



# Pre-Startup Checklist for Dust Collection Systems

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## ■ GENERAL REQUIREMENTS

- The dust collector has been assembled and secured in place in accordance with the furnished instruction manual? Grounded if required?
- The fan, if it isn't installed by the factory, has been installed per the specifications and in accordance with the furnished instruction manual. Check the fan rotation and alignment by rotating wheel and confirming that there is no rubbing noise.
- The damper, silencer, safety filter(s) and other accessories have been installed per the specifications and the furnished instruction manual(s).
- Fabricated duct system has been installed and connected to the collector.
- The collection bin(s), 55-gallon drum(s), or other waste removal system, has been installed as specified.
- Confirm the compressed air line been connected?
- Has an in-house electrician or the electrical contractor been scheduled to be at the startup of the equipment?
- Confirm that all dirty air ducting and clean air ducting has been installed before start up. Include hoods, etc.
- Have fuses been installed in the main breaker?

## ■ ELECTRICAL

- Confirm that three (3) phase power has been run to the dust collector main control panel.
- Check voltage nameplate against VFD or starter size.
- Confirm that the power feed to the dust collector's electrical control panel is completed with adequate wire size & fed from the properly sized breaker.
- Confirm that three (3) phase power has been wired between the panel and the dust collector fan motor.
- Confirm three (3) phase power has been wired between the panel and the rotary valve.
- Confirm three (3) phase power has been wired between the panel and the screw conveyor.
- Confirm three (3) phase/single control wiring has been completed between control panel and shaker motor or pulsing controls on the dust collector.
- Confirm that any remote switch has been mounted. Has conduit and wiring been installed between the dust collector control panel the remote switch provided?

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- Has the fan been bumped to check rotation and to make sure it is wired correctly? Check fan rotation and alignment again.
- Confirm that all motors have properly sized disconnects in the proper locations according to electrical requirements
- The pulse cleaning system is often controlled by pressure drop. Confirm that the two (2) clear poly tubing lines are installed from the dust collector clean air plenum port and the dirty air plenum port (brass fittings located on the side of the unit) to the brass fittings located on the outside of the electrical control panel (these ports are labeled). See dust collector I&O Manual for details.

## ■ EXPLOSION PROTECTION

- Has the Explosion Suppression representative been scheduled to check and start up the Explosion Protection equipment?
- Confirm that the Explosion Protection Controls have been mounted.
- Confirm dedicated power source has been run to and landed in the Explosion Protection Control Panel.
- Confirm that the power feed to the Explosion Protection control panel is completed with adequate wire size & fed from the properly sized breaker.
- Confirm all wiring between the Explosion Protection Control Panel and the Explosion Protection equipment has been completed.
- Confirm the Explosion Protection equipment has been installed on the dust collector and the ducting.
- Have blow out plugs or spreader caps been installed on the interior of the process?
- Confirm that the Explosion Protection Controls have been turned on electrically to check operation.
- Confirm the Explosion Protection Technician will have access to installed equipment using lift, ladder or scaffolding where required.
- Has explosion vent(s) and duct been installed and assembled?
- Has Isolation Valve been installed and electrically connected?
- Has the interconnecting wiring for shutdown been run and landed between the dust collector panel and explosion panel?

## ■ SPARK DETECTION

- Has the Spark Detection representative been scheduled to check and start-up the Spark Detection equipment?
- Confirm all Spark Detection Controls have been mounted.
- Confirm power has been run to and landed in the Spark Detection Control Panel.
- Confirm that the power feed to the Spark Detection Control Panel is completed with adequate wire size & fed from the properly sized breaker.
- Confirm all wiring between the Spark Detection Control Panel and the Spark Detection equipment has been completed.
- Confirm that the Spark Detection equipment has been installed on the dust collector and the ducting.
- Have water lines been flushed?
- Confirm the Spark Detection Controls have been turned on electrically to check operation.
- Confirm water plumbing has been run to and connected with the spark detection equipment.
- Has building water volume and pressure been verified and checked to accommodate the spark detection equipment?

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- Has heat tape been applied to any exposed water piping if necessary?
- Confirm grounding, if applicable, is installed in accordance with The National Electrical Code/Local Codes.