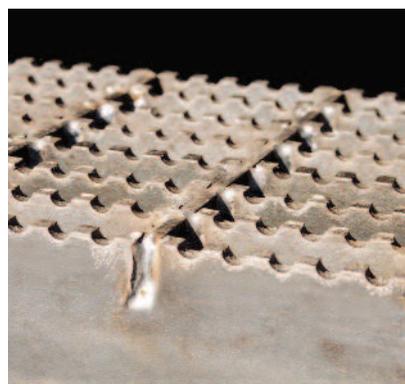
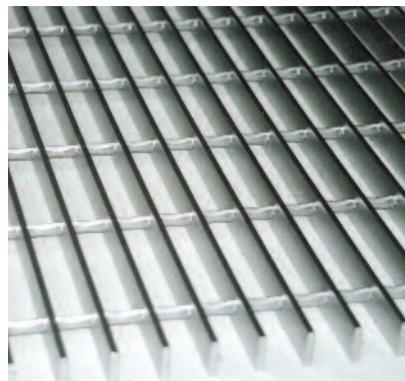


# Technology with teeth

An increase in bar grating business prompts search for saw that can make the cut



Kennesaw, Ga.-based Direct Metals specializes in custom grating fabrication for mezzanines, platforms and stairways in industrial plants.



With BTM's sawing technology, Direct Metals can stack panels 12 in. tall and do multiple cuts at the same time.

It's almost always underfoot, but it's never out of mind. For John and Tom Hoover, founders of Kennesaw, Georgia-based Direct Metals, industrial grating is the lifeblood of their business, which they began in 1996. With several dozen employees and locations in Kennesaw and Waukegan, Illinois, the

company specializes in custom grating fabrication for mezzanines, platforms and stairways in industrial plants.

"Bar grating is one of our five main product lines," says owner John Hoover. Other products include perforated metal, wire mesh, expanded metal, safety gratings and architectural wire mesh—work

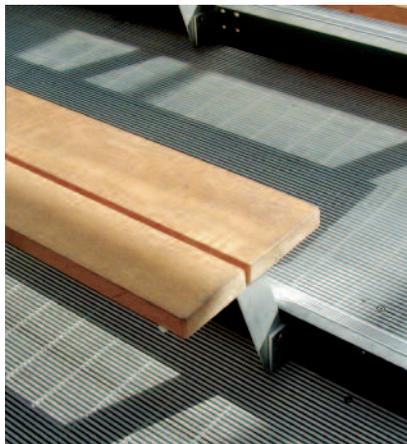
that's part of the Statue of Liberty's Welcome Center on Ellis Island. The company has also partnered with the State of Illinois and the U.S. Army Corps of Engineers to provide custom mesh to keep Asian carp out of the Great Lakes.

Location has been critical to the company's success and its ability to generate product demand, says John Hoover. "Direct Metals has two strategically located bar grating fabrication facilities," he says. "That, along with Direct Metals' reputation, extensive bar grating inventory and quick fabrication, has helped to increase grating demand year after year."

It was this continual uptick in the bar grating business that led Direct Metals to find a solution to increasing cutting capacity effectively. "Our bar grating business was increasing," says John Hoover. "We were looking for ways to cut wider panels more quickly. We fabricate up to 48-in.-wide bar grating panels to meet whatever needs our customers may have."

The answer? Two BTM 125 SA models from Woodstock, Ontario-based BTM Saws North America—one for each loca-

# Sawing Systems



The BTM 125 SA allowed Direct Metals to increase cutting capacity, cutting wider panels more quickly.

“Since the saw installations, we can cut panels more quickly, thus reducing the time needed to load cutting tables and [requiring fewer] man hours per job.”

Tom Hoover, Direct Metals

tion. Direct Metals executives liked what they saw at the 2013 Fabtech show in Chicago. “While walking the floor at Fabtech, we stopped in the BTM Saws booth,” says Hoover. “They were the only vendor at the show that had a saw designed specifically for the unique application of cutting bar grating so, of course, that attracted our attention.”

“We had a BTM 125 grating saw under power cutting some samples of floor grating,” says BTM Saws North America President Ian Tatham. “John happened to walk by and noticed the machine. After a brief demonstration it was clear this was the machine they were looking for to improve their operation.”

The saws, manufactured in BTM’s 270,000-sq.-ft. facility in Bergamo, Italy, were installed in March.

## Capacity and efficiency

“These saws increase our fabrication efficiency,” says John Hoover. Direct Metals’ previous, outdated cold saws were no match to the improvements the company found with BTM. “We can stack panels 12 in. tall and do multiple cuts at the same time. The saw uses a 1½-in. band saw blade that changes quickly and is more affordable than our previous blades,” he says.

Vice President Tom Hoover says BTM’s machines allow for faster processing. “The saws we purchased from BTM were specif-

ically designed to cut bar grating and have features built into them that increase the speed of the cut, as well as its accuracy.”

One of these features involves stress-relieving components—something Tatham says that only his company does. “Stress is added when metal moves through the fabrication process, and that can mean a very loud and inefficient process,” he says. BTM’s solution is to put saw components in a heat oven to remove stress. “That way, the component will absorb cutting vibration.”

Other features that improve speed and accuracy include “a reinforced drive with a gear box that has hardened and ground gears, a 10-degree head cant that spreads the cut over the cross section of material, an automatically adjusting guide arm that keeps the blade guides close to the point of cut and quick acting vises that completely clamp the material on both sides of the cut,” says Tatham.

The result is a 100 percent improvement in cutting cycle times, says John Hoover. “Since the saw installations, we can cut panels more quickly, thus reducing the time needed to load cutting tables and [requiring fewer] man hours per job.” Tom Hoover adds, “Bar grating is a product that is typically installed at the end of projects, whether it is used on top of structural steel as a platform or installed as drainage grates after the concrete has been poured. Be-

cause the project is about to be closed out, being able to deliver the bar grating even one day faster can often help win the job for Direct Metals.”

## Cleaner cuts save time

The new saws are also producing a cleaner cut, which saves time in fabrication. “BTM has developed a misting blade lubrication system that keeps the raw material cleaner, so less work is required to clean it before the next stage of fabrication is performed or before a finish is applied to the material.”

What’s more, accuracy has improved. “The saw has a laser sighting light, which gives us great cutting accuracy,” says Tom Hoover.

Thanks to the BTM 125 SA’s increased cutting capabilities, business is flourishing. “It’s definitely increasing,” says Hoover.

The same can be said for BTM. “We have had a dramatic increase in activity as more people learn about BTM equipment,” says Tatham. “We make a vast series of machines that cover most sawing requirements. The unique aspect of BTM is that with a range of 70 different machines, we are able to supply a customer a machine that is basically tailor made to meet their requirements, whether they are cutting floor grating, structural or solid alloy material.”

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