Pump:
Waukesha Cherry-Burrell Brand - Model 006 to 060
Universal 1 and Universal 2 Series

Industry:
Oil and Gas – Hydraulic Fracturing

Problem:
The customer needed to meter chemicals into a high volume water stream. The fluids were low viscosity but occasionally the viscosity would increase due to operating temperature. Previously, a progressive cavity pump was used and would often run dry causing the stator and rotor to fail.

Solution:
Pumps used in hydraulic fracturing processes are critical to the operation of mobile operating plants and are typically required to run 24/7, run dry when needed, and maintain the ability to accurately meter chemicals. The SPX Universal series pumps were able to address all of these issues and provide trouble-free operation. After initial trial, the customer standardized on the Universal Series pumps for their application.

Universal 1 and Universal 2 Series pumps with External Circumferential Piston (“ECP”) style rotors have tight running clearances (0.002-0.005 inches), this gives the pump higher operating efficiencies than other lobe style pumps. The increased efficiency provides accurate metering of chemicals and because the rotors are timed in the gear case, there is no internal contact inside the pump, thus allowing the pump to run dry. The customer commented “we have tried other brands of ECP pumps, but they did not provide the consistent quality and tight clearances required for these demanding applications”.

Another benefit was the compact footprint of the Waukesha pump, which provided space savings as the pumps are mounted on trucks with limited available space. The support of our global distribution channel also keeps replacement parts readily available for immediate delivery.