

MERRYWEATHER FOAM

ANTHONY, NEW MEXICO

When Merryweather needed to add high speed efficiency to their foam packaging line, they considered their options... and picked Jet Edge!

Merryweather compared speed, quality, and value to select Jet Edge to design and install their eight cutting head, 6' x 10' high rail motion system. Download this case study to learn more about the machine specifications and features that kept Jet Edge one cut above the others.

MERRYWEATHER FOAM, A foam packaging company selling into the medical device industry, was seeing such heavy demand they struggled to meet the customer's delivery schedule without working heavy overtime shifts. So they approached two waterjet manufacturers for a high speed solution; the incumbent waterjet company and Jet Edge.

The Company wanted to increase productivity by utilizing multiple cutting heads with load/unload capabilities. This required incorporating a system that allowed the operator to load the next set of material onto a table and unload finished goods while the machine continued to operate.

The Jet Edge 610 High Rail Motion System includes 8 cutting heads, mounted to a 6° x 10° high rail motion system and powered by a Jet Edge IP-60 100HP UHP Pump.

Jet Edge Solution: A high rail system with the larger cutting envelope is a core motion table strength of Jet Edge; that part was easy. Jet Edge had to draw upon its experience of multi-head waterjet cutting in the foam industry to meet the performance specifications required. Our engineers started with the cutting head requirements and increased the spreader bar dimensions to provide the range of motion required for all eight heads to operate simultaneously. A linear scale that allowed for precision locating of each head ranging from 4" to 16" apart was integrated with the HMI Controls. An automatic docking system sets the head spacing using the parameters set in the programming, rather than by manual



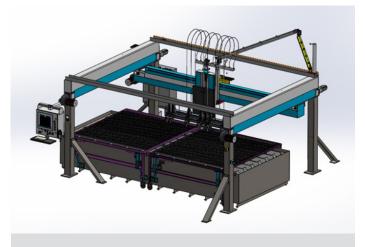


setting with tape measures. A stainless steel dual cart system, where one cart loaded from the left side and the other from the right side of the cutting envelope, was designed and built into the control system to confirm cart positions and lock out operation when carts were not in place. A Jet Edge IP60-100 UHP Pump was used to power and control the water stream to the system.

Remote start of the pump was optioned to allow the operator to control the start and stop of the pump as well as control pressure at the motion system control panel.

The 610 High Rail Motion System is a workhorse, designed to provide years of dependable service. Its sturdy design separates the motion system from the catcher tank, eliminating vibration and ensuring maximum part quality. We think the customer made the right choice to go with Jet Edge...but more importantly, so Do they!

NOT ONLY WAS THE SYSTEM
BETTER VALUE FROM A PRICING
STANDPOINT...IT RUNS ALMOST
THREE TIMES AS FAST AS THE
COMPETITOR'S SYSTEM WE HAVE!



The design concept included eight cutting heads with an automated docking station and incorporated a load/unload system.

THE PRODUCTION GOALS INCLUDED:

- A 6' x 10' cutting envelope
- 8 waterjet cutting heads mounted to a high rail gantry for sheet cutting
- Automated docking system for cutting head spacing
- 60k psi of cutting pressure with a 100hp drive system capable of water delivery to all heads
- Dual cart system for loading/unloading
- A capital expenditure price that met the ROI goals

