



Extrusion Solutions

THE LATEST EXTRUDING NEWS FROM ENTEK



MacDermid
Printing Solutions

CHOOSES



ENTEK

ENTEK Provides Turnkey Support To Help MacDermid Successfully Engineer, Install, and Commission a Multimillion Dollar Production Line



MacDermid Printing Solutions, based in Atlanta, GA, is a global leader in the production of photopolymer products like packaging, publication and coating plates that can be used for printing on paper, film, newsprint or corrugated material. They are widely regarded as one of the top producers of printing plates in the industry because of their superior quality and innovative company mentality.

In 2012, when MacDermid had decided to expand capacity at its Morristown, TN plant for the production of flexible packaging printing plates, company officials attended the NPE 2012 show in Orlando looking for twin-screw extruder suppliers. It was there that MacDermid originally connected with ENTEK.

"We were impressed by their 103mm twin-screw extruder they had on display, but even more impressed with their ability and willingness to assist with project management," said Gary Markhart, Director of Engineering at MacDermid. This turnkey approach made the difference, and MacDermid decided to give ENTEK a try.



The Right Machine

Initial lab trials at ENTEK's headquarters in Oregon proved to MacDermid that they could successfully process the application. "The lab trials were extremely important, as the extruder had to process a challenging mixture of low viscosity resin, synthetic rubber plasticizers, photo-initiators, and oil," said Markhart. "Right away we saw the kind of technical capabilities, and customer friendliness, that ENTEK brought to the table." Dean Elliott, ENTEK's Lab Manager, even created a unique, custom screw design to better process MacDermid's challenging formulation.

ENTEK supplied MacDermid with a new 103mm twin-screw extruder, chosen because of its high volume capacity and customization ability. In addition ENTEK was contracted to engineer all the electrical and controls for the extensive tank farm, multiple liquid injection systems and pellet delivery to the extruder. This included designing and assembling multiple electrical enclosures to service the fully automated material supply systems. ENTEK was also responsible for laying out the power distribution for the entire line.

The Right Process

Beyond supplying great equipment, ENTEK was also able to provide turnkey support to help integrate that equipment into the rest of the production line that MacDermid was developing. Al Bailey of ENTEK was brought in to oversee the electrical installations for the entire line, and was onsite at MacDermid for six months to help manage the project.

In addition to the twin-screw extruder, the production line included a tank farm, a calender, a cooling tunnel, vision system, laser marking machines, and UV lighting/treatment. ENTEK was asked to manage the integration of all of these into a single control system and they came through, creating custom screens for control of all line operations.

An important part of ENTEK's turnkey support included providing training to MacDermid's engineers and line operators to bring them up to speed on system operation.

"We love the fact that they offered so much more than just the extruder," said Markhart. "We saw true turnkey service and support from them, and it helped make our installation a real success story."

The Right People

Overall, the entire process went better than MacDermid could have expected. Above all else though, the quality of the people working for ENTEK was what impressed them the most. "The biggest positive of the many we took away from this whole experience was the plethora of top-notch people that work for ENTEK," said Markhart.

"Everyone from the President of the company to the engineers that came and helped us install the system brought a positive, can-do attitude, were easy to work with, and developed a great camaraderie with our own employees."

Right on schedule, MacDermid's new production line started up in February. ENTEK's Bill Petrozelli was onsite at MacDermid for the startup, providing invaluable processing knowledge and assistance. The line is now in its qualification stage, and MacDermid is successfully shipping product to its customers.

This project showed how ENTEK's turnkey project services combined the company's top-quality twin-screw extruders with engineering project management, and exceptional customer service, to help a customer succeed.

