



User-friendly touch-screen operator interface is convenient for on/off and component control.

Automated Blast Systems... Infinite Possibilities

With the uptick in economic activity in North America over the past several years, many customers have sizeable production backlogs. That is certainly nothing any CEO wants to complain about, but speeding production without suffering quality reduction can be challenging.

If you outsource some or all of your blast work, can your job shop keep up with your higher volumes? There no doubt are several viable solutions to meet the demand of higher volume. You could pressure your job shop to increase their capability or you could bring some or all of the work in-house, where you can better control lead times. There are many benefits of in-house processing, including being able to more easily adjust production for part changes or adapt to changes in peening specifications. Perhaps more importantly, you may more easily respond to production emergencies.

Usually, for high production applications, we are talking automation. But since no two customers or their applications are exactly alike, there are numerous technology variables that are combined to suit a particular customer or job.

Before you can allocate the necessary funding to pay for your new equipment, it's important to assess what your present needs are and what you think your future requirements for the equipment will be. This assessment process is often difficult and calls for careful planning and some sound expert advice. Help is only a phone call away.

We know where you are coming from, as we recently went through the process ourselves when we designed and built a new lab machine (yippee...a new toy for Herb!). It is our business to help customers solve cleaning, peening, and finishing problems. So, our machine has to have a multitude of features that can simulate many different air-blast nozzle combinations, blast nozzle manipulation, and part handling processes in a precisely controlled way.

Like all of our equipment, our new machine is a workhorse, built-to-last, and with heavy-duty construction for the industrial manufacturing environment. It can accommodate almost any material finishing requirement needed by our customers. The system accepts every blasting media from non-aggressive media

such as starch or plastic, to finishing/deburring media such as glass or ceramic media, to aggressive media such as aluminum oxide, silicon carbide, or steel grit, as well as steel shot, glass beads, or ceramic shot for shot peening applications.

The machine is versatile, allowing suction or pressure blasting with multiple nozzles and horizontal, vertical, or rotary nozzle manipulation. It can also be set up for continuous or indexing turntable applications as well as other methods of part manipulation. It has a removable belt conveyor system to allow simulation of various conveyor systems. The conveyor mechanisms vary but all are for high production and through-feeding. The different conveyor technologies include a magnetic-belt that keeps lightweight metallic parts in place, or an inclined-belt for small round parts that roll into the cabinet, or a straight-line belt conveyor for parts that are large and stable enough to stay in place at the blast station.

We incorporated state-of-the-art electronic controls and drive systems for the nozzle manipulation and material handling devices that provide high-precision repeatability of the process. PLC controls with "touch-screen" operator interface provide visual confirmation of nozzle manipulation and part manipulation speeds, and all-important process parameters for the system. Physical alarms make it possible to signal and shut down the system for any out-of-tolerance condition that affects the process.

Automation is a key component of a successful labor-saving, repeatable, finishing operation that is much in demand in today's manufacturing environment. For optimum efficiency, it is important to eliminate repetitive manual blast operations for labor and material savings.

Call the 'guy in the white coat', send in your finishing challenge and let us apply our sample processing capability and demonstrate the benefits and savings you can obtain by incorporating a quality piece of automation into your production line. Direct any questions to Herb Tobben at 636 239-8172 or send email to htobben@clemcoindustries.com.

Herb is Sample Processing Manager for the ZERO Automation product line at Clemco Industries Corp. He is a regular speaker at the Electronics Inc. Shot Peening Workshop.

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