

Is your trim collection system an afterthought?



If you approach the installation of a trim collection system as an afterthought or make your purchase decision based solely on the volume of scrap produced, you may regret it later. G.F. Puhl Company founder and CEO Gregg Puhl explains why.

Because air-conveyed waste removal systems are a vital component of a production process, forward-thinking executives are wise to think carefully about their options. Gregg Puhl, founder and CEO of G.F. Puhl Company, advises organizations in the market for air-conveyed waste removal/recycling systems to keep in mind seven important considerations.

1. Building Codes. If the system is to be installed outdoors, do city or county building codes place restrictions on cyclone height, noise levels or the external appearance of your facility? The build first/pull permits later approach rarely works with local codes officials.
2. System Sizing. How much waste is produced by the production process? Without an accurate measurement of waste output, it is nearly impossible to design a system that matches ductwork diameter and baler room capacity to scrap output.
3. System Backup. In order to reduce capital outlay for trim collection systems, manufacturers often ask vendors to eliminate equipment redundancy. This is risky. What happens to customer schedules when equipment fails and production grinds to a halt? HINT: Prayer is not an acceptable back up plan.
4. Energy Efficiency. Manufacturers who forget to take ductwork size and design into account are missing out on potential energy savings. On average, a manufacturer running a 24/7/365

operation purchasing energy at 7 cents per kilowatt hour will spend about \$50,000 per year for every 100 horsepower generated—or \$500 per horsepower per year. At this rate, a 100-ft length of 10" diameter duct requires \$875 of electricity per year per 1,000 cfm while a 100-ft section of 30" diameter duct only requires \$390 of electricity per year per 1000 cfm. The larger duct is 45 percent more efficient. (Calculations assume 5500 ft. per minute conveying velocity.)

5. Durability. Trim systems have to do more than move tons of paper waste per hour. They have to move tons of air. Only heavy-duty systems that are sized and engineered properly can withstand such abuse. Many manufacturers who opt for the low bid find themselves faced with the need to replace or repair their systems in the first two or three years.
6. Reliability. If a trim system isn't built heavy enough to withstand peak waste "slugs," frequent breakdowns can lead to delays and unhappy customers. But the problems don't stop there. Crews accustomed to the downtime created by unreliable trim systems may not be motivated to meet production goals when the system works. When your trim system is unreliable, that sucking sound you hear is not the cyclone, it's the sound of profit dollars slipping away.
7. Makeup Air. The right trim collection system can help control heating and cooling costs. Air exhausted from the plant will eventually be replaced by air from the atmosphere. Using engineered outside air intakes can help reduce the cost of return air heating and cooling. If outside air intakes are not an option, clean air aborts can help reduce cooling costs in the summer months.

Questions? For more information, give G.F. Puhl a call at 615.230.9500 or email us at sales@gfpuhl.com.