

# Iowa Manufacturer **Makes Its Mark** Enabling Others To Make Theirs

Important items can be marked for identification in all sorts of ways. Ink, paint, and labels offer low-cost options, but with a little effort they can be covered or removed. Optical scan images,



radio frequency tags, and lasers use sophisticated technologies to identify items, but these methods and required systems can be very costly.



Atlas Copco employees have set up a charity to provide a means of clean drinking water for those in need.

One time-honored means of identifying items simply, permanently and inexpensively continues to flourish: hand stamps. Simply put, a hand stamp is a manual instrument for making impressions on other objects.

"Our hand stamps are versatile because they allow you to put an identification mark on most anything," according to Debbie Mathis, General Manager of Young Brothers Stamp Works, Inc., of Muscatine, Iowa. "A quality set of hand stamps doesn't cost thousands of dollars, and you don't have to train someone how to use it. Just hold the stamp in your hand, line it up, hit it once with the hammer, and you've made a mark. If you can hit a nail, you can use a stamp."

Young Brothers Stamp Works is a fourth generation family business established in 1904. The company, which has 20 employees, has operated at the same Muscatine location for 60 years. Debbie Mathis oversees the factory and office operations. She's been with the company 28 years. "I learned the various trades through the years," she says. Debbie has done most everything at one time or another, and now she manages the operation.



## **Many Applications**

Hand stamps can be used to make any type of mark, including letters, numbers and symbols, onto almost any type of hard material, including steel, brass, aluminum, and wood, as well as certain plastics and specialty metals. Young Brothers makes stamps as small as 1/32" for use on jewelry and as large as 1" for use on beams and boards needing marks that can be seen from a distance.

Applications for hand stamps are truly vast. One common use is to identify tools. (When your neighbor or co-worker borrows a wrench with your initials stamped on, everyone knows whose wrench it is!) But marking tools is just the beginning. Metal stamps are used to...

- identify products by serial number;
- distinguish keys and tags;
- record inspections by code or symbol;
- indicate ownership by name, initials or logo;
- record the date when something was done, and more.

"We sell to almost every industry," Debbie says. "Automobiles, airlines, nuclear plants, locksmiths, jewelers, artisans and collectors, all types of manufacturing and industrial concerns, you name it. Wherever an item needs to be marked easily with clear, permanent identification, we have a customer."

Over the years, Debbie says she'd heard of some unique ways that Young Brothers hand stamps get used. Stamping serial numbers on golf balls, for example. Sometimes she is asked to make stamps with a special font, a particular symbol or logos, or even signatures.

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Debbie points out that artisans have long used stamps to mark their work. Picture frames, leather goods, guns, metal goods and more can be marked to identify who did what work and when it was completed. Millwrights, mechanics, metal workers, and industrial technicians mark dates and codes to indicate that a required inspection or maintenance was performed, when and by whom.

## **Marked For Good**

Permanence is an advantage of marking with a hand stamp. "You can't really alter a mark once it's made," Mathis explains. "If someone tries to alter it, you can tell it's been messed with. Police can identify stolen property through stamp marks, and labs involved in investigations and court cases have contacted us regarding how stamps are made and used."

Most hand stamps have a 45 degree bevel so the character on the stamp's face cuts cleanly into the surface to be marked, although Young Brothers also makes round face hand stamps with a blunt character. Aerospace, oil supply and nuclear power industries depend on round face stamps to make marks on crucial components while avoiding fractures that could result from too sharp an imprint.

## **Manufacturing Stamps at the Muscatine Plant**

Raw materials for Young Brothers hand stamps include 16-foot tool steel bars in various grades and nine diameters. The bars are cut to length to create blanks. Characters are formed on the stamped end using Young Brothers' proprietary process, then stamps are heat treated in house so they are hard enough to withstand repeated blows from a hammer and can mark material up to 50 on the Rockwell "C" scale.

As in manufacturing operations the world over, Young Brothers relies on compressed air. "We use compressed air to run practically all of our production equipment," Debbie explains. "This includes screw machines, knuckle machines, air guns, and drill presses."

Debbie says that Young Brothers got to know Atlas Copco when service technicians came in to do some service and repair work. "We had several air compressors of different makes, and we were running three or four air compressors at a time. They were all running separately. It wasn't the best setup, really."

## **An Energy Efficient Solution**

In 2007, Dean Bickford, Key Account Manager with Atlas Copco Compressors LLC in Tipton, Iowa, approached Young Brothers with a way to cut production costs using a high efficiency air compressor with Variable Speed Drive technology.



"Compressed air is a crucial resource for Young Brothers," according to Dean, "but they had multiple machines that were in need of constant repair. Trying to find parts for all those different compressors was costly and time consuming. The machines weren't set up to work with one another and production of air did not match demand. There was oil carryover and moisture in the air distribution system. On top of all that, the compressors were inefficient and noisy."

Dean's analysis led him to recommend an Atlas Copco GA11 VSD FF compressed air system. "Now Young Brothers has a single, reliable Atlas Copco compressor operating in the 'sweet spot' around 60-80% of the time," he says. "With one VSD compressor, not only did all of their compressed air issues go away, they added peace of mind through Atlas Copco's Total Responsibility Service Plan. They're paying far less for compressed air and they're no longer worried about finding parts or service for multiple old compressors from different manufacturers."



## **Two Years Later**

After two years with the Atlas Copco compressor working for Young Brothers, the results have been positive. "We save money in utility costs every month," Debbie says, "but that's not the only cost saving. We don't have to do any maintenance to the compressor, so it cuts our labor cost. It only produces the air that we need, whereas before we were making air constantly. The new compressor also cuts down on the noise, which is an advantage to our employees."

With help from Atlas Copco, Young Brothers Stamp Works continues to make its mark enabling others to make theirs.

Young Brothers Stamp Works offers hand stamps in a variety of grades, including economical machine made stamps, precision hand cut stamps with a hand ground taper, and heavy duty stamps for industrial use.

Stamps are also available with reversed characters for marking plastic molds, rubber molds, thin metal patterns, and forging dies. A reversed impression on the mold creates a properly facing raised character on the molded product.

Stamps are typically boxed as letter sets (A-Z plus a period), as figure sets (0-8, using 6 as 9), or as combination sets including both numbers and figures. A variety of special symbols is offered, and custom characters can be made to order.

To learn more about Young Brothers Stamp Works, contact Debbie Mathis, General Manager, at **1-800-553-8248** or or visit

www,youngbrosstampworks.com