

How to Buy Rebuilt Wheel Machines

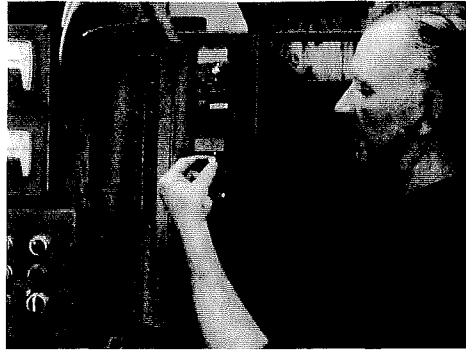
Is rebuilt right for you?

A rebuilt wheel machine might be the ideal workhorse for your shot peening or blast cleaning applications. The main selling point of a rebuilt is cost: A rebuilt machine can be purchased for up to 45% of the cost of a new machine and substantially less than the cost of a late model used machine. And like the pianist that purchases a rebuilt classic Steinway because she wants only the finest but can't afford a new Steinway grand, buying rebuilt makes the most reputable and dependable equipment affordable for even the smallest job shop.

A secondary benefit to rebuilt equipment is less training time if your operator and maintenance personnel are already familiar with older equipment.

Know your rebuilder

Jerry Sheyka is President of EMI, Inc. His company provides complete shot peening and shot blast services and sells new, used and rebuilt blast equipment. He rebuilds to the highest standards—the machine would have to be tough enough to handle years of the heavy workload in his own shop before he will ship it to a customer. EMI's rebuilt machines come with an one-year warranty and his staff can provide on-site installation services and training. All of Jerry's projects are pre-solds and are rebuilt to the customer's specifications. Obviously, working directly



Jerry Sheyka, President of EMI, demonstrates the Electronics Inc. FC Controller. Purchasing a rebuilt machine gives the buyer the opportunity to incorporate today's technology, like the MagnaValve® magnetic valve and FC Controller, into an older machine.

with a reputable rebuilder like EMI is the safest way to get quality product. And to continue the piano analogy: Like a fine piano rebuilder who knows that only a few piano manufacturers have built pianos that are worth rebuilding, Jerry will only consider certain machines for rebuilding and works a network of resources to purchase these machines.

Jerry is also an instructor at the EI annual Shot Peening and Blast Cleaning workshop. His class,

“Wheel Blast Machine Rebuild” always gets high reviews from attendees because he arms them with the knowledge they need to purchase rebuilt (and new) equipment. In his presentation, Jerry shows slides of a rebuilt machine that he purchased as an educational tool—it is the worst example of a rebuilt machine that he has ever seen. Here are a few of the reasons why:

- Jerry's crew removed 15 lbs. of Bondo (a body filler typically used in the automotive industry) from the machine. Worn metal sections that should have been cut out and replaced were covered over with metal pieces that were screwed in place, not welded, and then patched with Bondo.
- Grease embedded with abrasive was left on the machine and painted over.
- The bottom of the wheel blast machine should be 1/4" thick. This machine's bottom panel was badly worn and not replaced.

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Advice when purchasing a rebuilt machine:

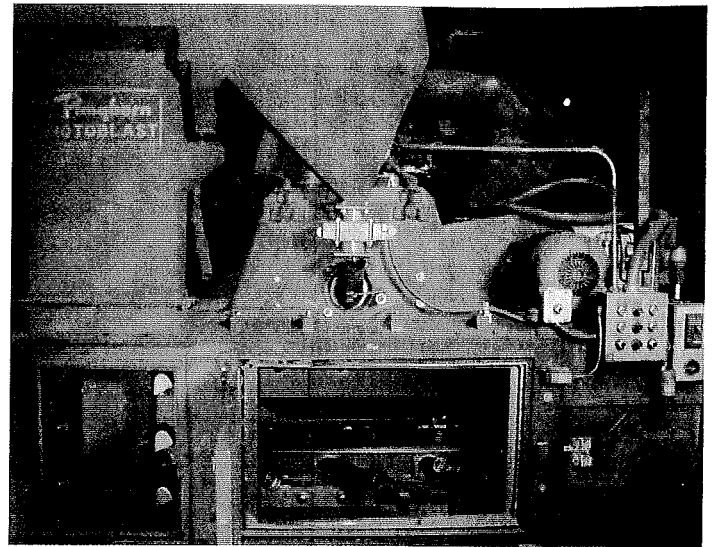
- 1. Never purchase a machine rebuilt with proprietary products. If your rebuilder goes out of business, you won't have a resource for parts.**
- 2. Many older machines do not have safety features — limit switches at each end of a machine and at the control panel should be added by the rebuilder.**
- 3. Ask to see the machine BEFORE it is painted. A reputable rebuilder will be proud to show you his work without the benefit of a fresh paint job.**

Jerry Sheyka
President, EMI Inc.

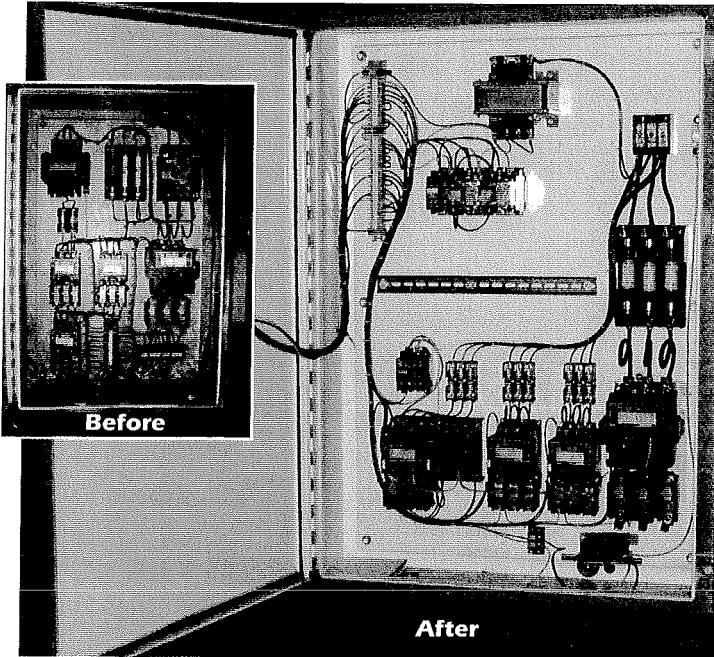
- The blast wheel was 90% worn and not replaced.
- The machine had worn areas around the wheels, liner and elevator.

Keep in mind that this machine was on the market as a **rebuilt** machine—a machine that should have been ready to serve many years without major repairs.

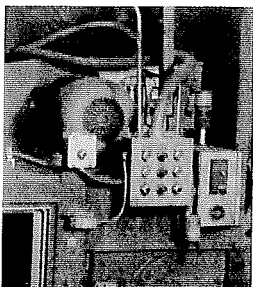
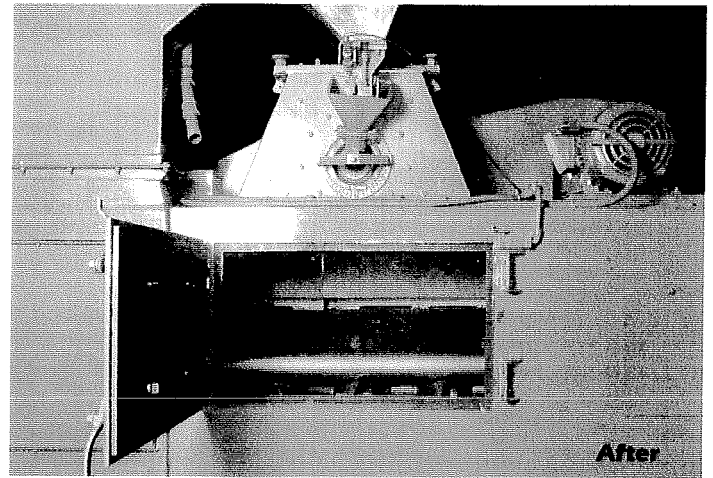
The following photos of an EMI project will point out more important details of the rebuild process. If you are considering rebuilding a machine yourself, our pictorial review is a good place to begin.



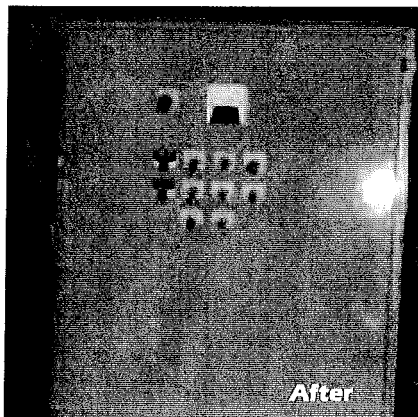
Before the rebuild: This machine was an excellent candidate for rebuilding because it's a Pangborn machine. Other good choices are Wheelabrator and Goff machines.



The Pangborn's new electrical panel was built and installed by an electrician.

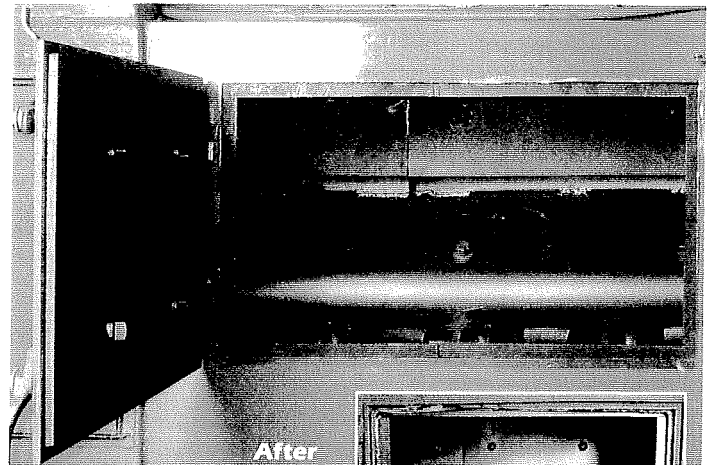


Before

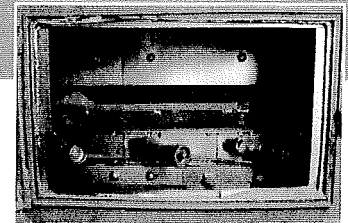


After

The push button panel, originally on the front of the machine, was moved to the electrical panel to protect it from abrasive.



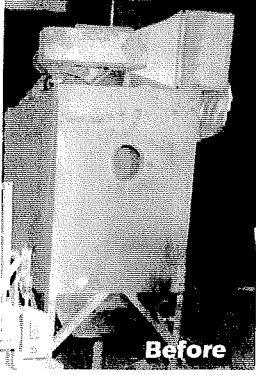
The rebuilt machine has a new door, liners and rollers. The front wall of the cabinet was completely replaced.



Before

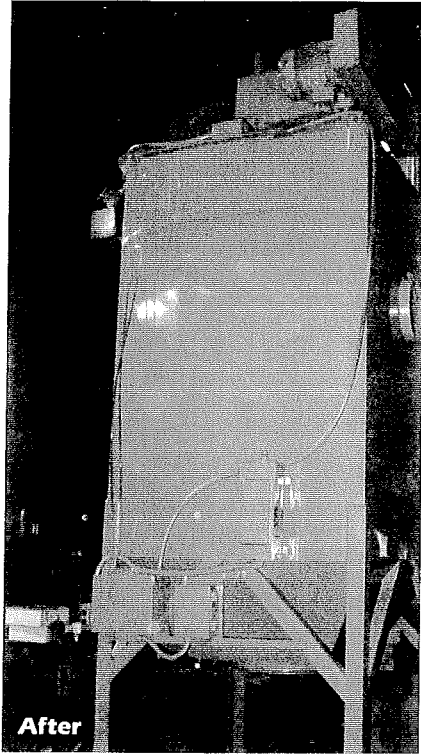
The electrical panel should always be replaced as it is the usual source for problems.

Jerry Sheyka

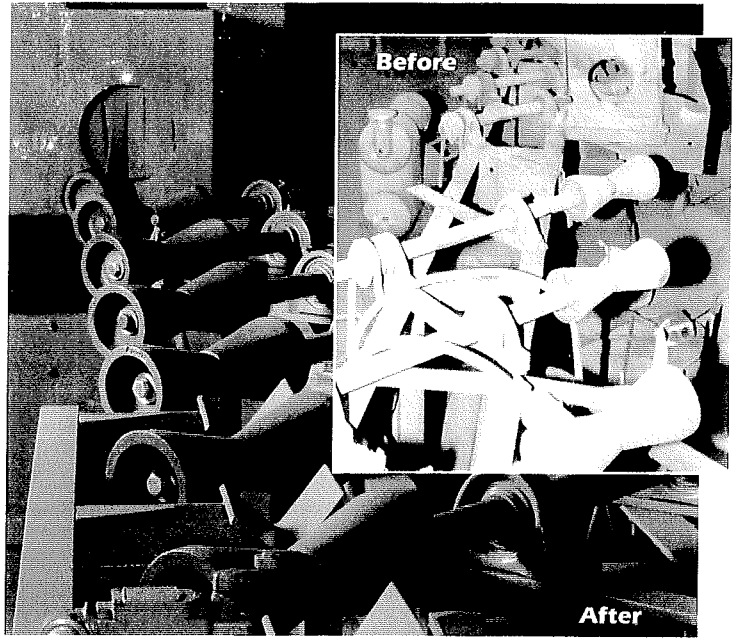


Before

While all that's visible is a fresh coat of paint, the dust collector now has a new diaphragm, filters, belts and a new circuit board.



After

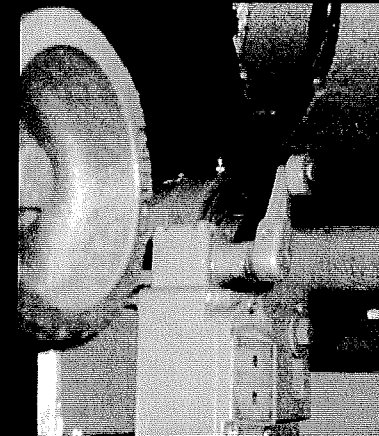
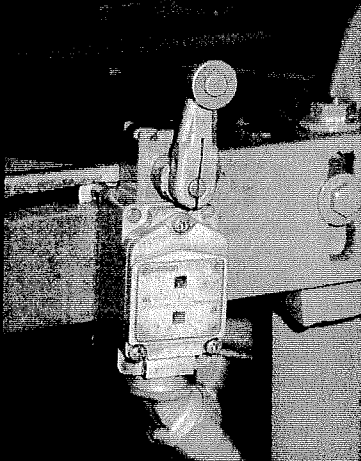


After

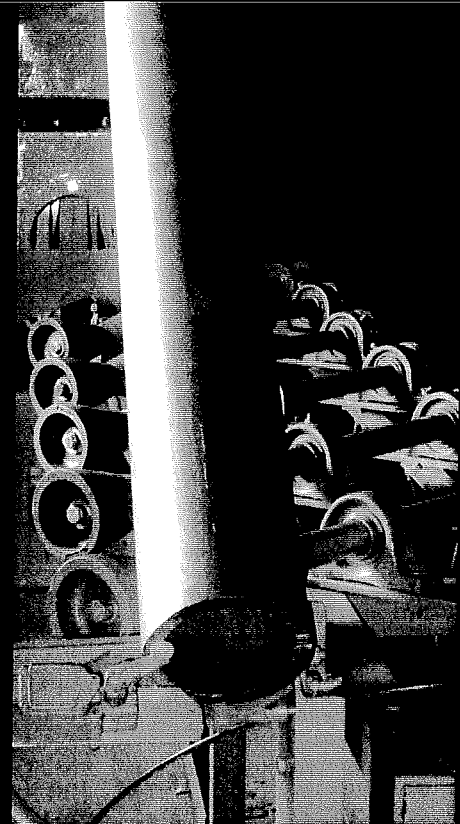
EMI cast the new rollers.

EMI Inc. fills special request

The Pangborn machine featured in this article was rebuilt for a Canadian manufacturer. The company had a special request, "We want blasting on this machine to be a one-man operation." To fulfill the request on this 30ft. machine, EMI designed a trip lever system. The pipe is placed on the conveyor and the operator pushes a button to start the conveyor. As the tube approaches the blast cabinet, it trips a lever that starts the abrasive. The pipe is blasted for a pre-set amount of time and then leaves the cabinet. When it reaches the end of the conveyor on the other end of the machine, it trips a switch that sends it back through the blasting cabinet. It is not blasted the second time. At the end of the line, the pipe is lifted so that the abrasive is dumped into a container. Removing the pipe from the conveyor is then much easier for the operator and the work environment is safer and cleaner.



The line trip lever that made blasting on this machine an one-man operation.



The pipe is lifted at the end of the conveyor and abrasive is dumped into a container.