



# torbo®

## Wet Abrasive Blasting Systems

„Picture – short manual“ 181006  
torbo® S080 to torbo® M120 - electric  
10/2006 english

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## 1. Code of Practice

It must always be adhered to the rules and regulations valid for wet abrasive blasting and also to the valid rules and regulations for the prevention of accidents to be applied to the respective field of application; special attention must be paid to the following (extract from the Instructions for Operation):

- Any and all recommendations and instructions, in particular the basic safety instructions included in the instructions for operation!
- The machine must be operated by trained and skilled personnel only!
- The blasting lance should never be directed towards persons and/or animals!
- The magnetic clamp of the remote control must always be securely fixed at the wrist!
- Helmet, hearing- and breathing protection apparatus must always be worn!
- Protective clothing must always be worn!
- Before putting into operation make sure that the machine and its accessories are in perfect condition.
- The compressor must always be operated without tool lubricator.

## 2. Setting up



Pic. 1



Pic. 2



Pic. 3



Pic. 4

1. place the machine on a flat and firmer area.
2. push the footbrake at the wheels on the back side (torbo S120 and M120).
3. close the handle bar for blasting pressure. (lever is in a horizontal position).
4. close valve for pressure relief (lever shows up).

## 3. Connect



Pic. 5



Pic. 6



Pic. 6, Info

5. unlock the emergency Stopp (turn the red cap to the right and release the cap).

6. connect the blasting-mixture-hose underneath the vessel and on the right side of the control cabinet.

*INFO:* the coupling with the tension ring must be underneath the vessel.



Pic. 7



Pic. 7, Info

7. connect the air-pressure-hose at the machine.

**ATTENTION:** protect the coupling with a locking pin against loosening.



Pic. 8

8. connect the water-hose at the machine.



Pic. 9



Pic. 9, Info

9. connect the power cable on a 12 volt DC power source.  
(e.g. battery of the compressor).

*INFO:* red pole tong at plus „+“ and the black tang at minus „-“; the LED lights green.

## 4. Filling

### 4.1. first filling at location



Pic. 10



Pic. 11

10. open the handle bar at the overflow  
(the lever shows up).

11. open the valve for water to the sieve top  
(handle bar shows up – extra equipment).



Pic. 12



Pic. 13

12. open the handle bar for blasting/washing  
(handle bar shows in the way of the hose –  
extra equipment).

13. turn the arrow at the dosing valve „S“ on  
position „D“.  
turn the arrow at the dosing valve „Z/R“ on  
position „D“ (extra equipment).



Pic. 14



Pic. 15

open now the pressure air and water to the machine.

14. start with filling of the blasting media into the vessel.

15. fill in blasting media till it flows out of the overflow.



Pic. 16



Pic. 17

- 16. close the handle bar at the overflow (handle bar shows to the right)
- 17. close handle bar for water to the sieve top (handle bar shows horizontal – extra equipment).



Pic. 18



Pic. 19

- 18. disconnect the water-hose from the sieve top. hold the loose end over the sieve top (extra equipment).
  - 19. open the water to the sieve top again (extra equipment). (handle bar shows up – extra equipment).
- flush the remaining blasting media into the vessel (extra equipment).



Pic. 20



Pic. 21

- 20. close the water to the sieve top (handle bar shows horizontal – extra equipment).
- 21. tip over the sieve top / take off the sieve top.



Pic. 22



Pic. 23

- 22. wait until water flows over the top of the vessel.
- INFO:* with water from the water-hose of the sieve top is the filling up of the vessel quicker.
- 23. turn the vessel closure to clean it from rests of blasting media.



Pic. 24



Pic. 25

- 24. pull up the vessel locking by the ring until the pressure has built up.
- INFO:* place the sieve top back on the top of the vessel.
- 25. lift up the black screw cap for vessel pressure control.. set the pressure at 11 to 12 bar by turning the screw cap. (see gauge next to the screw cap). push the screw cap in.

*INFO:* if the pressure is over 12 bar the safety relief valve opens. is these happens step 14 to 24 have to repeat.



Pic. 26

**INFO:** turn the screw cap  
 - to the left -> less pressure  
 - to the right -> more pressure.

26. turn the handle bar for blasting pressure slightly up.

check the machine for leak tightness.

- a) audio test (disappear air or water out of the machine?)  
 b) view test (disappear water out of the machine?)

is there a leakiness so solve the problem first or call you dealer before working with the machine.

**ATTENTION:** observe the details and safety instructions in the manual to the machine!



Pic. 27



Pic. 28

27. connect the blasting nozzle with the blasting hose.  
 (connector assembly with cap nut or (see picture) with coupling).

28. connect the remote control at the extension cable.



Pic. 29



Pic. 30

29. attach the remote control with the belts approx. 30 cm (12 inch) behind the nozzle holder at the blasting lance..

30. connect the other end of the extension cable at the machine.



Pic. 31

31. connect the other end of the blasting hose at the machine.

**ATTENTION:** protect the coupling with a locking pin against loosening.

## 4.2. Second filling at location

with repeated felling repeat step 10 to 24.

**INFO:** step 25 to 31 are only necessary with the first filling at the lokation.

## 5. Setting



Pic. 32



Pic. 33



Pic. 34

32. set blasting media at handwheel „S“  
set extra water at handwheel „Z“, to increase the water-proportion in the blasting mixture (for soft cleaning – extra equipment) (see chapter „3. Information for Practice in the manual“)

33. wear necessary and legal working clothes.

34. start the machine and set the blasting pressure at the handle bar.  
(see chapter „3. Information for Practice in the manual“)

**ATTENTION:** read first the chapter „6. start blasting“ and „7. stop blasting“.

**INFO:** setting of the blasting pressure is only possible during blasting.  
the pressure is shown at the gauge next to the handle bar.

## 6. Start blasting



Pic. 35



Pic. 36

35. fix the magnet of the remote control always securely at the wrist.

36. have a secured hold at blasting lance (blasting nozzle with blasting hose and remote control) and put magnet on the position at the remote control.  
to start: press the push-button

**ATTENTION:** the higher the blasting pressure is, the higher is the back pressure at the nozzle!

## 7. Stop blasting

### 7.1. Short stop



Pic. 37



Pic. 38

37. to stop: remove magnet from remote control.

38. **ATTENTION:** If necessary, the machine can also be switched off by pushing the EMERGENCY-OFF switch!

## 7.2. stop blasting (e.g. lunch)



Pic. 39



Pic. 40



Pic. 41

39. to stop: remove magnet from remote control.

40. **ATTENTION:** If necessary, the machine can also be switched off by pushing the EMERGENCY-OFF switch!

41. open the handle bar at the overflow.

interrupt the air pressure to the machine.

interrupt the water feed to the machine.

## 7.3. stop blasting (e.g. over night)



Pic. 42



Pic. 42, Info

42. to stop: remove magnet from remote control;  
open handle bar at the overflow (see step 41).

**ATTENTION:** If necessary, the machine can also be switched off by pushing the EMERGENCY-OFF switch!



Pic. 43



Pic. 44

43. disconnect the pole tongs from the power supply.

44. disconnect the remote control and extension cable from the machine and save these.



Pic. 45



Pic. 46

45. disconnect the blasting hose and save these.

46. disconnect the air supply and save these.



Pic. 47



Pic. 48

47. disconnect the water supply.

48. additional to this, the vessel has to be emptied for following reasons:  
 a) usage of a soluble blasting media,  
 b) usage of a blasting media which get hardens in combination with water (e.g. soda),  
 c) change blasting media.

#### 7.4. Stop blasting (e.g. relocation)



Pic. 49



Pic. 50

see chapter „7.3 stop blasting and follow the next steps:

49. disconnect the blasting-mixture-hose and empty vessel;  
 and disconnect the second coupling of the mixture hose.

50. open vessel closure, clean vessel inside with water and close vessel closure.

clean the blasting hose inside with air pressure.