

Renaissance Man

Dwight Griffin of GRIFform Innovations, Inc.

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Create a finely detailed, three-dimensional solid surface inlay and adorn it with a rainbow of vibrant color, all-the-while maintaining subtle tonal shifts commonly found in nature. While decorating your masterpiece combine the elements of solid color with metals, iridescence and opalescence. Having achieved that, develop a process whereby you can accurately reproduce that same inlay hundreds - even thousands - of times per week, while maintaining absolute control over the details of shape and color. Then create a system in which any fabricator in the world might order a stock or custom inlay, and install it in a countertop just as he would a bevel edge undermount bowl. Oh, and don't forget to make it affordable.

Sound impossible? Not for someone blessed with a highly creative mind and the passion to see a project through, no matter what the cost in terms of personal sacrifice. Someone with the heart of an engineer, the soul of an artist, the organizational skills of a field general and the vision of a philosopher. That someone is Dwight Griffin, owner of GRIFform Innovations, Inc., located in Glide, Oregon.



But inlays are just the beginning, really just a sideline. Griffin pushes the limits of three-dimensional thermoforming by creating solid surface shower pans that substitutes sharp angles and boxy corners with sweeping bends and elegant cantilevered curbs. To make the concept attractive to the RV and marine industries, he has reduced the shower pan's overall weight to just 50 lbs. All this at a price comparable to other competitive products and which are now available through the Corian distribution network.

Of course, and in typical Griffin style, there is more to this story. Realizing that shower pans are used in conjunction with a variety of colors and materials, and that most polyester based solid surface products cannot be thermoformed, GRIFform has developed molds for casting its shower pans from raw materials. GRIFform is licensed by both Avonite and Karadon to cast their colors, and the company has also developed solid surface patterns that are perfect doppelgangers for many of today's popular engineered stone materials.

As a component parts manufacturer, GRIFform produces custom and stock goods for other companies, who then incorporate those pieces into their own finished products. The company is proficient in making institutional children's furniture, standard and folding hardwood chairs, built-ins and cabinetry, closet organizers, institutional solid surface and laminate tables, moldings and decorative trim, as well as a host of other components. It employs 30 production and office workers and operates out of two facilities totaling 21,700 square feet.

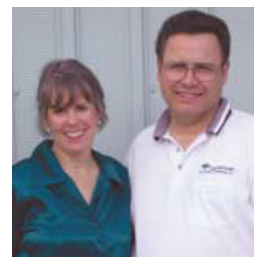


The Secret Is The System

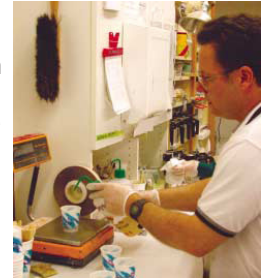
Successfully generating so many products from such a wide variety of materials and disciplines requires more than just creative thinking. It demands skillful execution. For that, among other things, GRIFform turns to technology.

"We bought our first computer for \$12,000 back in the 70's. It took up half the space in the room and had a fraction of the computing power of today's desktop models," Dwight Griffin says. "But it was worth it at the time because it gave us a tool for streamlining the business. That's the same philosophy we follow today. When new technology becomes available we bring it in and adapt it for our business."

The culture for pushing the envelope at GRIFform encompasses more than just purchasing the latest hardware, however. It centers on the desire to service the needs of its customers, which often leads the company down lesser traveled roads in the search for extended materials applications.



Take solid surface moldings, for example. One of GRIFform's customers, a manufacturer of high-end custom coaches, wanted to incorporate moldings used in its cabinetry into solid surface countertops in the kitchen and bathrooms. When the company brought its request to Griffin he designed and built molds for casting the special parts. He then created a manufacturing process for producing the moldings in a way that fit seamlessly into GRIFform's existing workflow, without so much as a hiccup.



"It's all about systems and planning," he explains. "If production grows faster than your ability to manage that growth then you have a problem. The system must be organized so that raw materials are available when you need them, information is put into the system prior to parts entering the production shop, and the manpower to process them is properly scheduled. It is like having all these different roads coming together at the same place and at the same time."

When GRIFform processes an order its information is entered into the computer, which "optimizes" the material for creating a cut list. Raw material is ordered and placed into inventory. A drawing of the components created in CAD and a tool path generated for cutting out the material. Before the project is sent into the shop the accuracy of the drawings are checked by another computer, which simulates the entire production process and points out any discrepancies. Once the parts are cut at the machining center, a bar code label is attached that contains all the information needed to process the part at stations further down the line.

Throughout the process a job ticket, called a "Shop Traveler," follows the material through the shop. Employees use personal data collection technology by Tractivity to record time spent working on the components. Finally, the staging and packaging process is timed so that an ad-hoc team of workers can switch from their normal tasks and work together to get the project out the door. All these functions occur naturally as part of the normal work day.

There Is No Substitute For Experience

On the day of Solid Surface's visit, Griffin fielded a call on his cell phone from a customer desiring to change the design of a particular component. It was late afternoon and we were two hours away from the plant. The customer explained he needed the part right away. Griffin told him he would get on it immediately.



That evening he went to the plant, designed the new part and wrote programs for cutting it out on the CNC machining center. The next morning the program was tested in the computer for accuracy, then a sample part was run on the CNC. Several digital photos were taken of the new component and emailed, along with shop drawings to the client, who approved the design. Having received the go-ahead, the part was given priority status in the shop and scheduled for production. All this was done by 9 a.m. By that afternoon the components were cut, finished, packaged and ready for delivery the next day.

"A lot of this comes from having over twenty years' experience in the field," Griffin says. "I know what needs to be done and the order it has to follow, sometimes even before the computer has a chance to figure it out."



The experience Griffin refers to includes a stint as a general contractor for commercial projects (he also holds licenses as a master electrician and landscaper). He has worked as a developer, cabinet maker, and product designer. Most important, according to Griffin, is his experience as a Special Forces Marine in the Vietnam war, which provided him with the work ethic and multi-tasking abilities he now uses to good advantage in his private and business life.

It often takes more than experience to come up with a new product innovation. For that, Griffin spends countless hours scouring the internet and other sources for information, and often weeks sequestered in his personal "laboratory" conducting experiments. His efforts have been rewarded with, among other things, a proprietary method for creating metallic, multi-colored inlays that can be reproduced exactly hundreds of times per week. He has also developed a three-dimensional process for thermoforming solid surface that is now used in the new GRIFform Innovations line of shower bases.



"We have become a company that is capable of manufacturing custom items or large production runs simultaneously," he says. "As the needs of our customer base have changed our company has evolved to better accommodate their needs. In every case we strive to bring Distinctive Excellence in our approach to any product or service we provide."