Latin American Composites Market

Heavy on Anti Corrosion

Hot spot for U.S. Investment?

By Phil Bridges

As indicated via attendance figures at last November's FEIPLAR composites trade show in Sao Paulo, Brazil, composites is a fast-growing industry in Latin America, and Brazil in particular. This growth and the particular quality of the challenges the industry faces make South America a region well-suited to investment opportunities by U.S. manufacturers.

The FEIPLAR show is produced every two years and draws attendees from all over South America and other regions including the United States and Europe. Prevalent at the 2004 show were examples of corrosion-resistant applications for composites, a strong market segment throughout South America and one that seems to have far reaching implications.

Four years ago, FEIPLAR drew only 4,000 attendees. Two years later, attendance had grown to 6,500. In November, 2004, according to Simone Martins Souza, show producer and publisher, 10,000 people attended FEIPLAR during its three-day run.

Souza said that many fabricators in Brazil are now beginning to look for new applications and opportunities. "When I started the magazine, they didn't want to look for different things," she recalls. "But now, with the show Plastico Reforçado, fabricators are beginning to realize how many opportunities may exist for them. In the past two years, we've found that most companies are looking for new technologies. Many are interested in the RTM-light process. Here in Brazil, RTM-light can be cheaper than conventional spray-up processes due to the heavy use of fillers."

Souza further says that Brazilian companies also are looking at bulk molding compound (BMC) as an alternative.

"We're seeing more investment in these processes where we were not four or six years ago," she says. "Suppliers such as Reichhold and St. Gobain are beginning to introduce more 'international' products in Brazil, and I believe these products offer new solutions to our market."

As interest in FIEPLAR indicated, corrosion-resistant, composite storage tanks and pipes have very strong market potential in Brazil.

"We have very good technology here, and some is even being exported to Europe," Souza says.

Recycling at Firplak S.A.

The Columbian-based Firplak S.A., a kitchen and bath products company that exports to 13 countries in Latin America, has developed a recycling program for cast polymer and fiber glass scrap. Lavatories, sinks, and laundry tubs are made with cast polymer on one of the company's production lines; bathtubs and whirlpools with fiberglass on another. Both cast polymer and fiberglass scrap (used roving, flanges, dust or micro-scrap, broken pieces), are taken to the recycling factory in front of the main factory, sorted, and stored in recycled cans. Eventually, the material is milled on grinders to different sizes of grains, what company officials call "the new raw material." Depending on what the

Products and demonstrations at Brazil's FEIPLAR composites trade show has steadily drawn more and more attendees. Corrosion resistant pipe (left) and glass flange application (right).

Permit challenges

Souza insists that investment and market development by Brazilian manufacturers, re-investing profits to promote business, are keys to future growth and success.

"Fabricators must invest more in their companies," she says, "and gain more materials sophistication. Some insist on producing the same composites part for 10 years with no changes. We must work smarter, look for new opportunities and develop products for which we know there are markets."

A Brazilian company, EDRA, developed a tank-truck featuring a corrosion-resistant, composite tank. However, while this application is widely accepted in countries such as the United States, Brazilian authorities ruled that these composite-tank trucks could not be driven on public paved highways. They believed that the composite road tankers were more likely than conventional tankers to leak in the event of crashes.

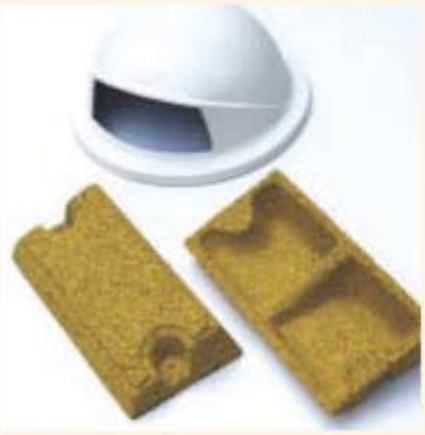
Even when independent tests showed this not to be true, transportation authorities refused to issue the necessary permits.

Still, with all of the challenges facing the composites industry in Brazil, Souza says composites are gaining ground throughout South America, not just Brazil. In the Excellence Awards (Prêmio Excelência) for composites, which are presented by *Plastico Reforçado* magazine, a quarter of the 2004 entries were from outside Brazil, mostly Colombia and Argentina. This is significant in that hardly any entries came from outside Brazil in 2001.

Success in corrosion resistance

One FIEPLAR attendee, Resinar Materiais Compostos (Resinar Composite Materials) produces composite linings and coatings, while sister company RUST Enginharia provides engineering and consultation solutions.

Resinar's business is focused on corrosion resistant composites for environments such as pulp and paper, sugar and alcohol, chemicals and



company is making, a cast polymer or fiberglass product, the milled material is taken to a mixer and mixed with resin, catalyst, and color. Resultant products include support bases, parking lot bumpers, base boards and a variety of others.