



WEST WINDOW REDUCES MAINTENANCE & BOTTLENECK WITH NEW HOT MELT SYSTEM



A new Graco Therm-O-Flow™ Plus hot melt supply system has significantly reduced maintenance expenses at West Window Corp.

rebuild the pump. In addition, we had to send the pump out-of-state to be rebuilt and it took months. This was unacceptable."

"When these breakdowns occurred or when the pump was sent out to be rebuilt, we had to shift production to one of our other XY tables" adds Alan Hancock, glass production supervisor. "It created a huge bottleneck. We had to put our table crews on overtime to keep pace with incoming orders. Again, it was unacceptable."

After the new Therm-O-Flow Plus hot melt system was installed, these maintenance and production problems were eliminated at the table station. Furthermore, changing from the old rotary hot melt system to the new one was easy. "We actually removed the old system and installed and wired the new system ourselves. It was the smoothest start-up I've ever experienced," says Plasters.

Producing the glass lites is a labor intensive process. Aluminum spacers are cut and processed while glass sheets are cut and washed in another part of the facility. Both of these components are conveyed to the XY table stations where a spacer is inserted between two panes of glass. The table operator places the glass unit

West Window Corporation, Martinsville, VA, has been manufacturing quality windows and doors in Henry County since 1949. According to company Chairman and CEO W.E. Giesler, "Throughout our history, West's goal has been to build better windows and doors, not cheaper ones. Our commitment to quality, efficiency and custom manufacturing is part of every order that leaves this plant."

This commitment means the company is constantly seeking more efficient and practical ways to improve their manufacturing processes and product quality. For instance, they recently replaced an older

hot melt supply system on one of their XY tables that seals double-pane glass lites with Graco's Therm-O-Flow® Plus hot melt supply system. According to C.J. Plasters, maintenance supervisor, "The new hot melt system has significantly reduced maintenance costs, eliminated a serious bottleneck and is simple to use."

"We were having major maintenance problems with our rotary-style hot melt pumps in our window sealing area," says Plasters. "We were spending up to \$1,200 a year on general maintenance, as well as another \$7-8,000 every other year to completely

CUSTOMER
West Window Corporation

APPLICATION
Sealing glass lites for windows and doors

PROBLEM
Pump maintenance was high, creating a bottleneck.

SOLUTION
Graco Therm-O-Flow™ Plus Hot Melt System

RESULTS
Maintenance was reduced significantly and the bottleneck was eliminated.

against a table guide and depresses a foot switch that activates an automated dispense head. The head extrudes a precise bead of sealant along the edge of the glass unit. The operator rotates the work piece and repeats the process on the remaining sides, sealing the entire insulated glass unit.

One of the features of a quality sealing process is consistency. "We need a constant temperature to maintain material viscosity and a bead that remains uniform," explains Plasters. West Window is receiving both of these critical features from the Therm-O-Flow Plus system.

The Graco Therm-O-Flow Plus system features a heated, ram-mounted, supply pump with a heated **PTFE** coated platen. The patented Mega-Flo™ heated platen, which fits snugly inside the 55-gallon sealer drum, heats the material. As sealer is needed, the high output pump transfers the material through a heated fluid hose and fluid pressure regulator to the heated dispenser head at a consistent 300 degrees F, insuring material uniformity. The Therm-O-Flow Plus is capable of providing fluid power ratios up to 65:1 to handle high viscosity materials up to 5 million CPS and higher flow rates. West Window is using a hot melt butyl sealer. The heated material's viscosity is approximately 300,000 CPS.

In addition to reducing mainten-

ance costs and increasing production efficiency, the Therm-O-Flow Plus hot melt system has made the operators' job more efficient and safer too. During a typical workday, the operator will change dispenser heads 4 to 8 times to accommodate the thickness of the different insulated glass units. There are eight different heads that extrude a bead from 3/8 to 13/16-inches wide. With the old hot melt unit, the operator had to bleed the system after each changeover to eliminate air in the system which caused an inconsistent bead. The job took time, was messy and, if the operator was not careful, could result in burns

Operating the new system simply required the operator to adjust the air pressure to maintain bead consistency from one size to the next after he's switched heads. It's a simple chore. "There's no waiting with the new pump, I don't have to bleed the system. It's just so much easier to operate," he says.

After the glass units are sealed, they are transported to the window and door production areas where they are assembled into aluminum or vinyl frames. The completed doors and windows are shipped to customers across the eastern seaboard area. Orders are filled within two weeks, depending on the type and style of the product.

"The Therm-O-Flow Plus has made our glass production area more productive," concludes Plasters. "It fit into our existing table station without a hitch and we haven't had a single maintenance problem with the unit. It's a very adaptable, simple system." •



For additional product information or the name of a local authorized Graco distributor, call toll free 877-844-7226 in the U.S.A. In Europe call (32) 89 770 700

©2003 Graco Inc. Form 320508 3/03
Printed in the USA