High Pressure Water Jet Cutting System

Industry: Metal Fabrication



This customer manufactures turnkey water jet cutting systems often used in fabrication shops. Typical cutting material can be metal, stone, glass, foam, plastic and ceramics. The machines work by pressurizing water to 55,000 psi

before being forced through a small orifice on the cutting head. An abrasive is mixed with the water and the water/abrasive mix is sprayed in

a stream that travels on the order of 1.5 times the speed of sound. The high-pressure stream can cut away material with no heat or work-induced stress leaving a clean, smooth finish.

The machine uses a three-axis precision rack and pinion driven by AMC products. The amplifiers used are AMC part number B15A8. Each amplifier controls a brushless motor. The PS16L80 power supply is used to power the amplifiers. Positioning accuracy is as high as +/-0.004" with a repeatability of +/-0.002". Speed range of the machine is 0.1 to 1000 inches per minute.



The customer chose AMC because of the small footprint of the drive, high reliability, and cost effectiveness. The customer was extremely satisfied with the reliability of the product.

Customer satisfaction comes first here at AMC!



