IMPORTANT INFORMATION for the AquaBlast® Elite 3.0 Washout Machine

Welcome to the CrystalBlast® Family! You have just purchased one of the AquaBlast® Film Washout Machines. This machine is designed, built, manufactured and assembled in the USA by Media Blast & Abrasive Inc. Established in 1977 and building fine Sandcarving and Film Washout Machines for almost 5 Decades. It replaces our High Voltage AquaBlast 2.0 model.

Always observe all OSHA Codes for Machine Set Up, Operation, and Service/Maintenance regarding Electrical and Service Lockout Tags..

This machine is very easy to operate and maintain. However, there are a few important issues to take into consideration.

- **NEVER STORE AT ANY LOCATION WHERE THE MACHINE IS SUBJECT TO FREEZING TEMPERATURES.** This includes any time the equipment may have a location change in a facility.
- **MAKE SURE YOUR 120-VOLT SINGLE PHASE 20 AMP SERVICE IS DEDICATED AND GROUNDED.** The setup for this machine is simple, if you are unfamiliar with electrical you need to hire a qualified electrician. The service requires 12 gauge wiring, a dedicated service using a 20 Amp GFI Safety Circuit Power Cord, included. The 20 amp GFI Power Cord has a different male plug end. Media Blast has provided an approved adaptor to plug into a standard 20 Amp 12 Ga Grounded Dedicated Service Outlet allowing the use of the 20 amp GFI Plug. The service outlet must be grounded or the AquaBlast will not power up. Make sure your standard service outlet is rated for 20 amps and includes ground wire.
- **THIS MACHINE REQUIRES STATIC WATER PRESSURE AT THE INLET OF 40 PSI, AND THE SUPPLY LINE MUST BE TESTED FOR GALLONS PER MINUTE FLOW.** This is a Patented High Pressure Washout Machine operating using less heated water than all other film washout equipment. With its faster washout and green operating conditions, it is capable of paying for the cost of the machine with saved heated water costs. Before installing the equipment, you want to test your water flow supply for a volume in gallons per minute. It must be at least 4 gallons per minute. The machine will never use more than 4 gallons per minute, and it will operate with less, but lower processing pressures may increase washout times a few seconds.
- **DO NOT OPERATE WITH PRESSURES ABOVE 300 PSI.** This is a booster pump and uses the final boosted pump pressure, then adds your supplied inlet pressure to produce the final running pump pressure for the washout. A monitor gauge has been supplied to indicate the final operating pressure.
- **WHEN NOT USING THE MACHINE, YOU ALWAYS LEAVE THE WASHOUT CHAMPER OPEN.** This machine includes a safety switch to prevent operation with the washout chamber open. The washout drum is powder coated mild steel to allow the film to use the magnetic holding strips. Leaving the washout chamber closed when not using can cause premature rusting of the washout drum.
- **YOU CAN MONITOR THE CONDITION OF THE WASHOUT NOZZLES USING THE MONITOR PRESSURE GAUGE.** Nozzles can be worn with time and your processing pressure can lower. Using this information can tell the user when nozzle replacement may be required vs time saved for film washout. Do not process parts with plugged nozzles. In addition to missing an area of the film, the monitor pressure gauge can indicate a higher processing pressure.
- **HAVING GOOD HOUSE KEEPING IS IMPORTANT.** Cleaning around the drain outlet area determined by the DDC, Daily Duty Cycle of the equipment, is important. A clean drain area equals fast waste draining.
- **USE MBA REPLACEMENT COMPONENTS.** Replacement of worn components with non-MBA parts may void the machine warranty. The components used by Media Blast are of the highest quality and will provide the most serviceable life for machine design.
- **REVIEW THE TROUBLESHOOTING GUIDE AND FOLLOW THE INSTRUCTIONS PRIOR TO CALLING MBA FOR TROUBLESHOOTING ASSISTANCE.** Most problems associated with the machine can be identified by simply consulting the Troubleshooting Guide. Nearly all equipment malfunction issues can be resolved over the telephone.
- **MAXIMUM WATER TEMPERATURE.** The AquaBlast 3.0 has a much higher water inlet processing pressure of 165°. This is higher than all other machine models and higher than our Pro Model in our middle position.
- **WITH THE AQUABLAST 3.0 MODEL, IT IS VERY IMPORTANT TO NOT OPERATE THE MACHINE OR NEVER ALLOW THE FOLLOWING CONDITIONS TO OCCUR:**
  1. Lower water inlet pressure than 40 psi and static flow less than 4 gallons per minute. The Patented AquaBlast does not use a stored water tank. This eliminates overflows, running out of required 9 to 10 gallons per minute, and loss of water temperature due to tank storage.
  2. Conditions where the possibility of a temperature freeze may exist.
  3. Operating conditions of more than 300 psi processing pressure
  4. Operation without the supplied GFI Safety Circuit supplied.
  5. Operation on a Non-Dedicated Service Outlet

AQUABLAST® ELITE 3.0 MACHINE "QUICK SET-UP" SHEET

Please review the main manual completely - These sheets are the Quick Operation Sheet you should read even if you are already familiar with the AquaBlast models. Important information is listed in red

1. Unpack and place the machine, install any parts packed inside the washout chamber for user assembly. This may include casters, and more, see the main machine manual.
2. Install the power, water supply, and drain as indicated in the main manual for the equipment.
3. Plug the machine into a dedicated 120-volt 20 amp single phase service outlet and never use extension cords. 20 amp requires 12 ga wiring, dedicated service prevent circuit breaker trips.
4. Never cycle the pump before removing the air from the machine. After the installation is complete, open the water valve and using the manual washout gun, trigger the gun until water exits the nozzle tip. At this time the air has been removed from the machine.
5. Test the water drain, making sure the wastewater is being removed.
6. Open the washout chamber and use the manual washout gun to wet the drum surface. This will help you to position the film on the drum surface. Use the magnetic strips to overlap the film edge and hold the film in position during the washout cycle.
7. The AquaBlast Elite 3.0 has the largest drum size in the industry, fastest processing time and lowest cost of operation today.
8. Turn the On-Off Selector Switch to the ON position, this will power up the controls making the machine ready for operation.
9. Open the washout chamber and position the film on the drum using the supplied magnetic holding strips.
10. Close the washout chamber at this time making sure the chamber is seated against the seal. You can use the heavy duty handle to seat the cover against the seal by lightly pushing down on the handle.
11. Set the Digital Timer for the washout cycle time. Test some film to make sure the time is right for the film type and thickness if you have never operated an AquaBlast before.
12. Using the Cycle Switch, start the timed washout cycle, you can view the nozzle patterns making sure all nozzles are operating properly using the included view window.
13. When the cycle stops, open the washout chamber and inspect the film washout cycle. You can use the manual washout gun to concentrate on any area you feel was not washed out completely.
14. In addition to number 13 above you can close the washout chamber, using the jog button hold down and the drum will rotate and activate the washout pump. If you are using the jog for more than 20 seconds, readjust your washout timer setting.
15. Open and inspect the film for timed washout, you can create a logbook to establish the pressure, and washout processing time, note the film thickness for future use.
16. If the film includes detailed part areas that have not been washed out, you can use the manual washout gun to complete any missing washout areas.
17. Remove the processed film by first removing the strip magnets understanding all AquaBlast models include a double pan top allowing even drips and spilled coffee to be directed to the wastewater. This is just one of the many special features included with the AquaBlast Elite 3.0 remembering it saves old costly washout machines having a substantially higher washout cost.
18. If all washouts are now complete, power off and leave the washout chamber open to dry the drum, always remove the magnets from the drum to prevent pre-mature drum rusting..
19. The AquaBlast Elite 3.0 has an optional mechanical temperature gauge installed by the factory before machine shipment. It includes the mechanical temperature gauge with protective cover guard, and plumbing parts allowing only vertical downward gauge observation. This protects the gauge from possible damage allowing easy observation for inlet water temperature. Ask for details about this option, it can be purchased and added by the user at any later date.

QUICK OPERATION SHEET AquaBlast Elite 3.0

Your machine has now been connected to electrical power, water, and the waste water drain using the instructions from the Quick Set-Up Sheet above.

POWER UP THE INSTALLED MACHINE:

- Turn the On-Off power switch to the ON position. This will supply the power needed to operate the machine.
- An EMERGENCY STOP BUTTON has been supplied to allow the machine to be stopped at any time.

SET THE CYCLE TIMER:

- If you know the processing time, set it now on the digital timer. See the manual for more details.

OPEN THE MAIN WATER INLET VALVE.

LOAD THE FILM ON THE DRUM:

- Always pre-wet the drum if it is dry, use the manual washout gun for the step. Place the film centering on the drum and use the strip magnets to hold the film in position during the washout process.

CLOSE THE WASHOUT COVER MAKING SURE THE COVER IS SEATED AGAINST THE LID SEAL

- Use the washout chamber handle to close and set the washout chamber against the chamber seal.

PRESS THE CYCLE START SWITCH TO BEGIN THE TIMED WASHOUT CYCLE:

OPEN AFTER WASHOUT CYCLE ENDS AND INSPECT THE FILM AT THE TIME FOR WASHOUT:

- Use the manual washout gun if any area is not completely washout out with the washout chamber open or close the washout chamber and use the jog button, holding down, to rotate the drum and activate the washout pump. We suggest that you reset the timer if you add more than 20 seconds of additional washout time using the jog circuit.

OPEN THE WASHOUT CHAMBER AND REMOVE THE FILM:

- The AquaBlast Elite 3.0 can include an optional mechanical temperature gauge installed by the factory before machine shipment. It includes the mechanical temperature gauge with protective cover guard, and necessary plumbing parts allowing only vertical downward gauge observation. This protects the 2-1/2" gauge from possible damage allowing easy observation of the inlet water temperature. Ask for details about this option, it can be purchased and added by the user at any later date.

LOAD ANOTHER WASHOUT OR LEAVE THE CHAMBER OPEN TO DRY WHEN DAILY USE IS OVER.

- Always remove the holding magnets from the drum when the washout cycle is finished for the day. Leave the chamber open to dry. Premature rusting of the drum can occur when this is not observed.

TURN OFF THE MAIN WATER INLET VALVE AT THIS TIME.

CLEAN THE AREA AROUND THE WASHOUT CHAMBER DRAIN AT THIS TIME:

- ✓ NEVER USE EXTENSION CORDS, INSTALL ON DEDICATED 20 AMP SERVICE ONLY, 12 GA. WIRE WITH GOUND..
- ✓ IMPROPER WIRING WILL NOT ALLOW THE GFI TO WORK..
- ✓ NEVER STORE THE MACHINE AT ANY LOCATION SUBJECT TO FREEZING TEMPERATURES..
- ✓ ALWAYS LEAVE THE PROCESSING CHAMBER OPEN WHEN NOT BEING USED..
- ✓ NEVER STORE THE MAGNETS ON THE DRUM WHEN NOT IN USE..
- ✓ MAINTAIN GOOD HOUSE-KEEPING AND CLEAN THE WASTEWATER DRAIN SCREEN DAILY..