



www.Dawson-Macdonald.com

800-556-4456

Dawson-Macdonald Company

845 Woburn Street

Wilmington MA 01887 USA

mhanna@dawson-macdonald.com



Blasting tips and updates are seen at www.BlastPrep.com

Preventive Maintenance for Blasters: Automation, Rooms & Cabinets

Preventive maintenance, proper training, type of abrasive used, and how the system is used drastically affects productivity & downtime, as well as actual service intervals required. Use this guide in conjunction with your Operating Manual – please refer to it for proper installation, operation, safety, troubleshooting tips, recommended spare parts, and other useful information.

Upon Start-up every day:

- ✓ Drain moisture. *Helpful tips:*
- ✓ Verify blast pressure ___ PSI. – Compressed air source must be clean and dry!
- ✓ Check & (if necessary) adjust blast flow. – Lowest pressure that gets the job done right in the required time.
- ✓ Correct any safety deficiencies. – Make it a 'lean' mix – a 'shadow' from nozzle.
- ✓ Report and fix any operational problems. –Never operate an unsafe machine.
- ✓ Clean machine and sweep area. – Check integrity, wear, & condition of unit.
- ✓ – Use safety matting when using round media: shot or bead.

And every four hours:

- ✓ Pushbutton clean dust collector filters – If not automated; Push-button shaker style or pulse jet.
- ✓ Empty dust collector (s). – Use dust mask; clean up afterwards.
- ✓ Add abrasive (don't overfill). – Use (optional) sight plugs on direct-pressure systems.
- ✓ Inspect blast media in the hopper & dust in the collector
 - Only when too much good media is found in the dust, or if too much dust is in the working mix of media should you readjust the reclaimer (or air wash) tuning or damper. Give replacement dust collector filters a week to “season” before re-tuning the system. Let the adjustments “take hold” for several hours before re-inspection and re-tuning.

Periodic Inspection Recommendations

Blast systems:

	<u>Interval (hours):</u>
○ Inspect nozzle for wear (+1/16" is worn, measured with drill bit or test mandrel)...	40...200
○ Inspect nozzle washer...	8...80
○ Inspect blast hose for soft spots...	Daily
○ Inspect couplings & their gaskets; use appropriate lube when reassembling...	40...200
○ Check for safety pins & whip checks on couplings...	Regularly
○ Check for rapid shutdown of:	
✚ Foot treadle on cabinet...	Monthly
✚ OSHA door interlock switch(es)...	Weekly
✚ Deadman on portable systems and blast rooms...	Weekly
○ Check air hoses for leaks, deterioration, or loose fittings...	Monthly

Reclaimer and dust collector:

○ Clean reclaimer screen...	8...40
○ Clean (optional) reclaimer magnet...	8...40
○ Inspect conveying hose, if standard duty style...	40-200
○ Inspect conveying hose, if heavy duty style...	500...1000
(if the blast room PRS is continuously “on”, then inspect the hose...	Weekly
○ Inspect dust hose or duct...	500...1000
○ Monitor dust collector gauge for aging filters...	Weekly
○ Monitor exhaust of dust collector for any emissions...	Regularly

Note: Do NOT take filters out for “cleaning.” Do not blow them off.

- o Thoroughly inspect *all* gaskets including reclaimer access door & dust dump door, or drum lid gasket... Monthly

Cabinet:

- o Inspect gloves... 8...40
- o Check lights for operation (replace using appropriate gasket)... 40
- o Clean/replace safety glass or optional protector... Daily or as needed
- o Inspect/replace air inlet filters... Bi-weekly
- o Inspect door gaskets... Biannually

Direct-pressure systems:

- o Inspect sealing ring and plunger... 500...1000
- o Inspect exhaust hose & hose barbs or couplings... 500...1000
- o Inspect exhaust valve with standard ceramic restrictor... 200
- o Inspect exhaust valve with (optional) boron restrictor... 1000...2000
- o Inspect pinch tube in grit valve... 500...1000
- o Inspect air & grit valve diaphragms and springs... 1000
- o Clean sight plugs, re-seal and tighten... As needed

Suction (siphon) systems:

- o Clean & rotate air jet when using glass bead and non-harsh media... 200...1000
- o Clean & rotate air jet when using harsh media... 200

Accessories:

- o Inspect/grease turntable bearings and cart wheels... Biannually
- o Check vertical door seals and integrity... Monthly
- o Replace rubber curtains and other protective or wear-prone surfaces... As needed

Blast Rooms:

- o Respirator system... Daily
- o Clean or replace Lexan® covers on lights... 500...1000
- o Replace air inlet filter on Bullard Free-Air Pump... 500
- o Replace carbon exhaust filter on Bullard Free-Air Pump... 200
- o Replace large element in your Personal Air Filter... If odors detected
- o Recalibrate CO Monitor (record in logbook for OSHA)... Monthly
- o Inspect recovery trough... 500...1000

Supplies (available at 1-800-556-4456):

- o Check spare parts and media inventory, and reorder accordingly... Weekly

A thorough Preventive Maintenance & Training program is available through Dawson-Macdonald, utilizing our highly experienced staff – and highly recommended every six months for most operations, under normal 8-hour working conditions.

About Us: Dawson-Macdonald is the most experienced full-service, stocking supplier for all of your abrasive blasting and dust collection needs. We're brick and mortar and nearby – for fast service.

Parts – Service – Rentals – Blast Lab – Preventative Maintenance Equipment – Abrasives – Advice.

Use of an hour meter (measuring actual blasting hours) is highly advised.



Also keep a logbook.



© Mark Hanna & BlastPrep.com 2017