

Seals for rotary equipment

Superdeal[®] and Goodeal[™]





Metso's 10' test unit used for the development and continued improvement in air seal design.

Superdeal[®] and Goodeal[™] Seals

Metso is the leading supplier of Leaf type seals for Rotary kilns, Dryers and Coolers, has been successfully marketing the Superdeal and Goodeal air seals since 1987. To date, there have been over 400 applications of these air seals worldwide, in a variety of Pyro Processing related applications.

Applications include those in:

- Cement Making
- Chemical Production
- Iron Ore Pelletizing
- Pulp Mill Lime Recovery
- Pebble Lime Production
- Drying of Bulk Granular Materials
- Coke Calcining
- Hazardous Waste
- Aggregate

The patented Superdeal Air Seal and the Goodeal Air Seal can be effectively applied to all existing Rotary Kilns, Dryers and Coolers, regardless of manufacturer of the equipment.

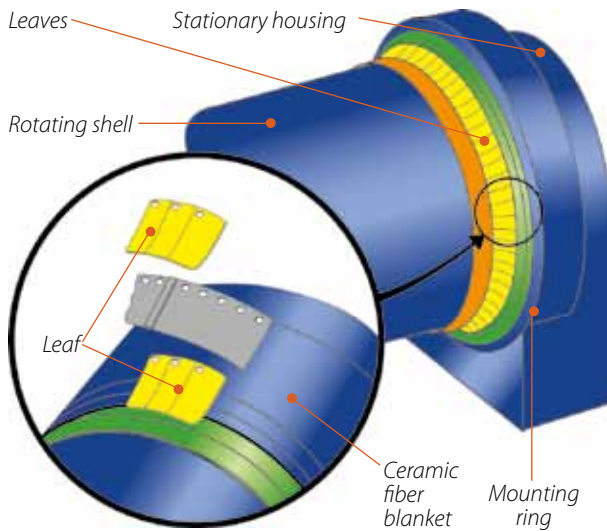
Unique features and benefits

- Our Seals are hands off, self adjusting, and shell runout compensating
- Reduced Seal maintenance, results in lower operating costs
- Our Seals can be retrofitted to all existing Rotary Kilns, Dryers and Coolers regardless of manufacturer or application
- Our seals show greatly reduced air leakage when compared to other conventional seals
- Lower air leakage reduces power consumption and increases process efficiency
- Our Seals increase the fuel efficiency of any operating kiln
- Installation and replacement of our Seals is quick and simple, leading to lower maintenance costs

Key features

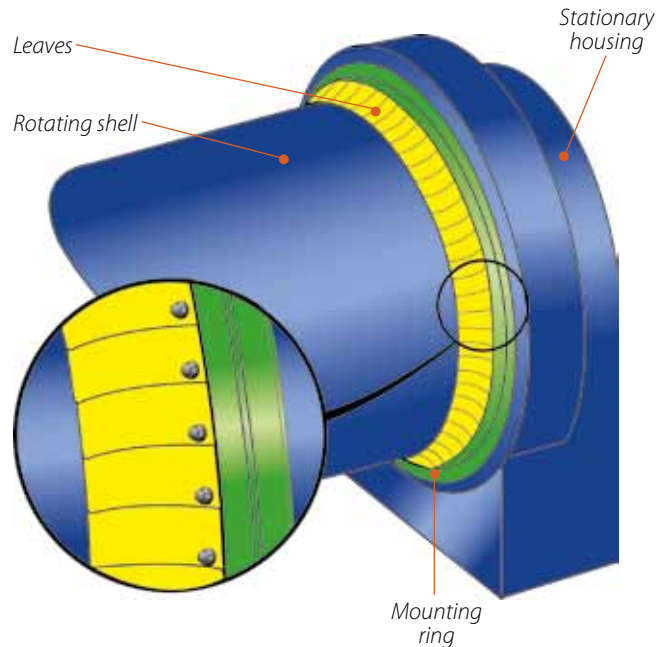
Simplified representation

Superdeal Seal®



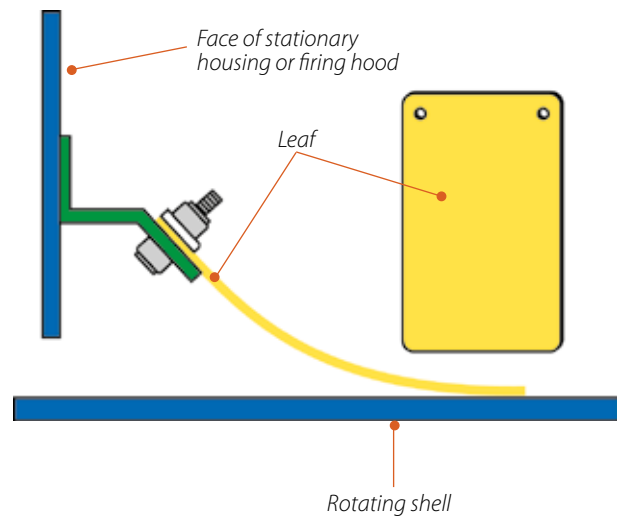
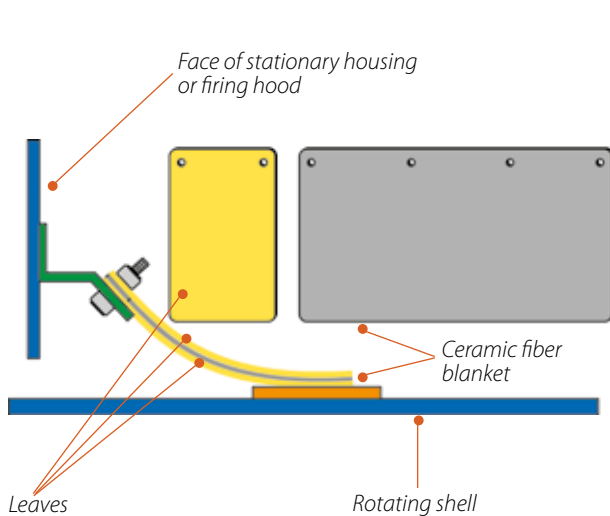
The patented SUPERDEAL® seal has applications for rotary kilns, dryers and coolers. Because of its low leakage characteristics, it is cost effective for most applications. Increased fuel efficiency, reduced off gas volumes and environmental compliance requirements are typical considerations for selecting this seal.

Goodeal Seal™



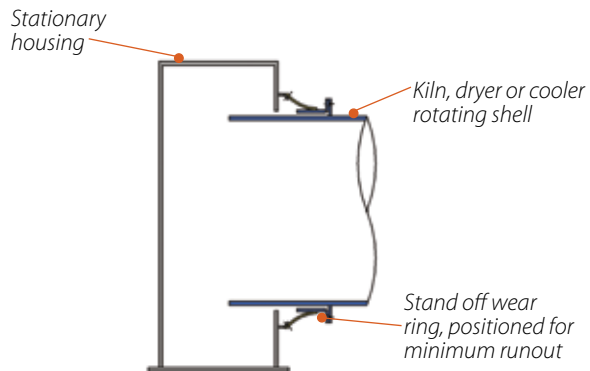
The GOODEAL™ seal is utilized for less demanding conditions - where some air leakage is acceptable or actually desirable for process performance.

Sectional view

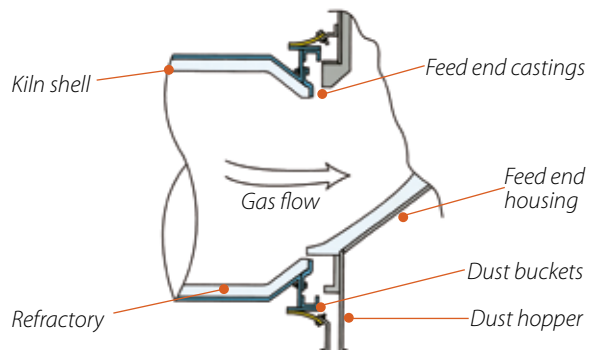


Configurations

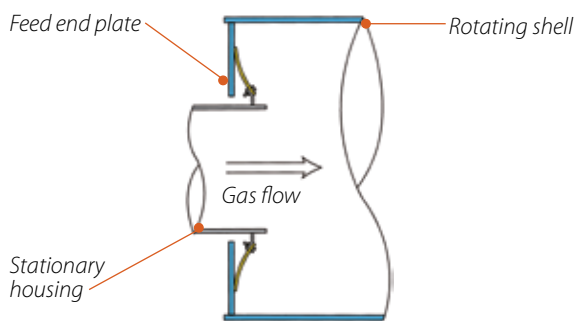
Superdeal[®] and Goodeal[™] Seals can be installed in a wide variety of configurations



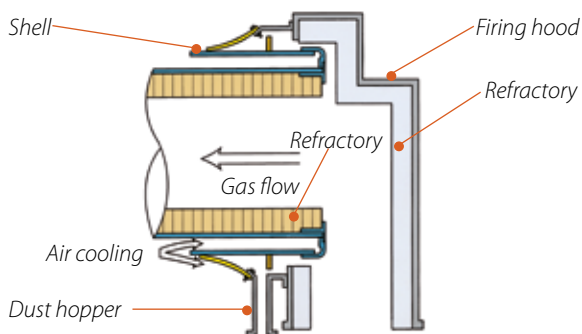
Radial seal with stand off wear ring



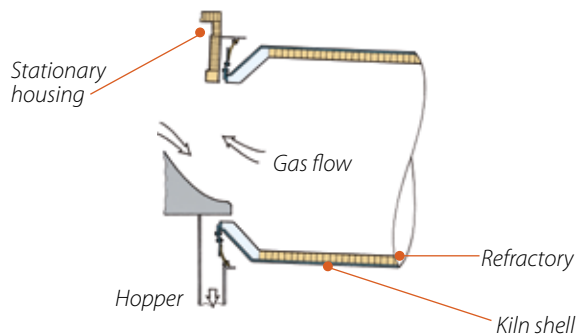
Radial seal (typical feed end of preheater cement kiln)



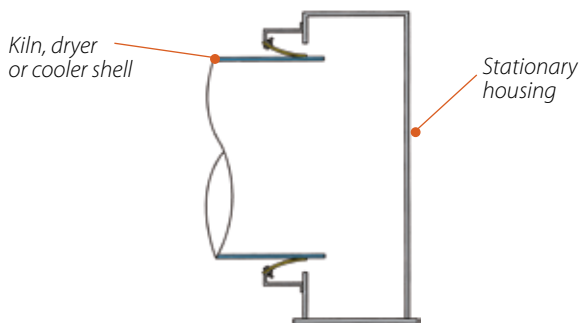
Inward axial seal installed inside dryer to minimize material and air leakage



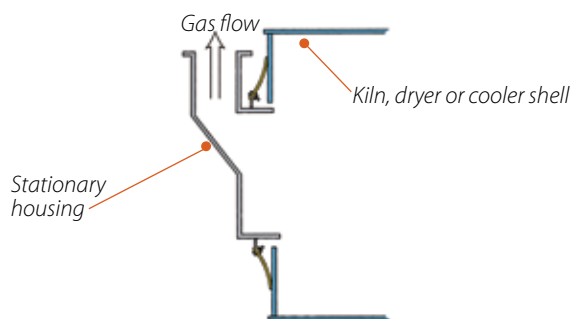
Radial seal discharge end with air cooling, dust hopper and heat shield



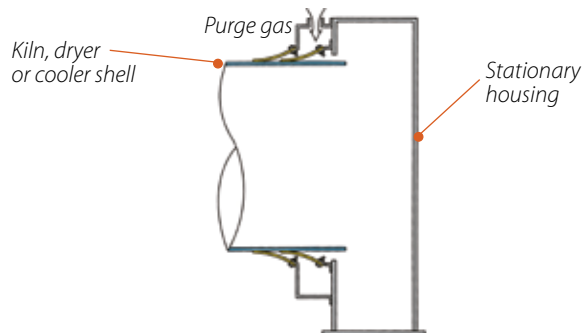
Inverted axial seal



Inward radial seal



Axial seal



Double radial seal with purge gas

Typical installations



Superdeal kiln seal in the final stage of installation.



Superdeal seal installed on a kiln for waste recovery.



Superdeal seal installed on the feed end of a cement kiln



Goodeal seal after four years in service



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