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# Grafton Company, WVU To Make New Adhesive

INDUSTRIES OF THE FUTURE  
PROJECT TO CREATE  
ENVIRONMENTALLY FRIENDLY,  
COST-EFFECTIVE PRODUCT

By PAM KASEY

For The State Journal

Pressure sensitive adhesives (PSAs) — used, for example, on postage stamps, “sticky” note pads and disposable diapers — are now most efficiently produced using solvents that harm the environment.

Dyna-Tech Adhesives of Grafton has teamed up with the chemical engineering department at West Virginia University, Argonne National Laboratory and other partners in a major IOF project to develop more environmentally friendly and energy efficient water-based PSAs.

“We’re a small company, and our resources are limited,” says Technical Director Earl Melby of Dyna-Tech, which employs 35 to 40 people.

He appreciates the opportunity to work with WVU.

“They’re chemical engineers, so they have a feel for some of this that we wouldn’t have from a theoretical standpoint.” The project received \$1.4 million in federal funding over three years.

Weirton Steel has participated in several IOF projects.

“The main part of it was a project we did called utilities automation,” said Howard Snyder, senior director for engineering and technology at Weirton Steel. “We automated our powerhouse and boiler house with a level-one computer system.”

Those and other projects have reduced

production costs by about \$8 per ton of steel produced.

“We make about 2.3 million tons a year ... that’s about \$18 million total saved. Every year.”

Weirton Steel is now the lead industry partner in an IOF-WV co-funded project to improve the durability of “pot hardware,” an item that causes frequent line shutdowns for replacement. The program may bring significant cost reductions to the galvanizing industry as a whole.

IOF-WV director Carl Irwin is concerned about the future of this multi-year project in light of administration-proposed cuts to IOF funding.

An IOF co-funded plant-wide energy assessment at Bayer Corp. near New Martinsville turned up potential energy savings of \$1.4 million annually. Unlike some energy-efficiency investments, these changes were projected to pay for themselves in less than a year.

Art Burnside, manager of Bayer’s Environmental and Utilities Operations Department, said the changes “gave us an opportunity to work with the university and experts in the field of energy and brought some of that knowledge into practical application here at the site.”

The company has undertaken some of the smaller projects, such as correcting leaks in utilities distribution piping and improving insulation throughout the plant.

They will look into some of the larger investments for projects such as coal-powered cogeneration to recycling waste heat.

“It’s an opportunity for us as a company to leverage our research dollars.” Ken Dunlap, director of research for Bayer, said of IOF-WV.