Mechanical oil-buffered seals for hydrocarbon processing equipment

Kaydon has supplied the hydrocarbon processing industry with safe, hard-working mechanical oil buffered shaft seals (K·MOS) since the 1930’s. The mechanical oil-buffered seal is a prime example of Kaydon quality and reliability.

Oil consumption to process drain during operation is limited to less than 5 gal/day (20 liter/day), and less than 1 gal/day (4 liter/day) at shutdown. The balanced face design and back-to-back dynamic secondary sealing element maintain gas sealing, even with loss of buffer fluid. The addition of an inboard windback or gas buffered labyrinth feature directs sour oil leakage into drains and away from your process stream.
Key features

- Steel retained mechanical carbon face and bushing seal rings provide stability and durability to critical components
- Hydrostatically balanced face seal minimizes wear
- Solid PTFE secondary sealing elements provide the optimal combination of sealing and reduced friction drag
- Hard faced rotor elements matched with seal ring carbon
- Pre-tested seal cartridge

The mechanical oil-buffered seal can be configured for most any type of hydrocarbon processing equipment, including centrifugal compressors, oil free screw compressors, turbo-expanders, and more.

Typical applications up to

Pressure: \( \leq 1500 \text{ psi (100 bar)} \)
Speed: \( 350 \text{ ft/s (105 m/s)} \)
Temperature: \( 350 ^\circ \text{F (175 \degree C)} \)
Size: \( 13 \text{ in (330 mm)} \)

Kaydon's oil seal application group has the experience and expertise to help with new seal designs, upgrades, retrofits, and troubleshooting of Kaydon and other brand seals, and control systems.

Contact us today at kmos@kaydon.com

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