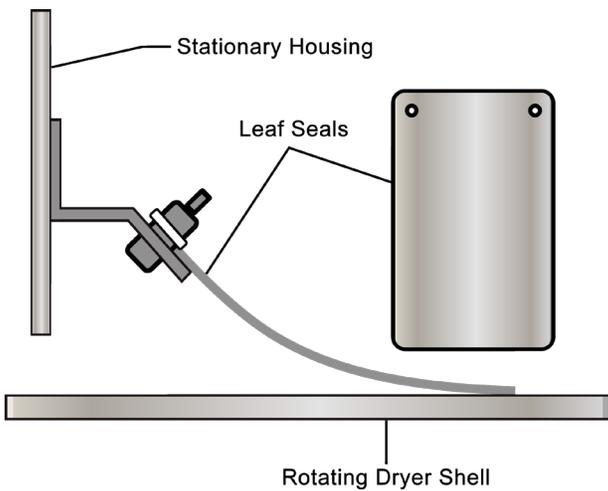


LABYRINTH SEAL

Relative Leakage >>1

The labyrinth seal is a cost-effective option when air leakage into the system is not a major concern.

This seal provides a torturous path for the ambient air by means of relatively close clearance between the rotating seal ring and the non-rotating housing. Sealing can be improved with the addition of a flexible wrap between the seal plate and rotating shell.

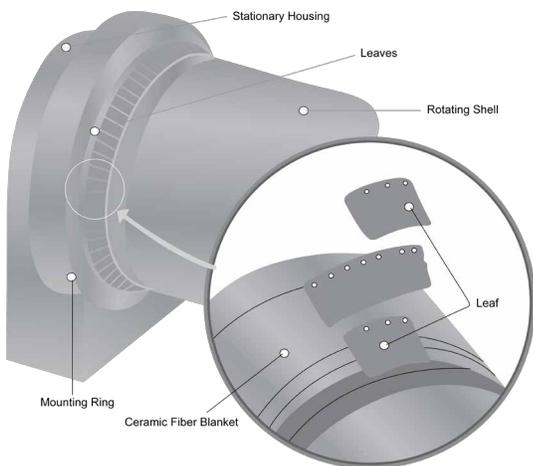


SINGLE LEAF SEAL

Relative Leakage = 1.0

The single leaf seal is the seal of choice to minimize the leakage of air into the dryer or kiln. Limiting leakage reduces fuel consumption and can result in a capacity increase.

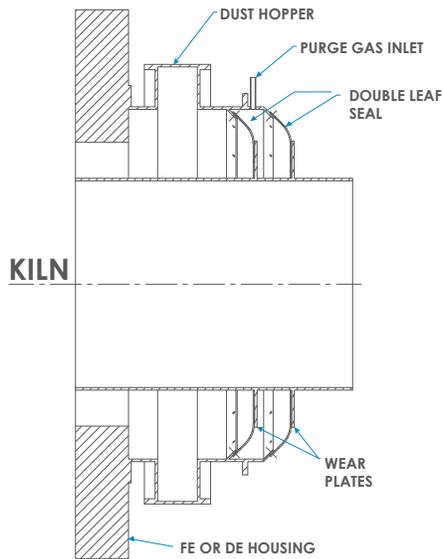
The seal consists of a series of overlapping spring steel plates that are mounted to the housing and ride on a wear ring on the rotating shell.



DOUBLE LEAF SEAL

Relative Leakage = .25

The double leaf seal is used when less leakage can be tolerated than with the single leaf seal. The double leaf consists of two leaf seals with a ceramic fiber blanket sandwiched between the two leaves. Leakage is about 25% of a single leaf.



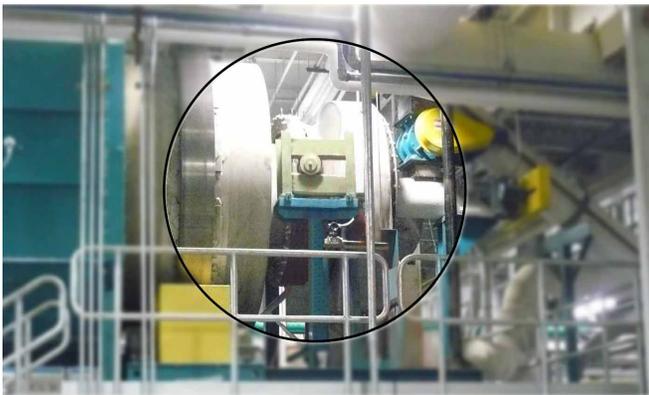
PURGED SEAL

Relative Leakage Air = ~0

Relative Leakage Purge Gas = 0.5

When leakage of gases into or out of a kiln or dryer cannot be tolerated, the purged seal is used.

This seal consists of a pair of double leaf seals with a gas purge in the volume between seals. The purge gas prevents the interior gas from exiting. A small amount of purge gas is lost both to the surroundings and the interior of the kiln.

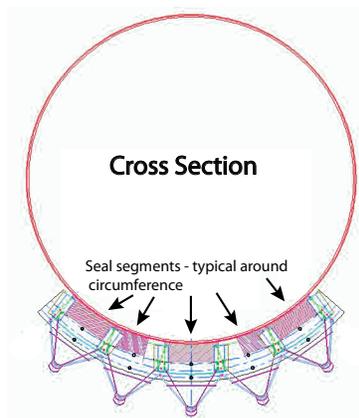
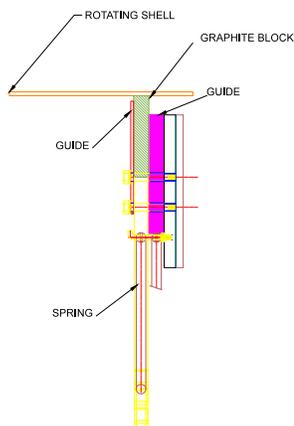


EAGLEBURGMANN SEAL

Relative Leakage = ~0

The Eagleburgmann seal is also used when virtually no air leakage into the process can be tolerated. It is a high precision mechanical seal that uses spring loaded packing rings to maintain the seal. Purge gas can be used to ensure there is no leakage into or out of the kiln.

This seal has an operating range of -0.7 to 3.6 psi.



GRAPHITE SEAL

Relative Leakage <<1

The graphite seal is FEECO's latest seal innovation. Spring tensioned graphite blocks are used to maintain the seal between the rotating shell and housing. This seal is used when there is the potential for material to enter and degrade the seal. The close contact of the graphite with the rotating surface prevents material from getting into the seal. In addition, it can be used in higher temperature situations where other seals are not applicable.