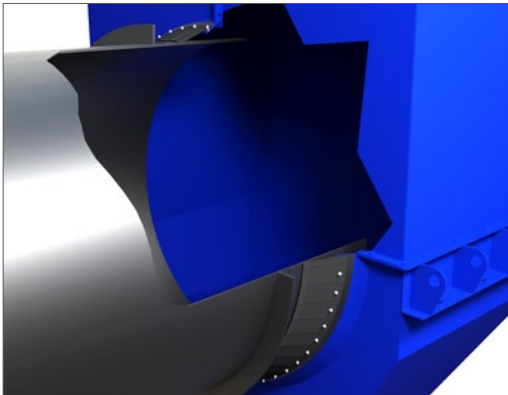


LABYRINTH SEAL

Relative Leakage >>1.0

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.



Shown: Single Leaf Seal

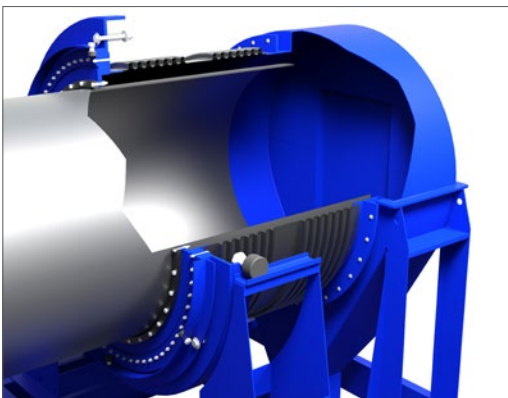
SINGLE AND DOUBLE LEAF SEAL(S)

Single Leaf Relative Leakage = 1.0

Double Leaf Relative Leakage = 0.25

The single leaf seal (shown) 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.

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 layers of leaves.



BELLOWS SEAL

Relative Leakage <<1.0

The bellows seal utilizes a wear material, such as graphite, to act as a face seal when compressed against a flat, rotating surface. The corrugated bellows accommodates significant longitudinal expansion—especially useful for higher temperature drums such as indirect kilns. The bellows is guided and supported by cam rollers.