READY TO INSPECT — FIELD CHECKLIST

Dust collector annual maintenance checklist

The annual dust collector service is the deep pass: the measurements, cleanings and tests a quarterly round doesn't reach. This checklist keeps the full service on record with the photos that make it defensible later. Work is commonly verified against manufacturer's published instructions. Confirm the edition your authority having jurisdiction has adopted.

Who runs it: The service tech on the annual service, with the collector locked out and offline. When: Once a year, scheduled during a shutdown so filters can be pulled and the clean-air side opened without dust escaping into the space.

Shutdown and lockout

- [ ] Served machines stopped and their operators told
  Operators at every tool the collector serves told of the outage and the machines stopped, since running them without capture puts dust into the room.
  No photo required

- [ ] Fan, airlock and every feeding source locked and tagged
  Lock and tag hung under the site's procedure on the fan, rotary valve, any conveyor and the cleaning controller, each tried from its normal control and staying stopped.
  1 photo required

- [ ] Compressed air isolated and pulse header bled down
  Supply valve closed and locked, header drained until its gauge reads zero, so no diaphragm can fire while hands are in the plenum.
  1 photo required

- [ ] Dust PPE and entry procedure in place before doors open
  Respirator and clothing per the site's dust hazard assessment, hopper emptied first, entry under the site's confined-space procedure where it classifies the collector.
  No photo required

Filter change

- [ ] Filters changed and old media inspected
  Bags or cartridges replaced with the correct type, old media inspected for holes, caking or channeling that points to a pulse or moisture problem.
  2 photos required

- [ ] Tube sheet, cages and seals inspected on reinstall
  Tube sheet clean and flat, cages straight, gaskets and clamps sealing so no dust bypasses the new filters at the seat.
  2 photos required

- [ ] Blowpipes and diaphragm valves inspected
  Blowpipes secure and aligned over the filter centers, nozzles clear, diaphragms inspected for tears or hardening, with worn ones replaced.
  1 photo required

Internal inspection

- [ ] Clean-air plenum and housing opened and inspected
  Clean side checked for any dust that shouldn't be there, housing and hopper walls inspected for wear-through, corrosion or abrasion at elbows and inlets.
  2 photos required

- [ ] Airlock, dampers and protection devices serviced
  Rotary airlock vanes and seals inspected for wear, dampers and blast gates freed and confirmed, explosion-protection hardware confirmed intact and unobstructed.
  1 photo required

- [ ] Explosion vent and isolation device inspection on file
  Whichever devices are fitted inspected to the manufacturer: vent panel, seal and fasteners, flap valve swing and seat, chemical isolation by its service provider; report on file.
  No photo required

- [ ] Spark detection and extinguishing test report on file
  Where fitted, detectors and the extinguishing valve tested by the system's service provider, with the monitoring company told first if it reports to the fire alarm.
  No photo required

Bonding and ductwork

- [ ] Duct and collector bonding continuity measured
  Resistance measured across flex connectors, duct joints and to the collector ground against the site's acceptance value, beyond the quarterly visual check of the straps.
  1 photo required

- [ ] Duct cleanouts or access doors opened and checked for settled dust
  Settled dust in horizontal runs flags low transport velocity; dust removed with a vacuum rated for it, the run noted for a balance review, cleanouts or doors resealed.
  1 photo required

Return to service

- [ ] Access doors sealed and locks removed by whoever hung them
  Tools and rags out of the plenum and hopper, every access door latched on its gasket, compressed air restored, then locks and tags removed by the people who hung them.
  1 photo required

- [ ] Clean-filter differential pressure recorded as the baseline
  Collector restarted with pulse cleaning running, the gauge reading across the new filters photographed and recorded as the baseline next quarter's trend is read against.
  1 photo required