Emerson’s pneumatic system controls the cyclone

**BENEFITS**
- Developed a turnkey, panel-mounted pneumatic control solution
- Simplified panel-mount design
- Achieved compact footprint
- Enabled reliable operation in dust-filled environment
- Reduced installation time

**APPLICATION**
Construction machinery & equipment

**CHALLENGE**
A manufacturer of mineral processing equipment built a cyclone for a mining customer. The cyclone, which separates different sizes of rock, incorporates knife-gate valves in its design. A control system extended and retracted a pneumatic cylinder that opened and closed the cyclone’s valves. The manufacturer wanted a turnkey control valve solution that would be easy to install during cyclone assembly. The solution had to be compact and withstand the end user’s harsh environment.

**SOLUTION**
Emerson provide a simplified turnkey solution that eliminated the need for a bulkhead, added an integrated maintenance plate on the manifold, and included a panel mount option. The compact design mounted AVENTICS™ 581 Series directional control valves and ASCO™ Series 651 air preparation equipment in an AVENTICS Mecproof cabinet. The enclosed solution provided reliable operation in the mining customer’s dust-filled environment. The turnkey panel significantly reduced installation time in the cyclone assembly, plus the manufacturer benefitted from Emerson’s global technical support.

Emerson provided a turnkey solution, with a compact design, that significantly reduced installation time and required space. The customer was impressed with its ability to operate in a high dust environment.