300 Imperial Drive Jackson Center PA 16133
800.918.3013 or 724.662.2801 • F: 724.662.2803
info@isystemsweb.com • isystemsweb.com

1. Dust Collector

   A. Imperial Systems CMAXX Collector or Equivalent

   B. General

      1. The system will be designed to perform the following functions:

         a. To be completed as needed with application data, unit selection, airflow and ATC ratio.

   C. Dust Collector

      1. The collector shall be vertical cartridge design, continuously operating and self-cleaning type. Construction shall be of 10-gauge steel panels and 3/16" steel. Major sections shall be modular with no external bolt construction and dome top design. The collector consists of filter module sections, hopper sections with support legs.

      2. The collector shall use filter cartridges with a sum total of 350 square feet of filter media per filter. Cartridges shall be pleated moisture resistant media with NANO fiber technology and a MERV 15 rating to allow adequate surface capture and release. Cartridges with external wire or expanded metal are not acceptable. * Add over bag specification if required.

      3. The filter module shall contain the cartridge filter elements, digital on demand reverse pulse cleaning system, clean air plenum and tool free integral filter sealing hardware with support frame and side walls. The filter module shall have an industrial enamel corrosion resistant finish.

      4. The inlet shall be high entry type with opposed angle baffles to serve as an air diffuser and provide protection to the cartridges for wear purposes.

      5. The air reservoir shall be constructed of heavy duty schedule 40 pipe, fully welded with a 1 ½" NPT air connection. A pressure gauge and safety relief valve shall be provided. Valves are piped to pulse distribution nozzles and are provided with a remote pilot valve assembly contained in a NEMA 4 enclosure.

6. The cleaning system shall have ¼ MPT connections at high and low pressure plenum locations. The low side port shall be provided with a Pamic filter element rated to 300 F to maintain pressure reading accuracy.

7. The pulse cleaning system shall include blow pipes, internal piping, compressed air header, solenoid valves, and diaphragm valves. The diaphragm valve will be a minimum of 1-1/2" diameter. Only one cartridge at a time shall be cleaned per tube sheet opening. Compressed air header will be external to the clean air plenum. Compressed air will be supplied by others at 70-80 psig. Air supply shall be clean, dry and oil free.

8. Pulse control system shall be solid state controller in a NEMA 4 enclosure. Air pulse shall be controlled on demand based on the pressure differential across the filters. Control system shall be equipped with a 4-40ma output for actuation of downstream spray bar when unit is being pulsed down.

9. The hopper section shall contain the hoppers and integral fabricated support legs. Hopper shall be single or multiple pyramid type as required. Hopper wall angle shall be sufficient to prevent dust build up and bridging of dust. Hopper wall angle shall be 55 degrees from the horizontal minimum.