Dry gas seals for hydrocarbon processing equipment

Since manufacturing the first-ever dry gas face seal for a centrifugal compressor in 1951, Kaydon has developed its dry gas seal (K-DGS) into one of the most reliable and maintenance-free sealing solutions available. The dry gas seal represents the highest level of technology and leakage performance available for main shaft seals in turbomachinery, and may be applied to a wide range of hydrocarbon processing applications.

Exceptional durability

The dry gas seal rotating face geometry causes a gas film to form between the stationary and rotating seal rings during operation. The controlled gap allows for non-contacting operation and low gas leakage rates across a wide range of speeds and pressures. Unlike dry gas seals with constant depth groove geometry, Kaydon’s patented tapered lift ramp geometry creates an increase in purge gas velocity as it moves through the ramp, sweeping away contamination from this critical area. The silicon carbide rotating faces used in each dry gas seal provide greater resilience to material failure.
in the event of thermal shock or incidental rub.

Uni-directional and bi-directional seals are available in a variety of configurations including single, double, tandem, and tandem with intermediate labyrinth.

**Proven performance**

Each dry gas seal is dynamically tested at and beyond the parameters of your application. Reported test data includes operation speed, pressure, vibration, leakage rates, and inlet and outlet gas temperatures. Customers are welcome to witness all seal testing and inspection.