

MRS MANUAL

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1.0- Installation:

1.1 - Dust Collector:

Dust collector should be installed prior to room installation. Place dust collector on level surface. Collector may be installed outdoors providing at minimum, an overhang or roof is provided over unit to afford protection. Collector must be within 15 ft. of blast room. Position collector to easily access doors and filter pulse timer. Install 1" N.P.T. line to filter pulse manifold. 100 airline maximum P.S.I. cartridges must be provided with clean, dry air at all times. Connect 10" flexible duct hose to 10" inlet. See drawing for dust collector install.

1.2 - Motor and Fan:

1.2A - Direct Mount:

Motor and fan assembly up to 10 H.P. may be mounted directly to inlet on top of collector. Flange and hardware provided. Position fan outlet as desired. Connect electrical as required, provide motor starter and fused disconnect. See drawing for dust collector/fan install.

1.2B - Remote Fan Mount:

Large fans (over 10 H.P.) must be ground mounted and securely attached to concrete or steel foundation. Flexible hose or metal duct work is required for connection from dust collector outlet to fan.

1.2C - Filter Pulse Timer:

Requires 115 vac 1 phase. Timer is factory set - optional settings are discussed in operation and maintenance.

2.1 - Blast Room:

2.2 - Floor Excavation:

NOTE: If above ground hopper is utilized hopper should protrude through room at desired location. An opening must be made in enclosure for this hopper. Elevator should be located directly outside room. See MRS drawing.

2.2A - Sweep In Floor:

A steel floor pit is provided to install underground and eliminate concrete or block foundation walls and floor. To find pit location, first locate desired position of blast room and mark accordingly. Viewing the room from the front, the recovery pit will be in the left corner. Measure 30" from left corner of room toward left side. (See sketch) Room will install partially over floor pit (14") to allow for sweep in recovery. Pit dimension excavation is 45 ½ " x 39 ½ " x 30" D. Install floor pit, floor hopper and lower elevator section. (Note marks in pit elevator location.)

2.3 - Room Floor:

Steel floor (1/4 " thick minimum) should be installed if required, prior to wall erection, tack weld floor sections together. Fabricate openings in steel floor and allow sweep in hopper to protrude through floor for screen removal (Floor may be welded to trough.)

2.4-Room Walls:

Locate and assemble back wall of blast room. Secure all hardware. Lay flat on floor with interior side up. Install first roof panel and first (2) side panels to back wall. Secure all hardware. Stand completed assembly upright and position over blast room steel floor. Continue to assemble roof and side panels, spot check with level prior to securing hardware for accuracy. Install front panel with door hinges and secure hardware.

2.5 - Securing Room To Floor:

Angle supports are provided to attach room to floor. Angle may be tack welded to floor for permanent installation. If concrete floor is utilized, room may be moved or dismantled attach angle to floor using tapcon screws or cement anchors.

2.6 - Sealing Room Joints:

A small bead of clear silicone sealant should be applied to all joint surfaces inside the completed room.

2.7 - Door Installation:

Stand front doors and position at hinges provided. Install doors on hinges, check for proper operation. A hole will have to be provided for the door hinge to latch through the room floor. Close doors, mark hole by closing door latch and drill hole approximately 1" into floor.

2.8 - Recovery System Installation:

Locate above ground hopper, and screen. Position hopper at desired location.

Locate storage hopper and mount blast machine with hardware provided. If large capacity storage hopper is provided, bolt legs to hopper (if removed) and stand hopper in desired location (left or right side of room or back corners) attach reclaimers and screen to hopper, and booster fan if provided. Position fan with outlet towards dust collector. Attach 10" flex hose to outlet of fan and to 10" connection on dust collector.

2.9 - Blast Machine Installation:

Position blast machine under hopper. Attach flex hose to blast machine cover. Attach connecting hoses from twinline to corresponding coded connections on blast machine.

3.0 - Final Connections:

Install 10" x 4" tee near airwash separator and connect to 4" outlet w/ slide gate on separator. Connect 10" hose. Install 10" tee on blast room and connect 10" hoses. (Note: hose may be suspended with steel strap or rubber straps for security.) See dust collector drawing.

3.1 - Install Lighting and Covers:

Unpack safety glass and install over lights in ceiling panels. Install fluorescent lights and secure with brackets provided. Electrical connections should be made at this time.

4.1 - Blast Machine and Accessories:

Refer to operating and maintenance instructions for ultra blast machines.

Preparation Prior To Operation:

All functions of the system should be tested independently.

1.) Dust Collector:

- Check rotation of motor/fan.
- Inlet air pressure to filter pulse should not exceed 100 P.S.I.
- Check operation of pulse timer.

2.) Recovery System:

- Inspect elevator for proper rotation. On vacuum recovery systems check motor rotation.
- Pressurize blast machine & inspect for leaks. Then depressurize.
- Fill blast machine with abrasive through hopper door (6 cu. ft. capacity). On large capacity hopper systems fill through recovery trough. (Do Not Overfill)

3.) Blast Room:

- Check for adequate ventilation from collector (i.e. doors should have resistance when opening) within room.
- Check all lights are operating.
- Check operation of safety interlocks.
- Check operation of helmet.
- Operator should outfit himself with all safety equipment including respirator and test operation of blast machine at this time.
- All components should be in operation prior to testing.
- Refer to ultra blast machine operation manual for adjustments, etc. to blast machine.

Initial Operation:

1.) Operator should blast with the system for 15-30 minutes cycling the remote control on/off frequently. (Blasting a small part is ideal for this test.)

2.) To reclaim media in blast room: sweep all material to floor trough or conveyor, depressurize blast machine.

Refer to ultra blast manual and bucket elevator manual for maintenance and trouble shooting information.

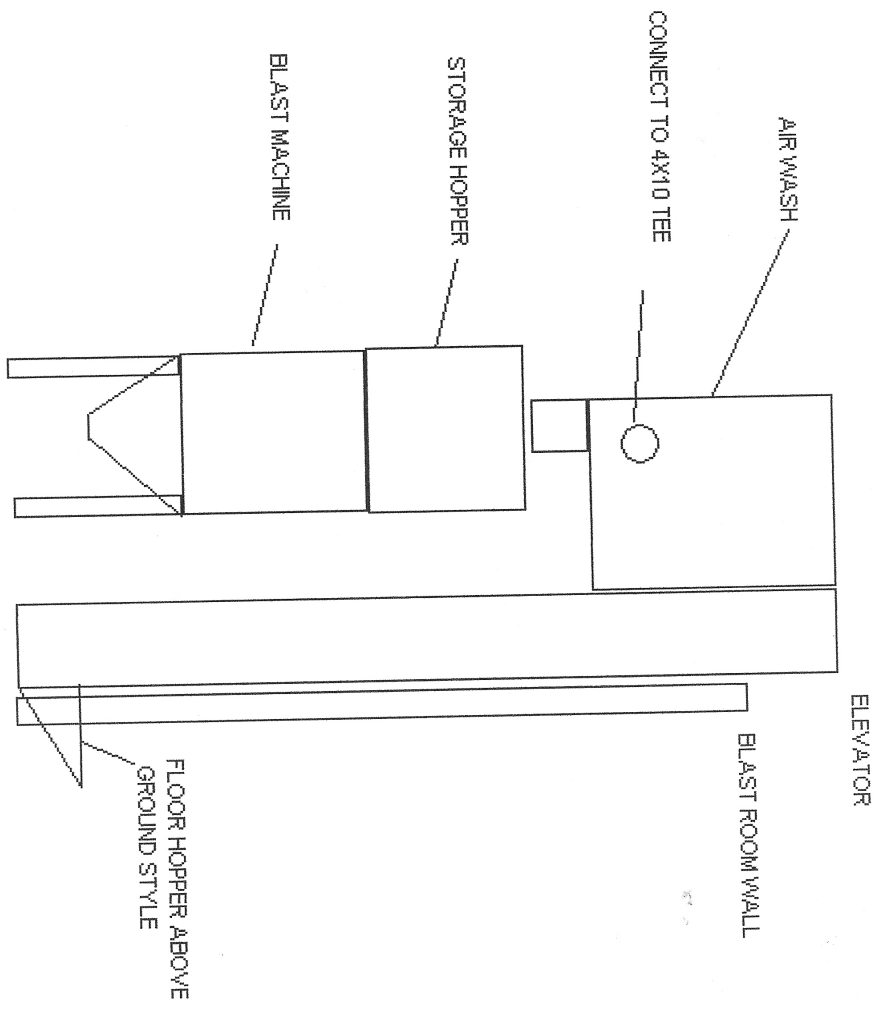
3.) On vacuum systems, check dust collector for good material carry over. If evident, close slide gate on reclaim blower to ½ open. Slide gate will have to be opened as media breaks down and cartridges “season”. (See below)

Helpful Hints:

- 1.) Do not over fill the blast system.
- 2.) Always check for proper ventilation in room - room should not be excessively dusty while blasting.
- 3.) Always operate recovery system when blasting, and especially when attempting to reclaim.
- 4.) Clean secondary screen on rotary separator daily. Clean screen on vacuum systems daily.
- 5.) Empty dust drum on collector daily.

- 6.) Check blast machine, hose, twin line and switch for leaks before operating.
- 7.) Maintain good housekeeping around unit, clean up excessive grit, dust, etc.
- 8.) Repair any leaks immediately.
- 9.) On vacuum systems, it is important to adjust slide gate on reclaim blower for precise media separation. With lightweight media such as plastic slide gate will initially be 3/4 closed to reduce carry over. Open slide gate as material breaks down or media appears dusty. Check dust in collector daily, observe carry over (good media) and adjust accordingly. If little dust is found in collector, open slide gate.

MRS RECLAIM SETUP



DUST COLLECTOR INSTALLATION

