

Abrasives bring out the sheen

By Ryan
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A process used by the automotive industry is now adding shine to wood products.

Most finishers, regardless of the industry they're working in, know that the basic function of applying an abrasive is to produce a uniform and consistent finish.

For years, the automotive industry has used a process of hand, wet sanding and buffing to create a spectacular gleam and shine. Now, that process has been transferred to the woodworking industry, producing strikingly beautiful results. National Detroit designed the kit with woodworkers in mind.

For the Rockford, Ill.-based National Detroit, a manufacturer of pneumatic sanders and buffers,

says Swanson. "With the help of several abrasive manufacturers, we were able to come up with a way of doing it using a dry process."

Upon receiving a refresher course in topcoat rubbing, Swanson stated that process takes too long. They experimented with a wood panel with a freshly sprayed topcoat. Working with a longtime customer and friend, Mario Carreon, at Mar-Lynn Furniture Restoration in Mokena, Ill., Swanson proposed the dry process.

Naturally, he was greeted with a slight bit of hesitation; however, confident in his skills as a finisher, Carreon said if the panel were messed up, he'd be able to fix it.

Swanson uttered, "Let me play."

Starting with a 1,200-grit abrasive, Swanson took out all the dust nibs before starting on the orange peel that was clearly visible. He then switched to a 1,500-grit abrasive and went over the panel a second time.

"The whole idea of this process is to make the scratches on the panel smaller and smaller so they may be buffed out easily," he explains.

He then changed from the dry sanding application to using a Mirka Abralon 2,000-grit disc in a wet sanding application. Using the same sander (Model PGU6), he wet the surface with a small amount of plain water with a spritzer bottle and went to work. In very short order, he changed to a 4,000-grit piece of Abralon and quickly finished the sanding operation.

The next step was to take an XLB/Sander/Buffer with a foam buffing pad and start buffing using the System One compound.

"When the buffing pad started to polish the panel, Mario's head went from a horizontal shaking of the head, signifying no, to a vertical shaking of his head, signifying yes," says Swanson. "I wiped the panel and there was suddenly a nice sheen to it."

The final step includes a soft polishing pad and the same System One compound to finish the panel. Once that step is completed, the panel takes on a new life of its own.

experience in the automotive finishing industry, trial and error and a leap of faith drove vice president Gary Swanson to try something new, using a proven method widely used in the automotive industry to produce a similar effect. And to the surprise of many of his customers, it works.

"I had talked to a number of woodworking people about the process and I was told, 'No, it won't work.'"



"This is the same process that is done in the automotive industry," says Swanson. "The experimental board I worked on had a nitrocellulose lacquer applied to it; however, I've tried other finishes and it works equally well."

"The whole idea of this process is to make the scratches on the panel smaller and smaller so they may be buffed out easily."

— Gary Swanson, vice president of National Detroit

The proof is in the sheen

According to Carreon the kit has had a remarkable effect on productivity. "It's cut our time in half," he says. "Before, it would take me a couple of hours to achieve the finish my customer wanted and even then there were times that it wasn't exactly correct."

Carreon typically uses a nitrocellulose lacquer and has tried the abrasive kit with parts finished with polyurethanes

and pre-catalyzed lacquers, both of which produced a similar result — a high-sheen, high-gloss appearance.

Contained within the kit is the Mirka Abralon, a mesh fabric coated with closely sized abrasive particles, recognized as an IWF Challenger's Award winner and a winner of the AWFS Sequoia Award. The mesh is laminated to foam with a brushed cloth backing. The open mesh and foam construction allows the lubricant to flow around the abrasive grains and is absorbed or released by the foam as required. The kit features the Abralon product in a 2,000 and 4,000 grit.

System 1, the closest product to a one-step buffing procedure, is also included.

At first glance, it would seem this system is strictly for the small shop finisher. And although Swanson has had his most experience using it in that setting, he notes, "it would be just as useful for the larger furniture manufacturer." ■

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