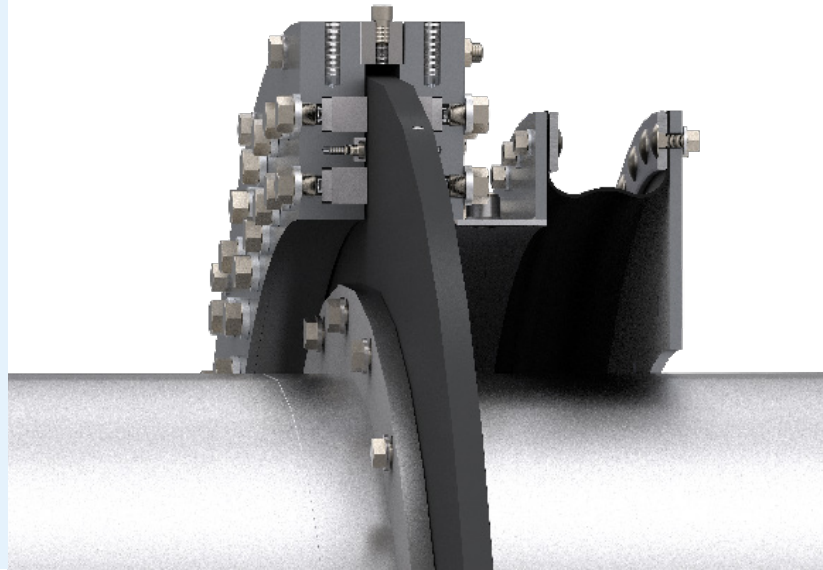


## Rotary kiln sealing system

### Advantages

- Reduced pollution emissions
- Clean residue combustion
- No partial temperature reduction below the residue combustion threshold due to air infiltration (no dioxin formation)
- Safe operation
- Significant reduction in primary energy consumption
- Long service life, low wear
- Predictable downtime (e.g. annual inspection)
- Available as retrofit on existing systems



### Operating range

- Diameter: 400-8000 mm
- Pressure: -50 to +250 mbar (-0.72 ... +3.62 PSI)
- Maximum process temperature: 1400 °C (2552 °F)
- Rotational speed: max. 2 m/s
- Radial movement capability: 50 mm
- Axial movement capability: 200 mm

\* other values on request

### Features

- Packing rings (self-adjusting) with permanent spring-action for optimal, continuous contact with the seal disc, optical wear indicator
- Can be pressurized with buffer gas
- Optional dust extraction at the expansion joint
- Optional flush fitting to remove dust deposits at the seal disc
- Double-acting seal rings for use with process-compatible barrier gas or to drain toxic or aggressive gas
- Cutting-edge materials, supports broad range of applications

### Recommended applications

- Pyrolysis
- Process industry
- Petrochemical industry
- Chemical industry
- Pharmaceutical industry
- Toxic, hazardous, chemical media
- Residue and waste incineration
- Cement production
- Calcination
- Reduction

### Materials (metal parts)

- Steel S235JR (St 37-2 / 1.0037)
- CrNiMo steel (1.4571)

### Functional description

- The sealing system consists of a mounting flange welded on to the kiln shell. The two connected halves of the split housing engage at the seal disc which is screw mounted to the flange. Depending on requirements, two or four packing rings are provided and a thrust ring presses them against the seal disc.  
A spring mechanism generates the contact force for the packing rings.
- A specially designed expansion joint compensates for axial (thermal) expansion and change in the position of the kiln shell. A torque damper prevents rotation of the seal carrier assembly.
- The seal is able to follow any movement by the oven with the sealing function remaining intact.
- The seal disc compensates for radial deflection of the rotary kiln (caused by ovality, etc.) by submerging to a greater or lesser extent into the seal housing.