

# Kaydon Ring & Seal Circumferential Barrier Seals [K•CBS] for hydrocarbon processing equipment

Kaydon Ring & Seal pioneered the use of circumferential barrier sealing technology for compressor separation seals, isolating dry gas seal cavities from bearing lubricating oil. Today, Kaydon Ring & Seal continues to advance the design and

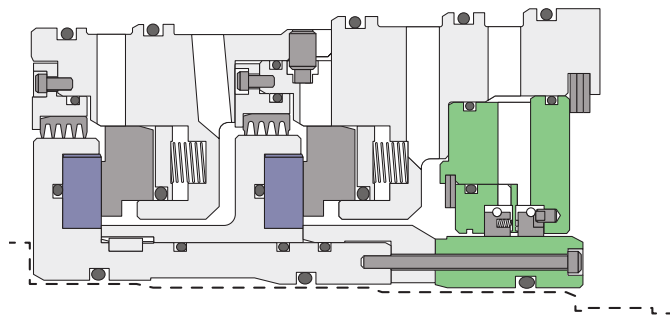
manufacturing techniques for circumferential compressor shaft seals through research and development activities, tackling the most demanding applications and remaining at the forefront in product performance and reliability.

## Isolation seal or backup seal

For optimal performance, the [K•CBS] employs two segmented carbon seal rings buffered with a low-pressure, clean gas, typically set at 5-15 psid. Each seal ring is pre-loaded with a light spring force in both the axial and

radial direction. Gas sealing occurs between each seal ring and its corresponding housing surface, as well as with a hard coated shaft or shaft sleeve. Leakage rates are approximately 0.1 scfm per diameter inch per seal ring.

In addition to its role as a bearing isolation seal, the [K•CBS] will serve as an emergency backup seal in the event of a dry gas face seal failure. Testing has shown that the [K•CBS] will remain intact after being subjected to over 800 psi gas pressure. The bearing side seal ring will experience excessive wear due to the increased loads, but will continue to provide resistance to gas escape.



[K•CBS] highlighted in a typical dry gas seal system



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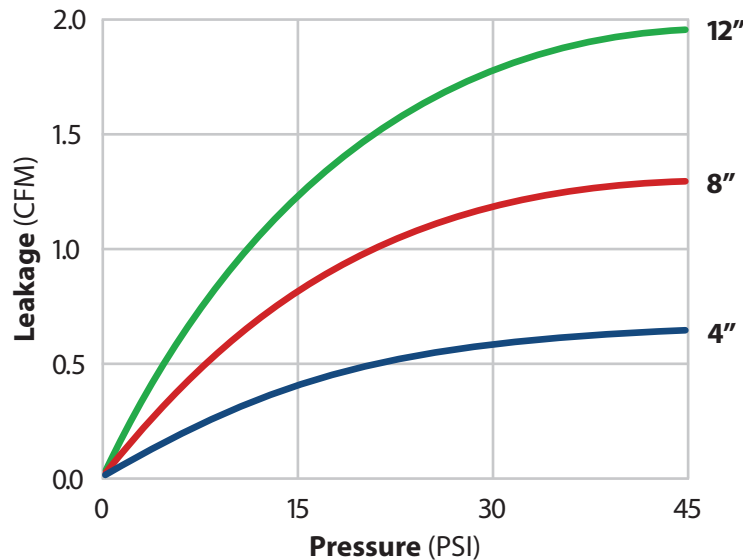
# Kaydon Ring & Seal

## Circumferential Barrier Seals [K•CBS]

### Upgrade to [K•CBS]

The Kaydon Ring & Seal circumferential barrier seal makes an excellent replacement upgrade to labyrinth seals, providing lower buffer gas consumption and a higher level of protection against bearing oil ingress.

### [K•CBS] Leakage rates



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

Contact us today at [sales@krs.us](mailto:sales@krs.us) or learn more at [www.krs.us](http://www.krs.us)



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