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Sandblasting Equipment, Media, Sales & Service

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(208) 947-1351 | Boise, Idaho

Belt Conveyor RECOVERY SYSTEMS



INDUSTRIAL
Blast Facilities
by **CLEMCO**[®]

Belt Conveyor Abrasive Recovery Systems are

- ◆ *Low operating cost.*
- ◆ *Suitable for steel and coarse abrasives.*
- ◆ *Simple mechanical system suitable for all sizes of blast rooms.*
- ◆ *Consumes only a fraction of the power required to run a screw conveyor system.*
- ◆ *Very low maintenance - sustains very little wear compared with screw conveyor systems.*
- ◆ *Capable of moving a large quantity of material over a long distance.*
- ◆ *Controlled abrasive-load design prohibits belt overload and prevents media overflow.*

An abrasive blast facility reduces blasting costs and environmental contamination by bringing blasting indoors, making possible the use of recyclable abrasives. To make the most of recyclable abrasive, an efficient abrasive recovery system automates the media recovery and cleaning processes.

The Clemco Belt Conveyor Recovery System combines simple, reliable, technology with high quality components for a system that is rugged, durable, and economical. The Clemco BCR system is built in custom lengths to suit existing or new blast rooms. It is engineered to suit rooms of all sizes.

A standard complete system comprises recovery hoppers, floor grating, a drum motor for each belt run, a bucket elevator, and an air-wash abrasive cleaner.

NOTE: The system lends itself to processing and cleaning heavy, coarse abrasives. For light-weight media, ask your Clemco Distributor about our M-Section® Recovery Systems.

Engineered to be—

Simple

The Clemco BCR system features multiple floor collection hoppers installed in a trench in the blast room floor. Partial-area systems can be configured in a single run, in H-, L-, or U-patterns or whatever layout suits the application. Floor gratings, flush with the blast room floor, cover the hoppers. Abrasive falls through the grating, into the hoppers, through a metering tube, falling on the 12-inch wide belt below. The distance between the hopper metering tube and the conveyor belt is set for the optimal media flow-rate which prevents belt overload.

Reliable

A 1-1/2 HP drum motor drives each belt, conveying material to the bucket elevator for transfer to the abrasive cleaner. Angled rollers beneath the belt form a V-shape support to contain the abrasive on the belt. Abrasive drops off the belt into the bucket elevator hopper. Sturdy buckets raise the abrasive to the air-wash cleaner, where the abrasive is separated from dust and debris. Debris falls into a waste container, dust is drawn into the dust collector, and reusable, clean abrasive falls into a hopper atop the blast machine.

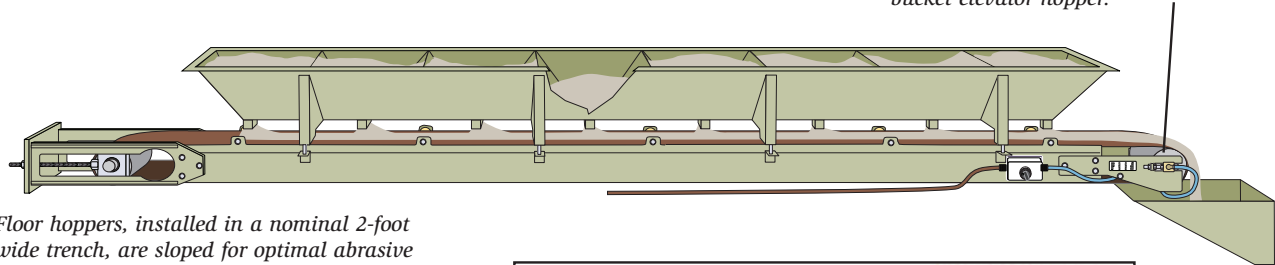
Durable

Collection hoppers are constructed of rugged 10-gauge steel making them ideal for wear resistance and long life. For each run of hoppers, a heavy-duty, multi-ply, endless belt is powered by an electric drum motor. The belt is fabricated to resist wear. The durable bucket elevator assembly has a reinforced PVC belt and tough but lightweight polyethylene buckets.

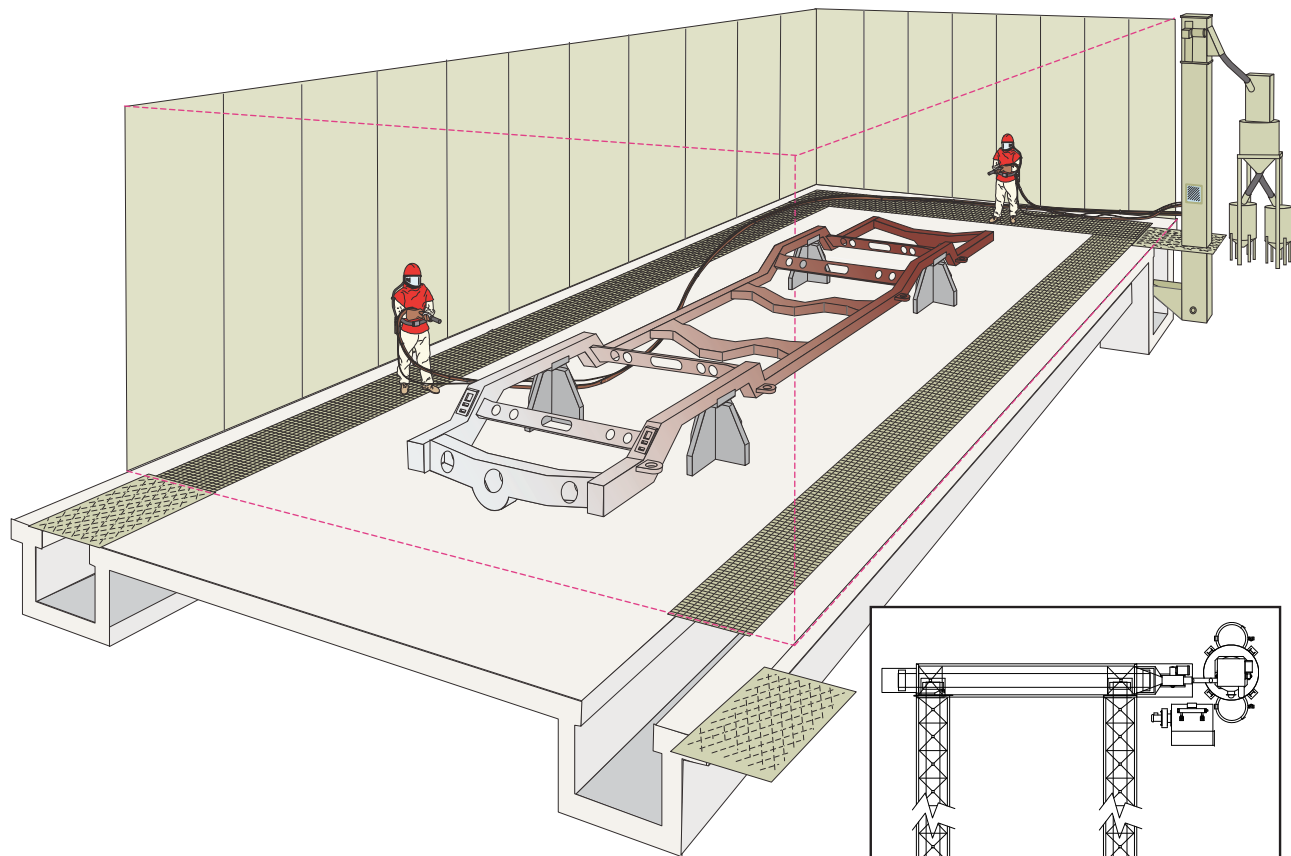
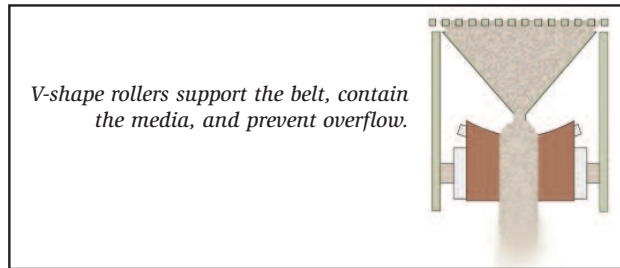
Practically Maintenance Free

Spent abrasive falls into or is swept into the floor collection hoppers and feeds by gravity through a metering tube onto the moving belt.

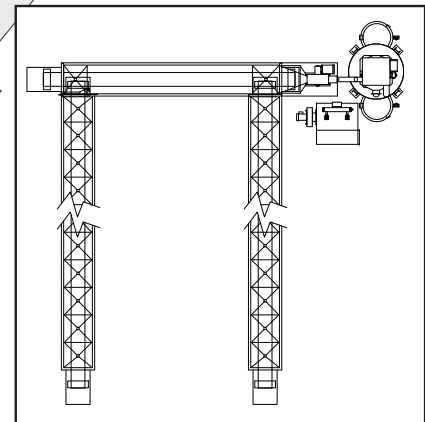
The drum motor, installed at the bucket elevator end, feeds the media into the bucket elevator hopper.



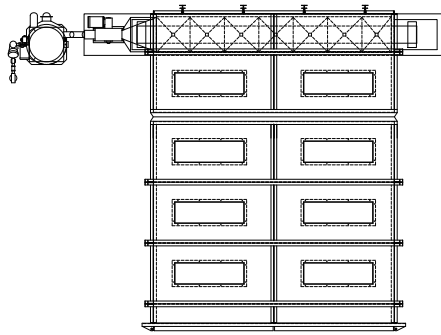
Floor hoppers, installed in a nominal 2-foot wide trench, are sloped for optimal abrasive flow.



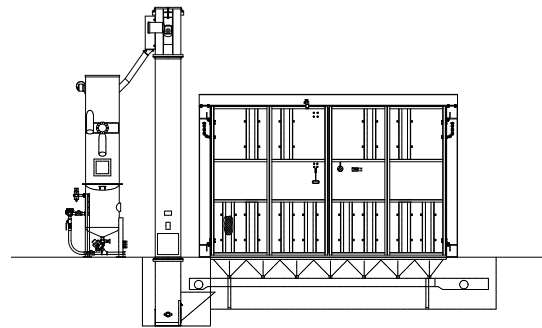
This 22 feet wide x 78 feet long x 17 feet high room features a U-pattern floor, bucket elevator assembly, abrasive cleaner, storage hopper, two 6 cubic foot capacity blast machines and a dust collector to ventilate the room. Media used: steel grit.



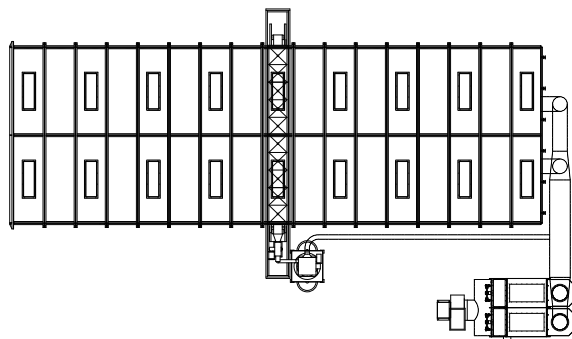
System Configuration Examples



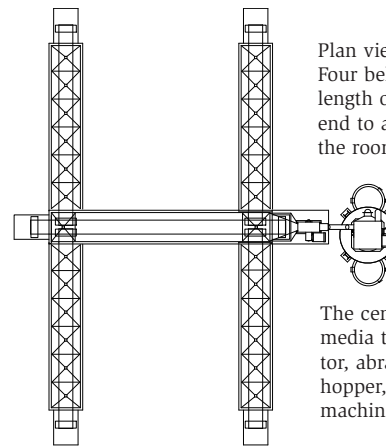
Plan view: Room size 14 ft wide x 18 ft long x 9 ft high. Single belt system runs width of room to bucket elevator and abrasive cleaner mounted atop blast machine.



Elevation view: Pit depth will differ depending upon system configuration. Deeper pit required for multi-belt systems.



Plan view: Room size 20 ft wide x 60 ft long x 16 ft high. Single belt runs width of room in center to bucket elevator, abrasive cleaner, hopper, and two blast machines.



Plan view: 'H' configuration; Four belts serve the full length of room from each end to a fifth belt located in the room's center.

The center belt moves media to the bucket elevator, abrasive cleaner, and hopper, feeding two blast machines.

Standard Specifications:

The Belt Conveyor Recovery System assembly includes: a series of abrasive collection hoppers, each with metering tube, uniform load steel grating, rated 250 pounds per square foot, 12-inch wide belt assembly, 1-1/2 HP drive motor for each belt, bucket elevator, and air-wash abrasive cleaner. Specifications and functional components may differ depending upon system configuration and size.

Each system is engineered to suit specific customer requirements for new or existing blast rooms.

Standard

- ◆ Belt: 12" wide
- ◆ Belt Drive Drum Motor: . . . 1-1/2 HP
- ◆ Floor Grating: 250 lbs per square foot uniform load
- ◆ Trench width: nominal 2-foot width
- ◆ Trench depth: depends upon system configuration

A worldwide network of Clemco offices and Authorized Distributors are staffed by experienced personnel to assist with facility planning, installation, and service.

Industrial Facility Systems and Services

Clemco Industries Corp. designs and builds blast rooms and room components to suit customer applications for all types of blast media. Rooms, floor systems, reclaimers, hoppers, and dust collectors can be purchased separately or as complete turnkey systems. Field service engineers are available for start up, installation supervision, maintenance audits, and training.

Options

- ◆ Grating heavier than 250 lb per square foot
- ◆ Abrasive storage hopper
- ◆ Electrical control panel
- ◆ Blast Machine

Distributed by:

Contact your authorized distributor to request our RFQ form or download it from www.clemcoindustries.com

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