

Operators must follow all OSHA and NIOSH rules and regulations for the proper use of abrasive blasting equipment. Caution must be also paid to the following:

- Any and all recommendations and instructions, especially basic safety instructions included in the operators manual!
- This equipment must be operated by trained and skilled personnel only!
- The magnet of the remote control must always be securely tied to the operators wrist!
- Protective clothing, helmet, hearing and respiratory protection must always be worn!
- Before operating the equipment, make sure all components are in working order!
- If further information is needed and not included on this short version operators manual, please see the main manual included with your equipment!

## 1. Machine setup procedures

- Close ball valve „P“ (1).
- Connect abrasive feed hose (17), water hose on coupling (E), air hose on coupling (B), power cable (A) on 12V DC, remote control (6) with additional cable to coupling (D), and blast hose (18) with nozzle (15) to coupling (C).
- Connect the remote (6) approx. 12 inches behind the blast nozzle (15).
- Check all electrical, air, water, blast hose connections and apply safety pins where required.
- Select the abrasive, start the compressor, open the water supply and compressed air supply to the machine.

## 2. Filling the machine with abrasive/water

- Turn metering valve „S“ (7) to position „D“ and open valve (22 & 23).
- Add the abrasive through the loading hopper into the pressure vessel until abrasive flows from the overflow hose (20).

- Close valves (20, 22 & 23).
- Raise the loading hopper back, make sure the pressure vessel is totally full of water, and pull up on the vessel sealing disc (19).
- Lower the hopper to the rubber rest, set the water output pressure gauge (5) with regulator control (4) to 170 PSI.

## 3. To start blasting

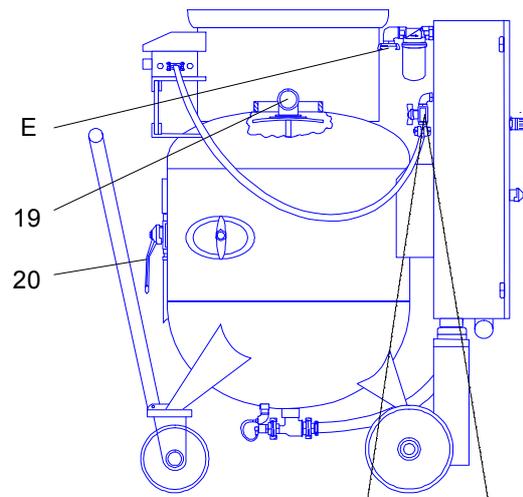
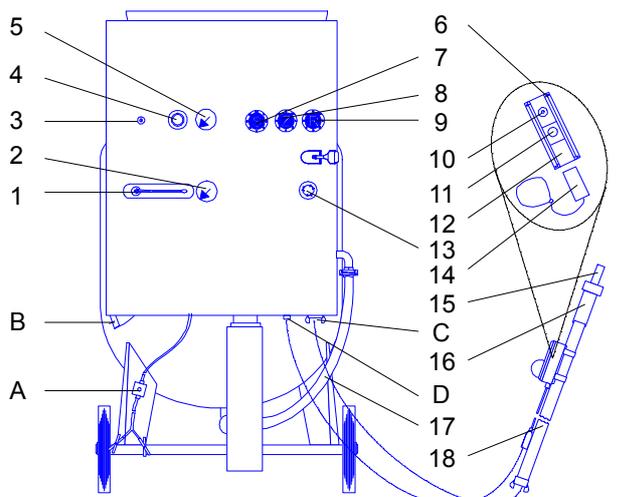
- Set valves (1, 7, 8, 9 & 21) to the recommended settings (see back page).
- Attach magnet (14) to operators wrist and keep a firm hold of the blast hose (18).
- To start, put the magnet (14) into the correct opening (12) of the remote control (6), activate push button (11) to start, then select function with 3-way switch (10).
- To start blasting, move switch (10) to position III (left).
- For wash down, move switch (10) to position II (right).
- For drying (air only), move switch (10) to middle position.
- To switch off, remove magnet (14) from opening (12).

## 4. Machine shut-down procedures

- Close valve „P“ (1) and turn off main switch – inside or with the EMERGENCY-OFF-switch (13).
- Close compressed air valve at compressor, turn off the compressor and open valve (20).

If the machine is to be shut down for an extended period of time, the following measures must be taken:

- Close water supply feeding the machine, uncouple hose (17), and empty vessel.
- Push the relief valve (3) until air flow stops.
- Remove power cable (A), air hose from coupling (B), and water hose from coupling (E).
- Remove remote control (6), and additional cable from blast hose (18) and coupling (D) in the control cabinet, and blast hose (18) from coupling (C).



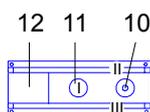
No. 1



No. 4



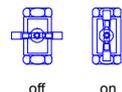
No. 6



No. 7, 8, 9



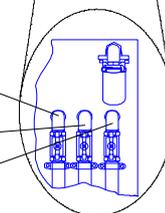
No. 21, 22, 23



21

22

23



## Adjustments and settings !

**Table 1: Settings**

	Type of Abrasive	Abrasive Metering Valve Setting (7) l/min	Blast-pressure valve (1) PSI (bar)	Blast nozzle (15) No (mm)
Cleaning up to 30 PSI (2 bar)	a) d)	0,4 / 0,6 / 0,8 / 1,0 / 1,5	8 to 30 (0,5 bis 2,0)	4, 5 or 6 (6 bis 10)
Cleaning up to 70 PSI (5 bar)	a) b)	0,6 / 0,8 / 1,0 / 1,5 / 2,0	15 to 70 (1,0 bis 5,0)	6 or 8 (10 to 12)
Blasting up to 180 cu ft./min. (5 m <sup>3</sup> /min)	b) c)	2,0 / 3,0	up to 140 (up to 10)	6 or 8 (10 to 12)
Blasting up to 250 cu ft./min. (7 m <sup>3</sup> /min)	b) c)	3,0 / 4,0	up to 140 (up to 10)	8 or 9 (12 up to 14)
Blasting up to 350 cu ft./min. (10 m <sup>3</sup> /min)	b) c)	4,0 / 5,0	up to 140 (up to 10)	9 or 10 (14 up to 16)
Blasting up to 530 cu ft./min. (15 m <sup>3</sup> /min)	b) c)	4,0 / 5,0 / 6,0 / 8,0	up to 140 (up to 10)	9 or 10 (14 up to 16)

The data given in the table above are approx. values only and may differ from case to case.

### Information for table 1

Column 2 "Type of Abrasive"

- a) very soft abrasives without sharp edges, up to mesh 60 and with a hardness up to 4 Mohs.
- b) glass beads, glass powder and other fine abrasives up to mesh 30 and with a hardness up to 8 Mohs.
- c) slag, sand, garnet and other abrasives up to mesh 12 (10), and with a hardness up to 8 to 9 Mohs.
- d) Sodium Bicarbonate, (suitable for the removal of paint and coatings without damaging the substrate).



- In order to ensure a good flow of abrasive it is recommended to use an abrasive containing superfines and fines of particles.
- To achieve a more delicate blast/clean, you may have to use additional water (valve 8).

Column 3 "Abrasive Metering Valve Setting (7)"



- For blast/cleaning always test soft abrasives first.
- The abrasive is already mixed with 20% water. If you need more water for delicate cleaning, you may have to use additional water (valve 8).

Column 4 „Blast-pressure valve (1)“



- For blast/cleaning always test with a low blast pressure first (valve 1)
- The blasting pressure (gauge 2) at the machine and at the blast nozzle may differ with different length and different diameter of blast hose.

**Table 2: Max. compressor size in relation to blast nozzle.**

Diameter blast nozzle size (15)	mm (No.)	6 (4)	8 (5)	10 (6)	12 (8)	14 (9)	16 (10)
Compressor output (B)	m <sup>3</sup> /min	1,8	3,2	5,0	7,2	9,8	12,8
	cu ft./min.	65	115	180	255	345	450
Blasting hose size (C, 18)	Inch	1/2 or 3/4	3/4 or 1	1 or 5/4	5/4	5/4 or 1 1/2	5/4 or 1 1/2
	mm	13 or 19	19 or 25	25 or 32	32	32 or 38	32 or 38
Compressed-air hose size (B)	Inch	3/4	1 or 5/4	5/4	1 1/2 or 2	2	2
	mm	19	25 or 32	32	38 or 49	49	49