

## Great tolerance for market change

Web-gauging scanner,  
automatic profile control offer process  
improvement, ensure  
quality



Fig. 1: Rowland Technologies Inc.

What does a company do when market requirements evolve? Find a way to evolve with them as quickly as possible.

In the case of Rowland Technologies, Inc., a manufacturer of high-quality plastic film and sheet, increasing market demand for thinner films with more restrictive tolerances sent the company in search of an on-line web gauging system that could ensure quality and better control the cross-machine direction (CD) profile. Rowland's executives found exactly what they needed with Mahlo America — a German-owned company resident in South Carolina since 1968.

Rowland had remained competitive in global markets by extruding specialty engineered film and sheet used in graphic arts and printing, menu boards and other retail signage, medical applications and photovoltaic cells for solar power applications. After looking at gauges and controls from several suppliers, Rowland's engineering and manufacturing process team had some concern about Mahlo. With 1,100 installations throughout North America, Mahlo was best known here for textile gauging. However, with their rapid growth into the plastics and converting markets over the last 10 years, plus high praise from existing customers, Mahlo had gained the credibility Rowland needed to move forward with a proposal.

In addition, Rowland engineers found much to admire about Mahlo. They particularly liked its 67-year history as a family-owned company. "In recent years, it seemed like some gauge manufacturers were changing owners like they were changing socks," one executive remarks. Mahlo had been proving its worth for decades, following a model that mirrored Rowland's business values.

Founded in 1945 by Dr. Heinz Mahlo, an engineer with an inventive mind and entrepreneurial spirit, the company is still privately owned by the Mahlo family and proudly continues the tradition of quality products built with exacting German engineering and craftsmanship. Decision-makers at Rowland couldn't help but see themselves in this progressive medium-sized family business with its technically trendsetting products.

Like Mahlo, Rowland Technologies was filled with self-starters who believed in their company and its dedication to achieving the highest standards of quality and performance. Incorporated in 1992, Rowland shifted production to the current larger facility in 1998 with most of that original work force still on the job. Even today a high percentage of those long-term employees are still employed at that Wallingford, Connecticut plant, enjoying the sense of security and extended family the company nourishes with competitive benefits, summer barbecues and traditional holiday expressions of appreciation. For Rowland's leaders, their search for an equipment supplier came down to more than finding a leading-edge product that would ensure greater quality and consistency. The two companies' cultures also clicked.

## Short setup, long life



*Fig. 2: Web gauging with Qualiscan QMS-12*

Ultimately, Rowland Technologies chose Mahlo's WebPro-XS compact O-Frame Scanner and DFI Beta Sensor with APC Pro automatic profile control. Many factors went into the purchase decision, beginning with the robust nature of the Mahlo frame and overall construction. "We expect this system to last us a lot longer than the one it replaced," says the head of manufacturing.

"Not only is their scanner engineered for a longer productive life," says Rowland's process coordinator, "but most of the components — from motors to circuit boards — are not custom designed or proprietary. We could buy spare parts locally off the shelf if we wanted. Mahlo even gives us the manufacturers' part numbers!"

The new equipment could also be up and running quickly. The old system was removed on Friday afternoon, and the new one installed on Saturday. "It's amazing how much an install schedule can be ruined by a half-inch difference between the drawings and the actual machine," says an installation team member. "But the Mahlo system fit exactly as their drawings showed, so we were ready to power up and test on Sunday." The line was back in production on Monday.

## Immediate Measurable Results



*Fig. 3: The results are immediately displayed*

With Rowland's old gamma gauge and profile control system, the roll-to-roll weight variance on each 1,000-lb. roll was typically +/-25 lbs. With the new Mahlo DFI beta gauge and automatic profile control, that variance is at most +/-5 lbs. Also, when there's a product changeover on the line, the new gauge is much quicker to achieve the required tolerance parameters, which affords operators more freedom to monitor and adjust for other critical properties that the customer might require. The end result of the new Mahlo system is consistently higher film quality, greater reliability and a significant reduction in material scrap.

## Free 24/7/365 support was an unexpected bonus



Fig. 4: Mahlo's Eric Reber (right) gives instructions.

In every industry, production machinery is only as good as the company that supports it, especially when challenges arise. People on the front lines of production at Rowland say Mahlo's service commitment is unmatched.

Mahlo proved its technical "mettle" one Saturday when some of the machine's settings were inadvertently lost. After Rowland's technician reached out via Mahlo's Internet help line, the customer support team identified the problem and resolved the issue in less than two hours. Even though Rowland Technologies is 800 miles away from the Mahlo America headquarters in Spartanburg, S.C., there was no need for travel or service charges.

"Our machines are built to keep running for a very long time," says Eric Reber, Technical Sales Manager for Mahlo America. "We aren't interested in making big profits from spare parts or service calls. Our free 24/7 online tech support is key to keeping the lines producing and our customers happy for the long term."

Manufacturers like Rowland Technologies also benefit from the short learning curve of the Windows-embedded-based Mahlo system. "Once the operator recognizes the icons used for common functions, the rest just comes naturally," says Rowland's process coordinator. As well, frame and control cabinets are engineered to make all regular maintenance areas easy to get to and tasks simple to perform.

And performance is the bottom line for the Rowland team. "Basically, the Mahlo system does exactly what they promised it would," one member says. "That kind of integrity is hard to find these days."

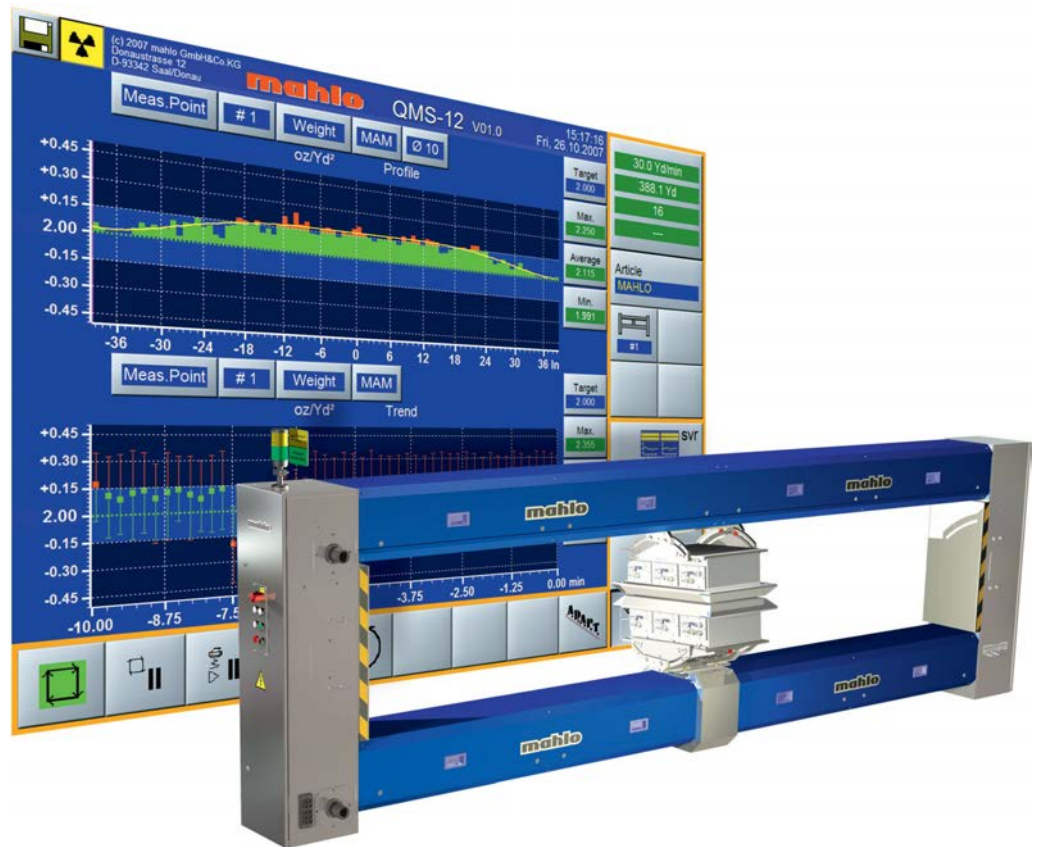


Fig. 5: Qualiscan QMS-12 Titel