



Integrated System Selection and Design

System Simplicity

DUST COLLECTORS & VACUUMS ARE SMALLER THAN THOSE USING OTHER ABRASIVE TYPES

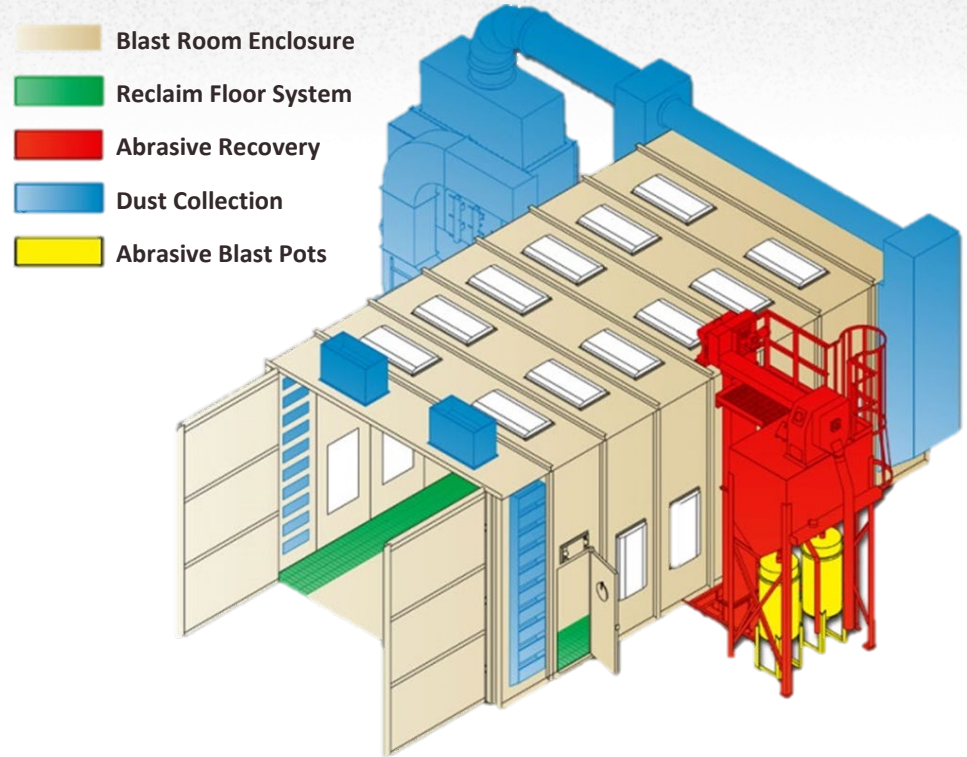


Typical Room for Steel Grit and other Ordinary Abrasives

Sponge-Jet Media can be used in most blast rooms by changing the Abrasive Blast Pot and the Abrasive Recovery/Recycling system.

Sponge-Media Rooms:

- 1/5th the Dust Collection
- Simplified Floor Recovery
- Less Capital Expense
- Substantial Energy Reduction
- Improved Reliability

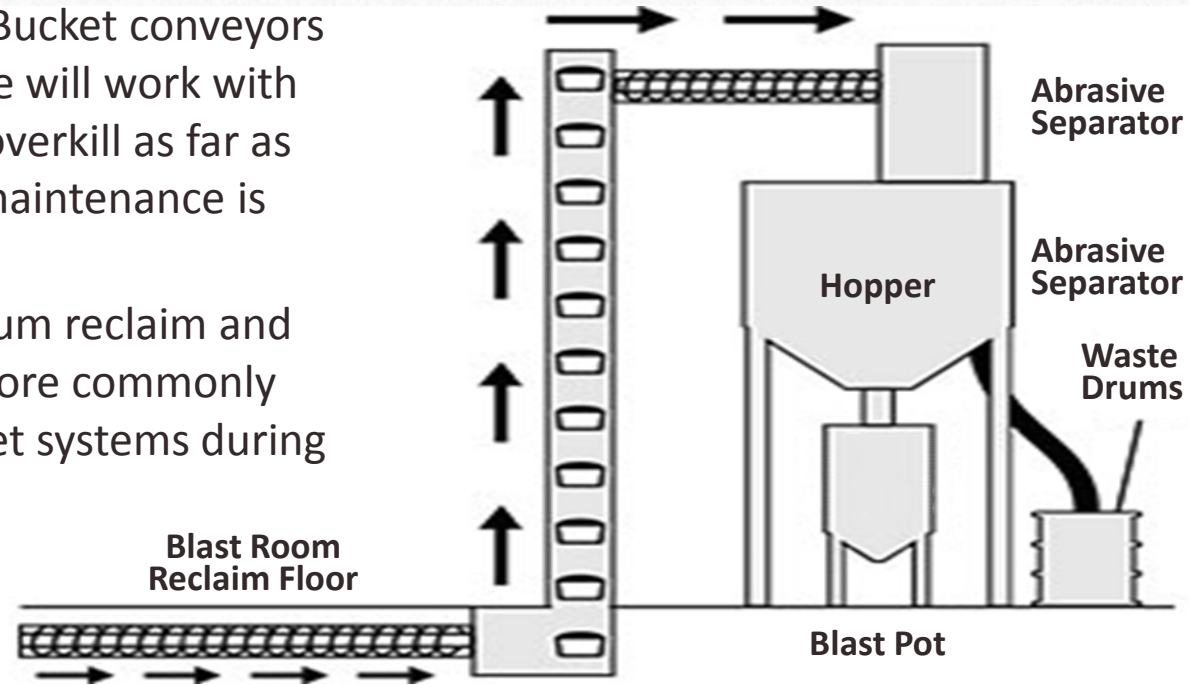


Heavy Abrasives cost more to recover than lighter abrasives:

1. The lighter the abrasive the more easily the operator can move it to the pick up point.
2. Less operator fatigue and injury.
3. Sponge Media can be blown across large rooms in seconds to a pick up point. It can also be easily moved with brooms, pushers and shovels.
4. If active floor units are selected, only some are capable of handling the weight of steel grit abrasives but all should work with Sponge Media.
5. Reliability, maintenance costs and process interruptions should all be factored in when considering an active floor system.
6. Active floors can save labor when dealing with heavy abrasives but they may also come at high initial costs followed by costs of high maintenance and downtime.

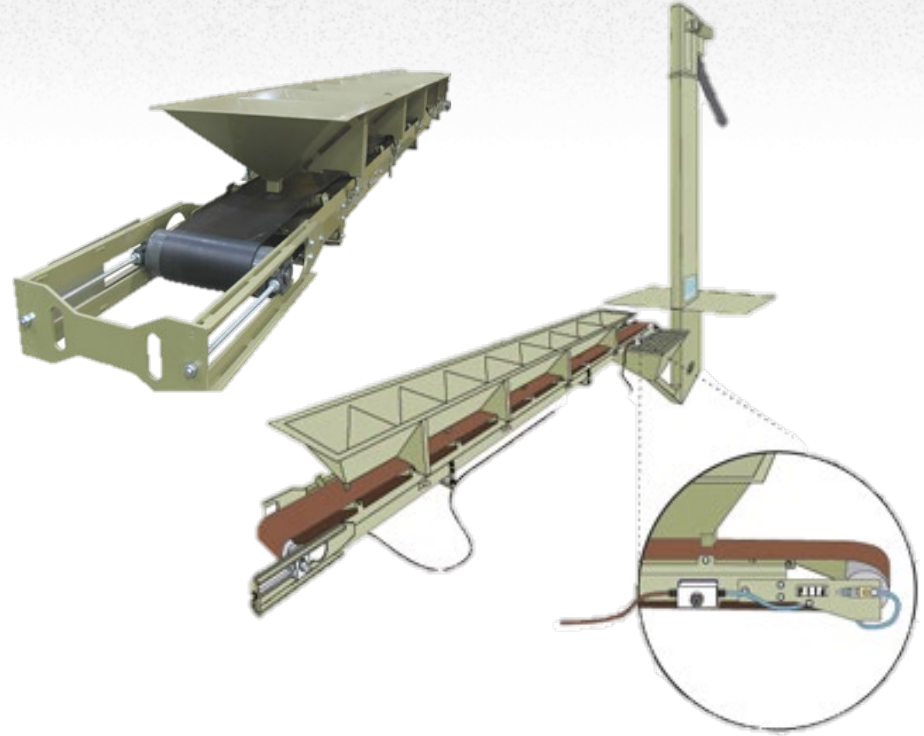
Common Reclaim and Recovery Methods

- Traditional Screws and Bucket conveyors used to recover abrasive will work with Sponge Media but are overkill as far as initial investment and maintenance is required.
- Less sophisticated vacuum reclaim and recovery systems are more commonly installed with Sponge-Jet systems during new construction.



Some Floor Systems use Conveyors to Move the Abrasive

- Hoppers direct the abrasive to the center of the conveyor belt.
- The conveyor belt carries the abrasive to one end of the room and dumps it into a receiving trough or collection bin. From there abrasives can be collected and elevated by a variety of methods.
- This system has many mechanical parts with limited access for service.



Vacuum Pick: Lower Cost, Better Reliability



Blast Rooms Designed for Sponge Media

NEW BLAST ROOMS CAN BE BUILT FOR A FRACTION OF THE COST OF CONVENTIONAL ROOMS

- Active floors and mechanical bucket elevators are not required. The media is easily moved and collected with reliable vacuum components.
- The Blast Units and Recycling systems are unique to Sponge Media which can not be used with conventional abrasive pots.
- Air flow for Dust Collection is typically 20% of conventional same-size blast rooms, which allow for additional features like HEPA filtration and the recirculation of conditioned air.
- Sponge Media is compatible with sound absorbing wall systems, glass viewing windows and video monitoring for safety.
- Touch up near intact paint coatings, adjacent to mechanical assemblies, rotating equipment and electronics.
- Existing rooms can be easily reconfigured by updating Feed Unit (blast pot) and Recycler.

Room Design - Establish the Basics First

**Room itself. How big?
Where is it? What features?
What is ideal work flow in
and out?**

**How many blast
nozzles?**



**Noise – Will it be an
issue? If so - how to
manage it?**

**Dust – Minimize it and
manage its migration. How
does airflow interact with
adjacent work areas?**

**Media Recovery – Methods,
Reliability, Labor cost**

Keep in Mind...



- ✓ Room Size Drives Cost – Don't oversize the room. Lower Ceilings improve dust control and Reduces the size of Dust Collector.
- ✓ Must have continuous negative air pressure if connected to workshop – Consider breeze way / air lock for dust and noise control. Otherwise use sound proof doors with interlocks so doors can not be open on two sides at once and without negative air on.
- ✓ Blast Unit Configuration: One Media Type or more? How many operators and Nozzles (speed)? How Many Rooms?
- ✓ Hoppers and Pressure Vessels must be sized to the workflow. Larger units allow more blast time between clean up.
- ✓ Design Workflow, Air management and Sound Control.