Emerson’s integrated solution cuts knife gate valve maker’s installation and lead times

RESULTS
• Designed turnkey fail-safe circuit assembly in a stainless-steel enclosure
• Simplified installation
• Cut lead times with three-week delivery schedule

APPLICATION
Fully Assembled Knife Gate Solution

CHALLENGE
A manufacturer of knife gate valves for the mining industry developed a new product line for slurry isolation applications. The valves incorporated a fail-safe circuit design that required connection with a Foundation Fieldbus control network. The company needed the circuit constructed as a fully assembled and tested panel for easy integration with the knife gate valves. In the past, the manufacturer would build the panels in house or subcontract them to an outside supplier. For the new product line, the company wanted a single source for both the components and the panel assembly to reduce lead times.

SOLUTION
Emerson’s technical team worked with the company to develop a custom integrated panel solution for the fail-safe circuit application. A stainless-steel enclosure housed a TopWorx™ Foundation Fieldbus communications module, a low-power ASCO™ piezo valve that piloted an AVENTICS™ Series TC15 directional control valve, and ASCO Series 651 and 652 air preparation equipment. The components were piped to the enclosure’s bulkhead fittings for easy installation. The solution was designed, quoted, assembled, tested, and delivered to the customer within three weeks. Emerson is now working with the customer to standardize its knife gate valve lines.