## VULCANA, LLC

## Dianne Denommee, GREO Westfield, Union County

You might say Vulcana had to "re-reinvent" the wheel—and add a dash of style, to boot.

Plenty of people are recycling rubber tires. But the founders of Vulcana had a specific re-use in mind that set them off on a search for vendors able to turn their unique vision into reality.

Vulcana converts car tires into sheet rubber that can be used in a variety of ways, including in upholstery, buildings and consumer products. Among Vulcana's first products were handbags and other accessories.

The company formed in 2007 after Dianne Denommee bought most of the assets of a rubber-tire recycling company in Arizona. The most important asset was a patent for producing material and products from recycled car tires claimed from U.S. landfills.

That concluded the first part of the journey. But it had begun about five years ago with something entirely different: pallets, the universal symbol of trade and logistics.

Denommee and her partners, who have a background in international trade, were interested in finding green solutions to offer their logistics clients. The search led them to explore offering pallets made of recycled rubber.

They found one company, but its pallets were about 40 pounds heavier than the existing plastic pallets. The next candidate was a composite pallet made partially of recycled plastic, but it was less durable.

The hunt wasn't entirely fruitless, however, because that's where Denommee found the company that had patented a method for turning car tires into sheet rubber.

While the process sounds straightforward, the effort to develop a finished product was anything but.

Complicating matters, Vulcana was looking for U.S.-based production partners at a time when most manufacturing was moving overseas.

One of the biggest challenges was finding a partner that could mix the scrap material in a process called compounding. They also had to find a supplier willing to send material in less-than-truckload quantities.

The next challenge was finding a vendor for curing and calendaring, the process that turns rubber into thin sheets.

Some companies were too big. Others didn't deal in scrap. Some calendared only their own patented material. Others handled only "serious" materials used in buildings, automobiles and military specifications.

Once Vulcana found the right partner, production was ready to roll.

The first handbags and accessories were all black, just like the original tires.

But Vulcana quickly began to experiment with pigments to create new colors. Today, the company has a line of materials that come in black, peanut, burgundy, blue, green and grey and are marketed under the trademark rubbRe.

The experiments continue, despite the challenging economic times.

The company is developing a line of recycled rubber-bonded materials marketed under the trademark "fuzun." It also has been working with industrial designers, university researchers and architectural firms to incorporate Vulcana products in their future projects.

In addition, Vulcana has engaged testing laboratories as part of getting its materials certified for specific commercial, industrial and military applications.

And, of course, Vulcana continues to develop new colors and textures. The recession has only inspired greater creativity as people look to do more with what they ordinarily would throw away.

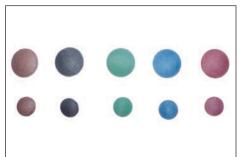
Speed bumps are unlikely to slow the progress of these tires. ∾



Vulcana has turned scrap tires into a boutique's worth of fashionable accessories, including handbags, portfolios and messenger bags.



Dianne Denommee is the founder of Vulcana, a company that finds creative and stylish uses for old scrap tires.



Among Vulcana's recycled products are buttons made from the company's patented rubbRe material. Buttons come in a range of sizes and colors, including peanut, black, green, blue and burgundy.





Vulcana – Fast Facts

No. of Employees: 10

Products/Services: Manufacturer of a sheet rubber material made from recycled car tires.

Mission/Value Statement: Build a successful U.S.-based enterprise that specializes in innovating alternative materials using post-consumer goods that achieve universal market acceptance for commercial, consumer and industrial uses.