

Choosing an Air System Vendor: Safety – Part 1



Choosing a scrap collection vendor is a lot like choosing a marriage partner. It's easy to fall in love with a proposal that looks great on the surface. But what happens after the blush of first love has worn off? You and your trim system vendor are going to be together for a long time so it makes sense to dig a little deeper before making a decision. What questions should you ask to assess whether your vendor is a good candidate for a long-term partnership?

This week, the focus is on safety. This important yet often-overlooked consideration can have a serious impact on your bottom line. It's vitally important that you choose a trim system vendor with a strong commitment to safety.

Here are a few questions to ask potential vendors to assess their commitment and ability to design a system that is safe to operate:

- Are platforms and ladders used to access the system built to OSHA specifications? Does the quote include the placement of toe plates on platforms, landings every 30 feet, handrails built to the proper height, and evenly-spaced rungs on access ladders?

- Does the system include explosion venting or explosion isolation to prevent air from moving backward in a filter explosion situation, containing the explosion to minimize damage? Does the quote include explosion isolation flaps (also known as non-reversing valves—NRV) that are tested and certified?
- Do separators and dust filters include fire sprinklers? Do filters and cyclones include water relief valves for sprinkler water?
- Is ductwork run according to industrial ventilation guidelines in order to minimize dust buildup that can provide fuel for a potential fire?
- What are the qualifications of those designing your air-conveyed trim system? Are systems designed by engineers with at least a bachelor's degree in an engineering discipline? Are system designers NFPA-trained? Do they have knowledge of OSHA requirements?
- On a PLC-controlled system, are there safety interlocks that will prevent blowers, floor sweep shredders or airlocks from running if an equipment or baler inspection door is open?
- On non-PLC-controlled systems, does the system have the capability to sense if an interlock is open? Are airlock and floor sweep shredder doors located more than an arm's length away from any rotating parts?
- Do shredder conveyors include safety cables along the sides connected to the E-Stop circuit so that if a crew member falls onto the conveyor, the cable can be pulled from any location on the conveyor belt?
- Does the vendor offer safety systems that are wearable for shredder conveyors that have in-ground/floor-level hoppers?
- Are blower belt and shaft guards designed to OSHA specifications? Can they pass the "Gotcha Stick" gauge for rotating equipment?
- Are control panels constructed to National Electric Code?

As you ask your questions, watch the vendor's reaction. If your system is being designed by degreed engineers skilled at applying the laws of physics to industrial scrap and dust systems, you should receive timely answers to your questions. You'll know your vendor is a good candidate if you get cheerful responses to even the most detailed safety-related questions in terms non-technical personnel can easily understand.

If you're interested in working with a vendor whose sales and engineering staff has more than 100 years of combined experience designing trim collection systems, don't cut corners when it comes to safety, call 615.230.9500 or email us at sales@gfpuhl.com.