

# A better finish

It's great to have too many orders to fill but not when you can't meet your customers' needs and you have a standing backlog.

This was the problem Elaine and Bill Snell of Black Cat Artworks, Greenville, S.C., had.

"Producing metal artwork is our livelihood," says Bill Snell. "We started producing metal artwork about five years ago. It's grown to where we needed to finish the pieces faster and in higher volume. Originally, we were using a drill rotating an 8-in. wire brush to finish our pieces. We would place the artwork on a magnetic table and then brush it.

"Our artwork is plasma cut from mild steel and finished with an acrylic clear coat. We're making wall artwork or tabletop sculptures, selling them to craft and art galleries around the country with customers in every state," says Snell. "We do a lot of custom work. Customers will describe something they're thinking about, or they'll send us an image to reproduce in metal."

As the company grew, the Snells needed a way to finish artwork on a high-production basis.

"I was looking for something such as a conveyor-based brushing machine that would make finishing a lot faster. I wanted to take some of the individual skill out of this operation and let anyone that had spare time feed the artwork through a machine."

Snell did Web searches to find the right equipment. "Supermax Tools [Eagan, Minn.,] popped up, and their equipment looked like what I needed," says Snell. "They were showing it at Fabtech when I first saw it. The equipment was agile and could easily change various brushes and grits to get the proper finish. Plus, it was one of the most economical units."

## From art to finish

Supermax offered free sample testing to identify the proper brush head to match the process results the Snells required. After matching the right brush head for the application, the machine purchase paid for itself through time and labor savings, says Snell.

"The SuperBrush machine is doing great," he says. "We've been working it hard and haven't had any problems. The finish quality is what we hoped for, our production rates have improved tremendously and now anyone with a bit of spare time can finish the artwork."

Graining or decorative finishing is a great application for a SuperBrush sander, which is done using a nylon or flap-style brush. The best brush choice will depend on desired appearance, condition of the material before brushing, type of material, and plating or painting.

Light deburring can be done on many materials by using an aggressive wire or nylon brush and can complement the wide-belt sanders as a second step to radius edges and remove secondary burrs belt sanders leave.



Nylon or flap-style brushes achieve graining or decorative finishing for the user.

## Polished process

Light deslagging or dross removal is achieved under certain conditions with an aggressive wire brush. The material usually needs to be softer or the slag needs to be less attached for wire to accomplish this task. Wire brushing is a great second step after initial deslagging with a wide belt.

Polishing and buffing metal are accomplished using either nylon or Scotch-Brite abrasive heads. This brings out the sheen of a surface or finish. A modified version of straight lining is done using the brush sander and a nylon or flap-style brush.

The brush will generate less heat, will better conform to slight differences in thickness and will have a much longer life compared with abrasives on the wide belt.

Cleaning and descaling can be completed with nylon, flap or wire brushes, depending on the degree of contamination removal and the base material.

Scuff sanding and primer sanding (base coat sanding) are easily accomplished with either nylon or flap-style brushes. This is much faster and more consistent than hand sanding or scuffing. **FFJ**

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