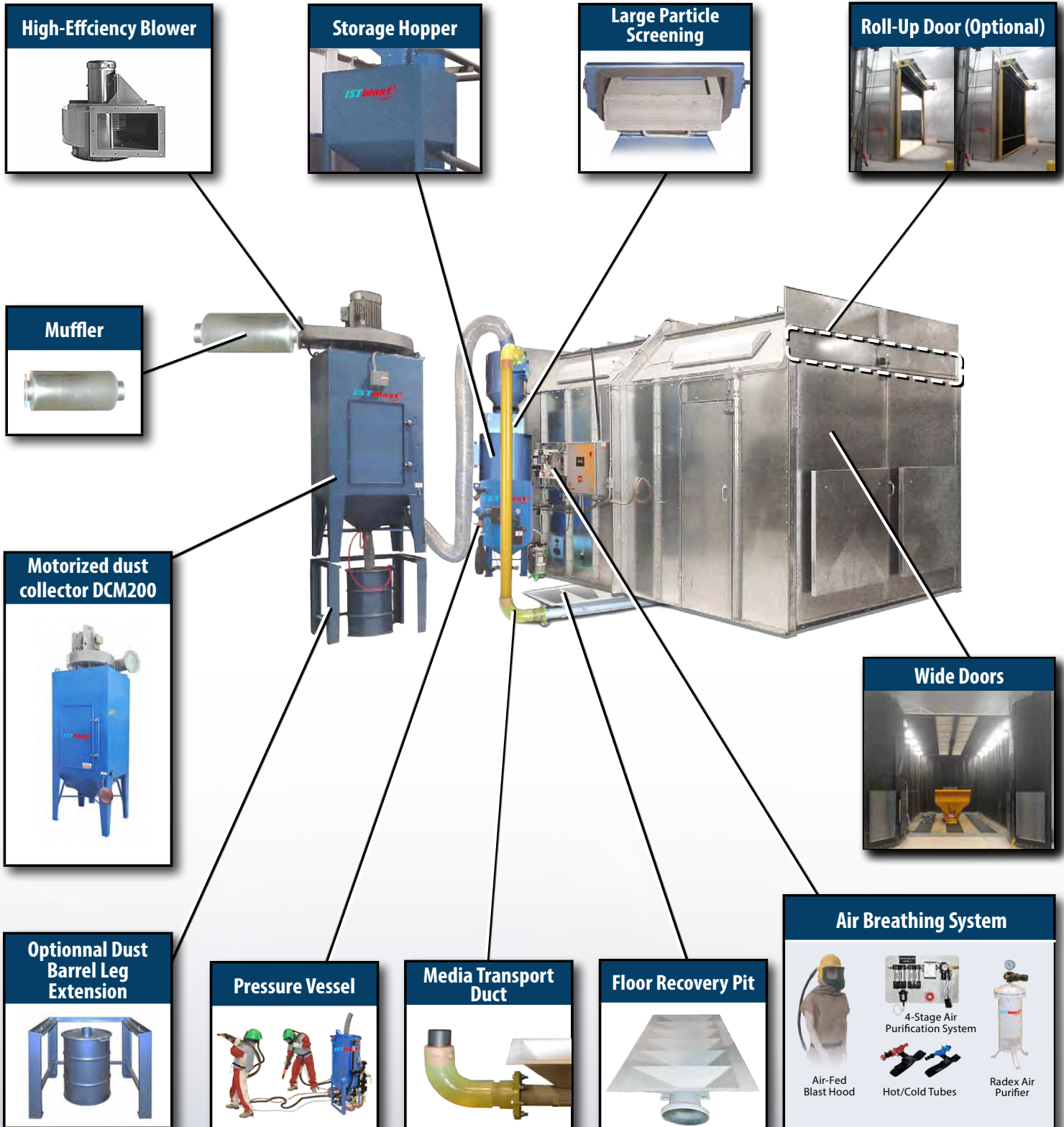
Single in ground pneumatic through



Double in ground pneumatic through











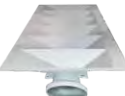






KEY FEATURES



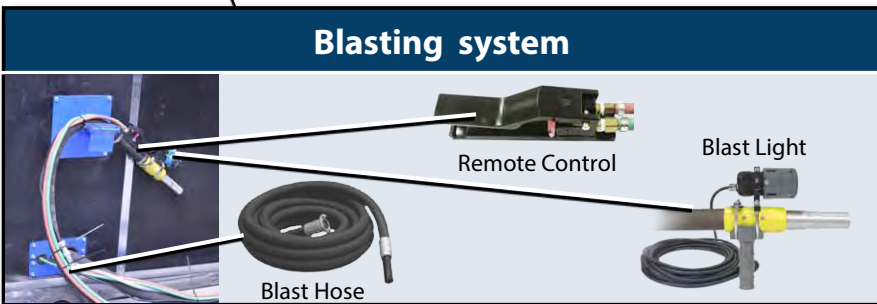
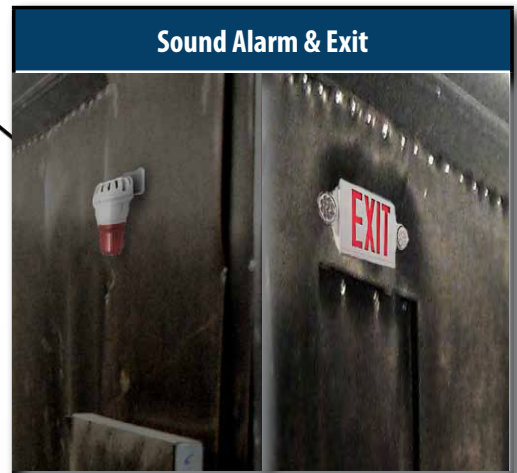
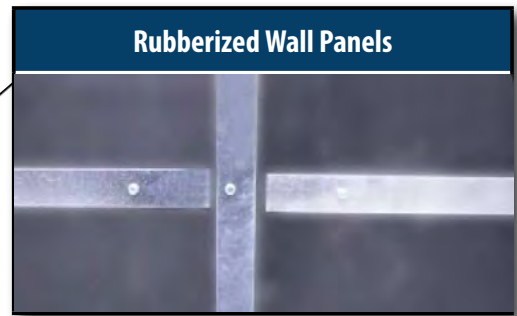
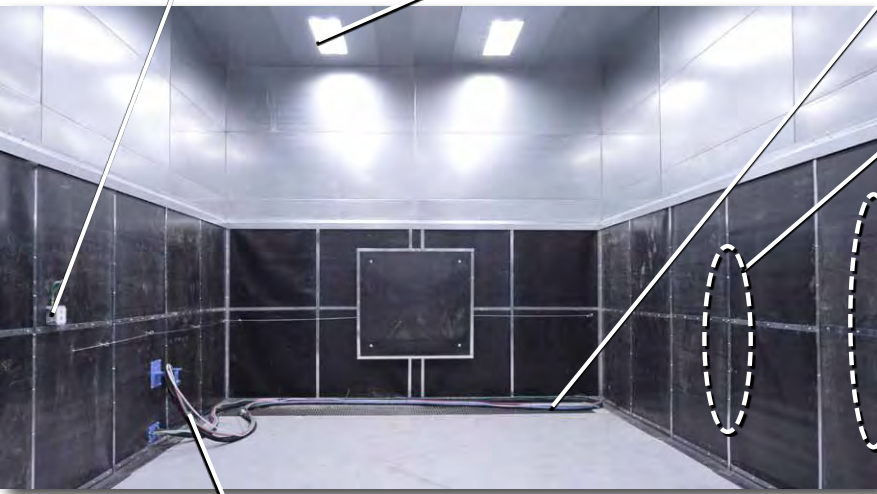
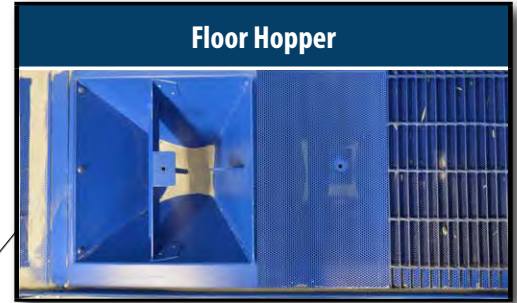


KEY FEATURES (CONT'D)

| VISUAL | DESCRIPTION |
|---|--|
|  | High efficiency blower 10 hp turbine engine providing high filtration efficiency to suck and extract fine particles and dust from abrasive residues produced during blasting |
|  | Muffler horizontal or optional vertical muffler to reduce noise produced by the turbine |
|  | Motorized dust collector DCM200 specially designed for our blast room pneumatic recovery system. DCM200 is equipped with manual (or optional automatic) shaker for dislodging dust agglomerated on surface of filter bags and requires minimal supervision and maintenance from operator. |
|  | Roll-Up Door (Optional) Durable roll-up rubber doors designed to withstand harsh environment and requiring minimal maintenance. |
|  | Wide doors opening and low footprint door system to enter large parts into the room. |
|  | Storage hopper provides long hours of blasting autonomy. |
|  | Large Particle Screening that contains large particles before they clog the system. |
|  | Optional Dust Barrel with Leg Extension and 55 gal. barrel dust collecting barrel to raise up the dust collector accordingly. |
|  | Pressure vessel in a various selection can supply up to 2 operators. |
|  | Media Transport Duct with sturdy urethane ducting to convey residual abrasive up to the media reclaimer. |
|  | Floor Recovery Pit all pneumatic, low maintenance floor recovery pit where residual abrasive is swept or shovel after blasting. |
|  | Air Fed Hood provides comfort and respiratory protection for long hours of blasting. |
|  | Hot/Cold Tubes temperature control warm up / cool down breathable air supplied for increase comfort. |
|  | 4-stage purification system provides grade « D » air and detects carbone monoxide. |
|  | Radex Air Purifier removes 98% of particles down to 0.5 micron size. |



INSIDE THE ROOM



| VISUAL | DESCRIPTION |
|--------|--|
| | Depress switch allows operator to fill the pressure vessel without leaving the room. |
| | High efficiency LED lighting system producing 65% more lumens and consuming 90% less energy. |
| | Pneumatic duct conveys abrasives residues to the media reclaimer. |
| | Tightly sealed rubberized panels protecting the inside of the blast room. |
| | Audible Alarm on wall and Emergency Exit located above the door. |

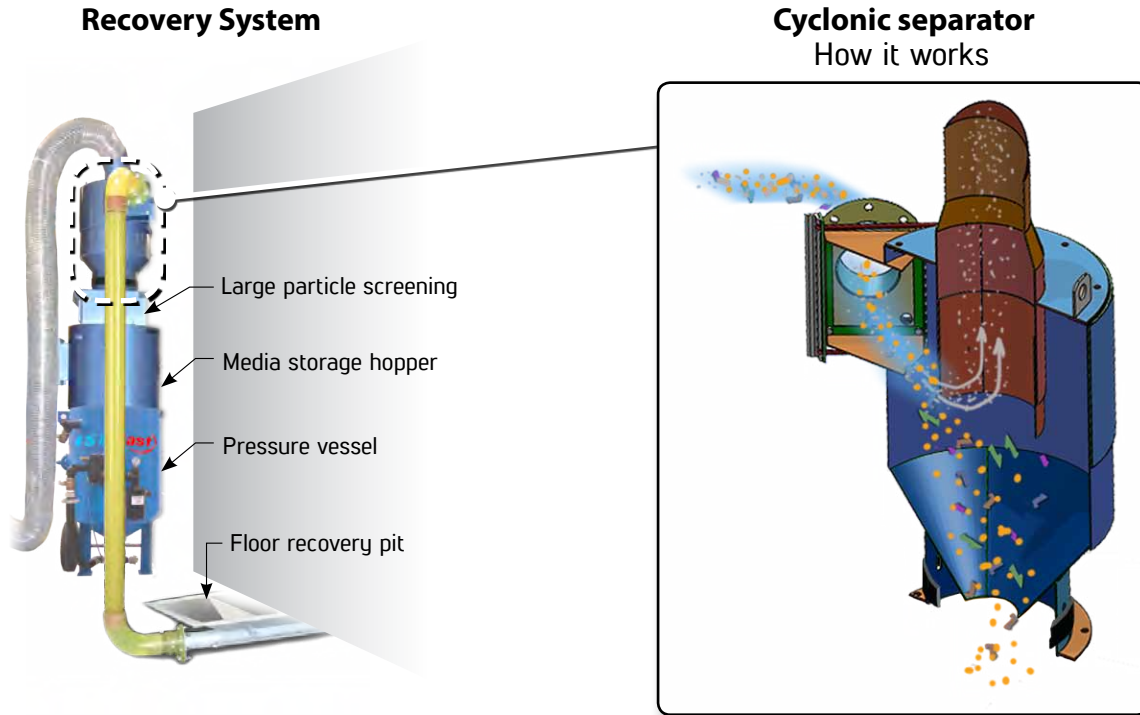
| VISUAL | DESCRIPTION |
|--------|---|
| | Durable 50' blast hose. |
| | Pneumatic remote control at the nozzle to operate blasting. |
| | LED auxiliary lighting system for better visibility. |



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.



R.O.I. (RETURN ON INVESTMENT)

Recycling abrasives enables the user to achieve considerable savings in abrasives consumption while protecting the environment from harmful sandblasting dust.

Steel grit abrasives can be recycled and used up to 100 times compared to only one use with non-recyclable media. The non-recyclable sandblasting abrasives are low in cost, but they can only be used for one sandblasting cycle. Because of their fragile molecular structure, they deteriorate quickly while generating harmful sandblasting dust and significantly reduce the visibility of the operators.

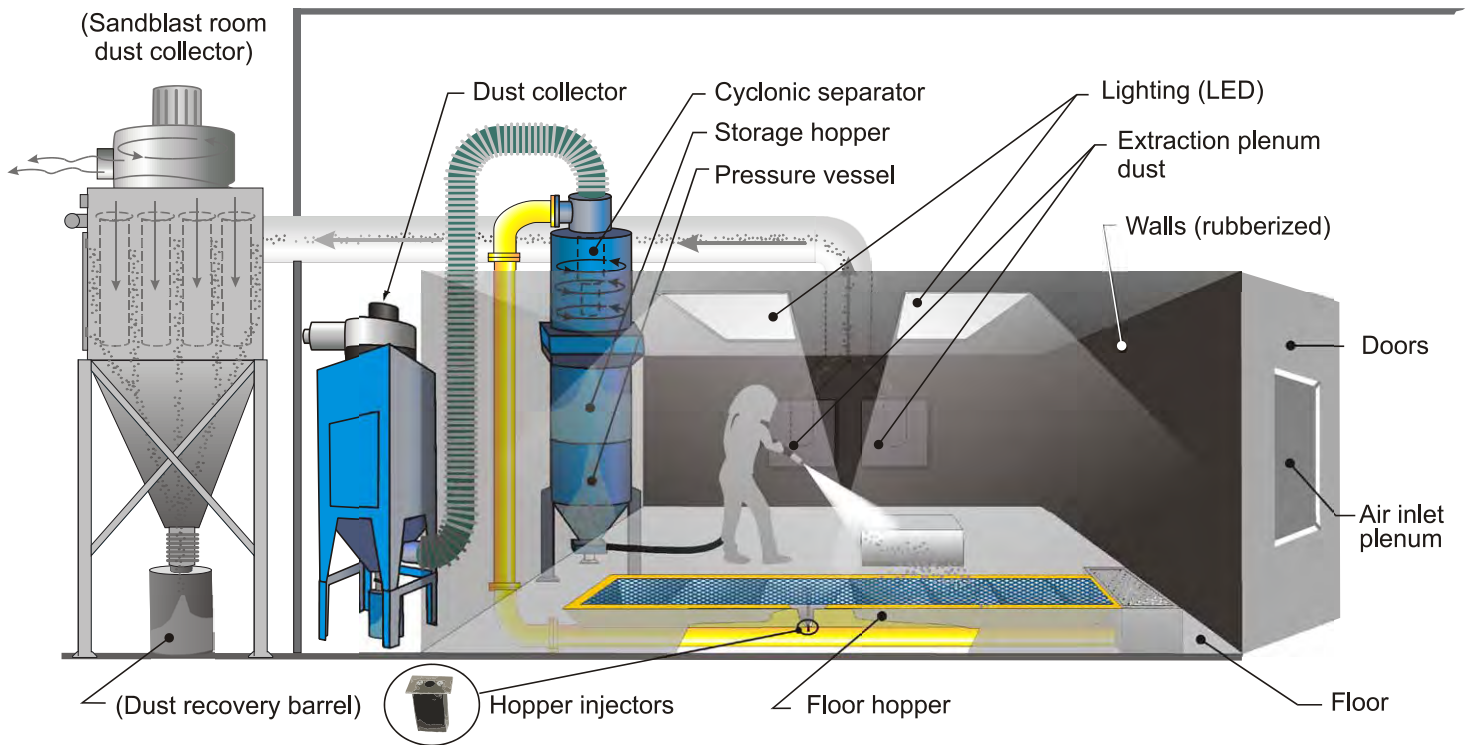
Recyclable Abrasives vs Non-Recyclable Abrasives Example

| DESCRIPTION | SILICA SAND | STEEL GRIT | SAVINGS \$/ DAY |
|---|-------------------------------------|-----------------------------------|-----------------|
| Pounds per day | 4 000 | 4 000 | |
| Abrasive (price/lb) x % breakdown | (\$0.12 x 4000) x 100 % = \$ 480 | (\$0.75 x 4000) x 5 % = \$ 150 | \$ 330.00 |
| Cleaning | 4h x \$ 25 | 2 h x \$ 25 | \$ 50.00 |
| Abrasive disposal cost | \$8 / day | \$0.40 / day | \$ 7.60 |
| Additional electrical cost (600 V - 8 A) | \$0.00 / day | \$6.00 / day | - \$ 6.00 |

Total savings per day : \$ 381.60



HOW IT WORKS



The operation of a pneumatic recovery system is very simple. Following the blasting process, the residual abrasives accumulated on the floor can be manually or mechanically swept into the recovery pit.

The pneumatic recovery system collects and conveys the used abrasive to the recycler to be cleaned and recycled. The clean abrasive is then deposited in the pressure vessel to be used again for disposal blasting process, while the dust is conveyed to the filtration system.

RECYCLABLE ABRASIVES

| TYPE OF ABRASIVE | HARDNESS | DURABILITY | DENSITY |
|------------------------|-------------------------------|-------------------------|-----------------|
| Glass Beads | 50-60 Rc (5-7 Mohs) | 5-8 cycles | 2.6 g/cc |
| SAE Steel Shot | 42-65 Rc (6-8 Mohs) | 2500-3500 cycles | 7.4 g/cc |
| Stainless Steel Shot | 20 Rc (work hardens to 60 Rc) | 3500-4500 cycles | 7.0 g/cc |
| Plastic Media | 3-4 Mohs | 4-6 cycles | 1.5 g/cc |
| Aluminium oxide | 50-65 Rc (5-7 Mohs) | 25-40 cycles | 3.7 g/cc |
| Ultra Soft Shot | 3-3.5 Mohs | 6000-7000 cycles | 7.4 g/cc |

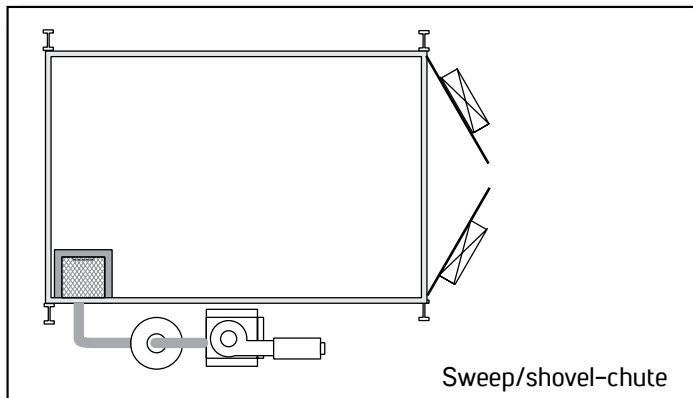


RECOVERY FLOORS

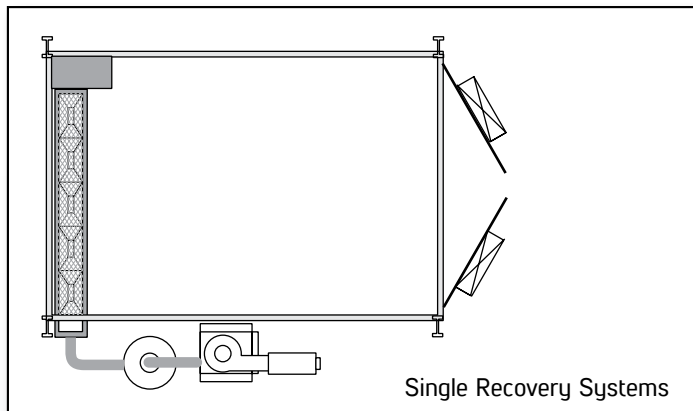
ISTblast offers recovery floors to meet almost any budget and production requirements. Mounted on the surface or excavated, pit dimensions can vary from 4 feet in length for compact installations, to more than 40 feet for high output industrial facilities. The configurations are practically infinite.

The recovery system is determined by the type of abrasive being used, (screw conveyor vs. pneumatic), your production requirements and budget. Full recovery hopper are slightly costly but provide larger recycling of abrasive. Partial recovery and corner boxes require the operator to sweep the abrasive to the reclaim system. If your parts are to be handled by forklifts, the recovery system must be designed to accommodate the extra weight of a forklift.

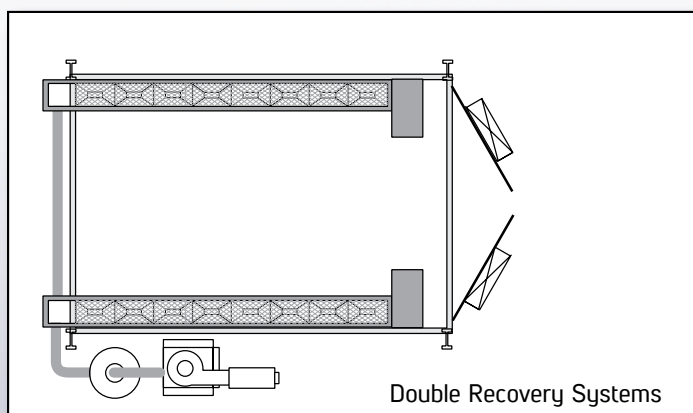
ISTblast's partial floors are available in sweep-chute or a long pit designs. The sweep-chute design is recommended if you require a very small working area as the configuration can retrieve media from the corner of the room. .



The sweep-chute recovery systems provide the most economical method for recycling media through the media recuperation system.



The media recovery hopper system contains a single long pit usually located at the back of the blast room. This is typical design is common to allow for low to medium production levels.



The media recovery hopper system contains a double long pit usually located at each sides of the blast room. This is typical design is common to allow for medium production levels.



3-AXIS BLAST MEDIA / BLAST BOOTH LIFTS

BL lifts are designed to withstand the harsh environment of grit, sand, and shot blast booths. Manufactured with sealed components and lift mast along with heavy duty components, the lifts can replace ladders providing increased safety and productivity. This efficient design can be used to reach heights of up to 27 feet.



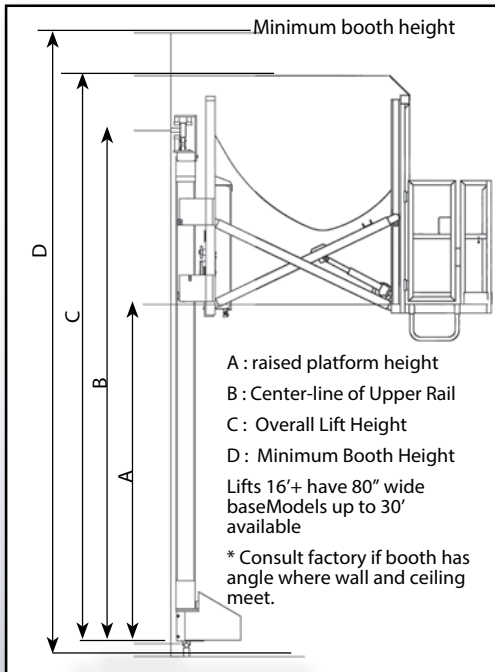
- Customizable raised-platform heights up to 20 feet
- Retracted dimension 4'-0"
- Extended dimension 9'-0"
- Operator platform capacity 500 lb
- Sealed mast construction
- Pneumatic/hydraulic power unit
- Platform 48" wide x 30" deep
- Operator controls on front rail of platform
- Hand controls for Y-Axis, Z-Axis, and emergency stop
- Foot control for X-Axis
- Base control to raise and lower platform
- Lift equipped with Filter/Regulator/Lubricator
- Self-closing/self latching entry gates
- 1 and 2 axis models available
- Lift requires a clean, dry air supply of 80 scfm @ 100 psi with a 40° F dew point.

Travel Speeds :

- X-Axis variable up to 40 fpm
- Y-Axis 15 fpm
- Z-Axis 15 fpm

Extended reach model :

- Retracted dimension 4'-6"
- Extended dimension: 13'-4"
- Operator platform capacity: 400 lb



| Fully Extended Dimension 9' (Y-Axis) Extended Reach Model 13'-4" Fully Extended (Y-Axis) | | | | |
|---|---------|-----------|---------|-----|
| Model | A | B | C | D |
| BL-89 | 8'- 0" | 12'- 11¼" | 14'- 6" | 15' |
| BL-99 | 9'- 0" | 13'- 11¼" | 15'- 6" | 16' |
| BL-109 | 10'- 0" | 14'- 11¼" | 16'- 6" | 17' |
| BL-119 | 11'- 0" | 15'- 11¼" | 17'- 6" | 18' |
| BL-129 | 12'- 0" | 16'- 11¼" | 18'- 6" | 19' |
| BL-139 | 13'- 0" | 17'- 11¼" | 19'- 6" | 20' |
| BL-149 | 14'- 0" | 18'- 11¼" | 20'- 6" | 21' |
| BL-159 | 15'- 0" | 19'- 11¼" | 21'- 6" | 22' |
| BL-169 | 16'- 0" | 20'- 11¼" | 22'- 6" | 23' |
| BL-179 | 17'- 0" | 21'- 11¼" | 23'- 6" | 24' |
| BL-189 | 18'- 0" | 22'- 11¼" | 24'- 6" | 25' |
| BL-199 | 19'- 0" | 23'- 11¼" | 25'- 6" | 26' |
| BL-209 | 20'- 0" | 24'- 11¼" | 26'- 6" | 27' |



CHOICE OF PRESSURE VESSELS

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



PPB 646



PPB 1046
(up to 2 operators)

| 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 or operators | 1 | 1 or 2 |

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

UPGRADE KIT



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%

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.



LED blast light



AIR & ABRASIVE CONSUMPTION

PRESSURE

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

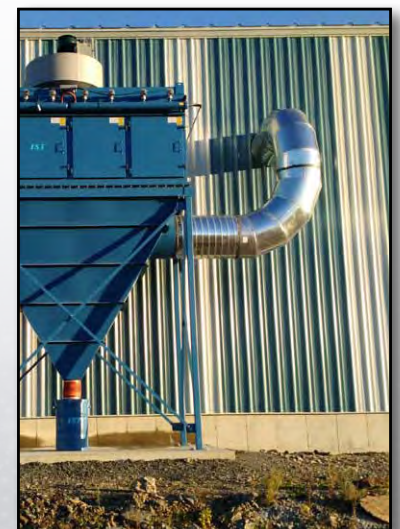


Automatic Pulse Cartridge Cleaner. A light illuminates to indicate when the cartridges must be replaced.



Optional screw conveyor to collect dust inside the building

DIFFERENT TYPES OF DUST EXTRACTION DUCTINGS



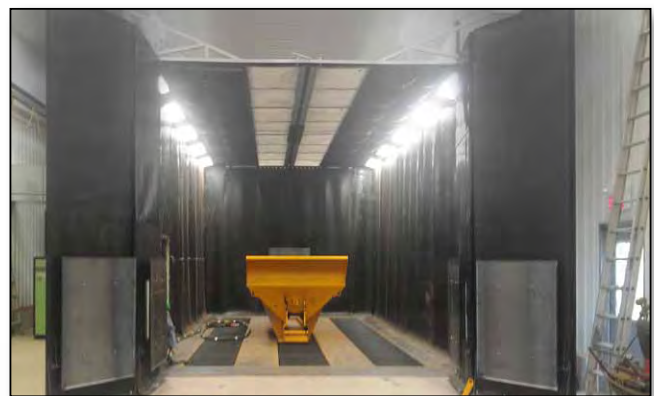


ABRASIVE BLAST ROOM SYSTEMS

We offer a wide range of customized solutions to meet any need.



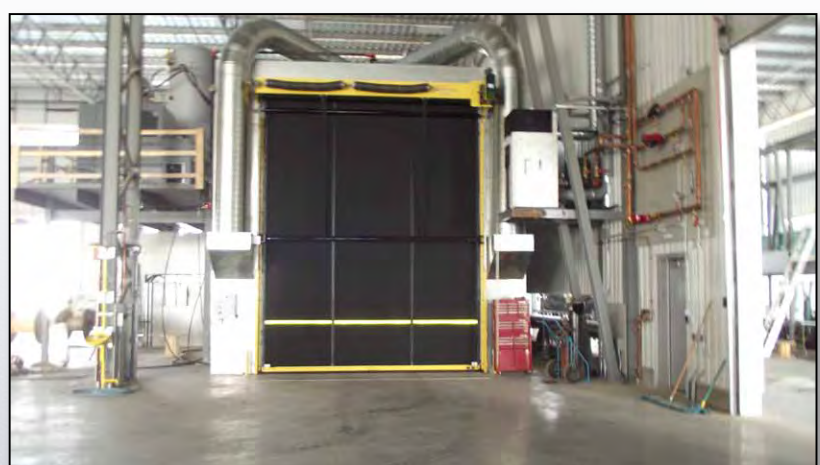
Full floor



Triple or dual recovery floor



Partial recovery floor



Roll up doors

Benefits of Owning an ISTblast Abrasive Blast Room :

- Significant cost savings since abrasives can be collected, sorted and recycled
- Increase in productivity since you can blast 24/7 indoors

Industrial applications

- General Manufacturing
- Industrial Equipment
- Metal forming
- Aerospace and Aviation
- Rail and Transit
- Marine
- Automotive
- Petroleum

INNOVATIVE AND LEADING TECHNOLOGY

Founded in 1978, International Surface Technologies (IST) is a North American leader in abrasive blast rooms, sandblasting cabinets and portable sandblasting equipment. The company's success is based on its unwavering commitment to technical excellence, world-class manufacturing and unparalleled customer service.

Working closely with qualified distributors and abrasive users, IST offers systems, products and technologies that set the quality standard in a wide range of surface treatment applications. IST provides equipment for a wide range of industries for preparing surfaces to receive paint applications or for strengthening surface profiles to resist wear and tear.

IST's ongoing investment in abrasive blasting equipment and research and development will continue to provide innovative solutions to a diverse global market. Call today for product information, to request a demonstration or for a free quote.

