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Preventive Maintenance for Typical Blast Systems

The following tips and checklist is provided by Dawson-Macdonald Company, Inc to help you maintain a typical abrasive blast cabinet. The type of abrasive employed and how the cabinet is used will drastically affect service intervals. A *Preventive Maintenance & Training* program is available through Dawson-Macdonald. This guide augments 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. – Compressed air source must be clean and dry!
- ✓ Verify blast pressure ___ PSI. – Lowest pressure that gets the job done in the required time.
- ✓ Check & adjust blast flow (if necessary). – Make it a ‘lean’ mix – a ‘shadow’ from nozzle.
- ✓ Look for and correct any safety deficiencies. – Never operate an unsafe machine.
- ✓ Report and fix any operational problems. – Check integrity, wear, & condition of unit.
- ✓ Clean machine and sweep area. – Use safety matting when using round media: shot or bead.

Helpful tips:

And every four hours:

- ✓ Pulse clean dust collector.
- ✓ Empty dust collector. – Use dust mask; clean up afterwards.
- ✓ Add abrasive (don’t overfill). – Use sight plugs on direct-pressure systems.
- ✓ Inspect both the dust and the blast media & adjust tuning band if necessary
– Once filters are ‘seasoned’ & system is properly ‘dialed-in,’ no adjustment needed for months.

Typical Inspection

Blast systems:

Interval (hours):

- | | |
|---|----------|
| ○ Inspect nozzle for wear (use drill bit): | 40...200 |
| ○ Inspect nozzle washer: | 8...80 |
| ○ Inspect blast hose for soft spots: | Daily |
| ○ Inspect couplings & their gaskets: | 40...200 |
| ○ Check for safety pins on couplings: | Monthly |
| ○ Check for rapid shutdown of: | |
| ✚ Foot treadle on cabinet: | Monthly |
| ✚ OSHA door interlock switch: | Monthly |
| ✚ 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 reclaimer magnet (option): 8...40
- Inspect conveying hose: 500...1000
- Inspect dust hose: 1000...2000
- Inspect dust filters: 1000...2000
- Inspect *all* gaskets inc. reclaimer door & dump door: Monthly

Cabinet:

- Inspect gloves: 8...40
- Check lights for operation: 40
- Clean/replace safety glass or optional protector: 40
- Inspect/replace air inlet filters: Yearly
- Inspect door gaskets: Yearly

Direct-pressure systems:

- Inspect sealing ring and plunger: 1000...2000
- Inspect exhaust hose & hose barbs: 500...1000
- Inspect exhaust valve and restrictor: 1000...2000
- Inspect pinch tube in grit valve: 1000
- Inspect air & grit valve diaphragms and springs: 1000
- Clean sight plugs, re-seal and tighten: As needed

Suction (siphon) systems:

- Rotate air jet: 500...1000

Accessories:

- Inspect/grease turntable bearings and cart wheels: 500...1000
- Check vertical door seals and integrity: Monthly
- Clean magnet (use safety goggles): 40-200

Blast Rooms:

- Clean or replace lexan covers on lights: 500...1000
- Replace air inlet filter on Bullard Free-Air Pump: 500
- Replace carbon exhaust filter on Bullard Free-Air Pump: 200
- Replace large element in your Personal Air Filter: If Odors detected
- Recalibrate CO Monitor: Monthly
- Inspect recovery trough: 1000

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

- Check spare parts and media inventory: Weekly

About Us: Dawson-Macdonald is the most experienced full-service, local stocking supplier for all of your abrasive blasting and dust collection needs. Since 1928.

Parts – Service – Preventative Maintenance – Equipment – Abrasives – Advice.