



**SET-UP, OPERATING and MAINTENANCE INSTRUCTIONS**

**For**

**SAFE Systems, Inc.**

**6-Ton, Trailer-mounted Abrasive Blast Machine**

**MODEL #**

**MPD-6**

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### **Before towing**

Check tire air pressure.

Check torque of lug nuts.

Attach safety chains and breakaway cable.

Check pintel hitch surge brake system for proper operation.

Check brake and running lights and trailer brakes.

Remove back-up fork so that the hydraulic system is operational.

## I. INTRODUCTION AND SYSTEM DESCRIPTION

The MPD-6 is a bulk abrasive blast machine with the capacity to service up to four (4) blast operators. With a 120-ft.<sup>3</sup> abrasive capacity, the MPD-6 will allow four (4) blast operators to work up to three (3) hours before having to refill. The MPD-6 can be filled through the hinged manway in the top of the vessel by crane or forklift or can be placed beneath a bulk storage hopper.

The MPD-6 trailer is equipped with hydraulic inertia type brakes, full fenders and tail lights. When fully loaded with grit, it may be towed over roads at speeds up to 35 mph (56 Km/Hr.) or up to highway speeds when empty. When backing up, you must put a fork between the brake and frame of the chassis so that the surge brake won't move in. **Caution** - be sure to remove the fork after you have backed up.

## **II OPERATING PROCEDURE**

1. Close the air inlet valve and open the exhaust valve to make sure the vessel is not pressurized.
2. Remove the safety "T-bolt" from the top of the manway. If there is air escaping from the vessel through the "T-Bolt" **STOP** and go back down the ladder and exhaust the vessel! If no air is coming from the "T-bolt", remove it and undo all the levers to allow the manway bolts to swing out of the way and open the manway.
3. Inspect the interior of the vessel to insure that it is clean and dry.
4. Fill the vessel with dry and clean abrasive.
3. Close the manway and install the safety "T-bolt".
4. Run the blast hoses through the back of the trailer and connect to the S4C metering valves be sure to wire the hose couplings together.
5. Connect the remote control cords to their proper receptacles on the bottom side on the control box.
6. Connect control system to power source. Check the control box label for the correct voltage. Note power indicator light.
7. Connect air lines from compressor to blast machine.
8. Start air compressor and allow it to build up maximum pressure.
9. Open valve from compressor to blast machine. **DO NOT** open air supply valve on the blast machine unit until the compressor has reached maximum pressure.
10. Close the exhaust valve and open the main air supply valve (red) and allow the unit to pressurize. While the unit is pressurizing, open the manifold drain valves (white) slightly to remove excess moisture. These valves can be left slightly open while blasting.
11. Each operator station is equipped with two (2) valves. Air supply (green) and abrasive supply (black). These valves should be open completely while blasting. **DO NOT** use the abrasive supply valve (black) to meter the amount of abrasive. This will only damage the valve internally.
12. To regulate the amount of abrasives, turn the air regular valves at the bottom of the control box to the corresponding outlet. More pressure equals (clockwise) more grit; less pressure (counter clockwise) equals less grit. **Do not adjust the ½" nuts on the S4C abrasive metering valve.**
13. The S4C valve is a fail-safe valve that is normally closed so it takes air pressure to open the valve. This valve allows the operator to "blow down" an area that has been blasted from the deadman switch. This is a 3 wire deadman system. Push the deadman switch **down** and you get air ONLY. Push the deadman switch **up** and you get air and grit.

**To depressurize the blast machine:**

1. Close the main air supply valve (red).
2. Shut down the air compressor.
3. Open exhaust valve (blue).

**III EQUIPMENT RETURN**

1. Secure and disconnect the compressed air from the equipment.
2. Secure/disconnect the AC power from the equipment and coil the power cord up for transport.
3. Remove **ALL** the abrasive from the inside of the vessel. This may require vacuuming it out or dropping one or more valves to drain it out and sending someone inside the vessel to push the abrasive to the hole(s).
4. Remove the deadman cords and switches from the blast hose and coil them up for shipment back to SRS. Inc.
5. Close all open valves for transport.
6. Wash the exterior of the unit if it is dirty or muddy beyond normal conditions.
7. Gather and secure for transport all the accessories sent with the equipment
8. Properly secure the equipment on the trailer using proper tie-down procedures. Use the lifting eyes for attachment of the chains or straps. This will minimize the risk of causing damage to the unit during transport.
9. If towing the unit, make sure it is connected to a properly sized and equipped tow vehicle. Check the brakes and lights prior to towing.
10. Make a note of any problems experienced during the operation of this equipment and a contact name and phone number so our technician can contact this person. Give this note to the delivery person returning the equipment.
11. We hope this equipment rental went well for you and we look forward to assisting your company in future projects. Thank you for your business.