Select a blast cabinet to suit your application

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As with any capital outlay for equipment, buying a blast cabinet requires balancing budget constraints against productivity gains, speed against energy consumption, and versatility against single-purpose performance.

Have you ever driven a car with a too-small engine? Or, used a power tool that fell a little short on power? Both can get the job done, but will require more time and more effort from the user — that's you.

When you price a blast cabinet, look beyond the size of the cabinet enclosure and blast capacity of the nozzle. The key to efficient blasting in a cabinet is how well the reclaimer and dust collector can keep pace with the blasting process. That's the amount of air and media coming from the nozzle and the volume of dust and spent media generated by blasting.

Be wary of any dealer who quotes you a price for a blast cabinet without asking what you plan to do with it.

Your dealer should recommend a reclaimer and dust collector based on your application — not the just the dimensions of the blast cabinet.

If you plan to impart a texture on stainless steel using a suction blast nozzle and hard media, your reclaimer and dust collector can be relatively small because this type of application usually does not generate a lot of dust.

But, putting texture on soft metals — brass and aluminum — with glass bead will require a slightly larger reclaimer and DC. In this instance, both the material and the media tend to break down more quickly and will fill the enclosure with dust if you don’t step up the airflow rate through the cabinet.

At the extreme: using a pressure blast machine and steel grit to scour layers of paint and rust from mild steel, you should plan to spend even more to get a bigger reclaimer and a more efficient reverse pulse cartridge dust collector.

Thinking about using aluminum oxide or other superaggressive media? You will need wear curtains in the cabinet, a rubber-lined reclaimer, and a boron carbide nozzle.

With so many factors to consider, it makes sense to consult with an experienced blast equipment distributor. Companies that buy a blast cabinet based solely on price and enclosure size usually get exactly what they pay for — a big, dust-filled box.

An experienced distributor will ask about the part, the process, the desired result, the production rate — and just as important, the available supply of compressed air. Blasting uses more compressed air than any other process you can imagine. It takes a high-pressure, high-volume compressor to make blasting efficient and cost effective.

Most reputable distributors have cabinets in their plants where they can demonstrate the manual blast cleaning process. Using sample parts supplied by you, your distributor will conduct tests — varying the blast pressure, media type and size, and nozzle size.

The result is a firm quotation for equipment, and a proven process, that will do the job for years to come.

Armed with more than just a price, you can compare apples to apples, so you don’t get stuck with a lemon.