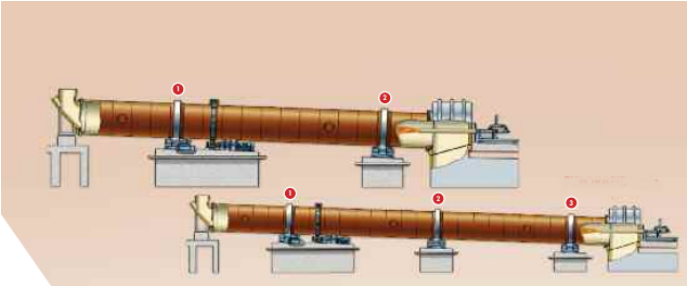
Great wall machinery rotary kiln plants are top of the line.



The advantage for customers is lower investment and operating costs. No wonder these systems quickly gained excellent reputations among our customers.

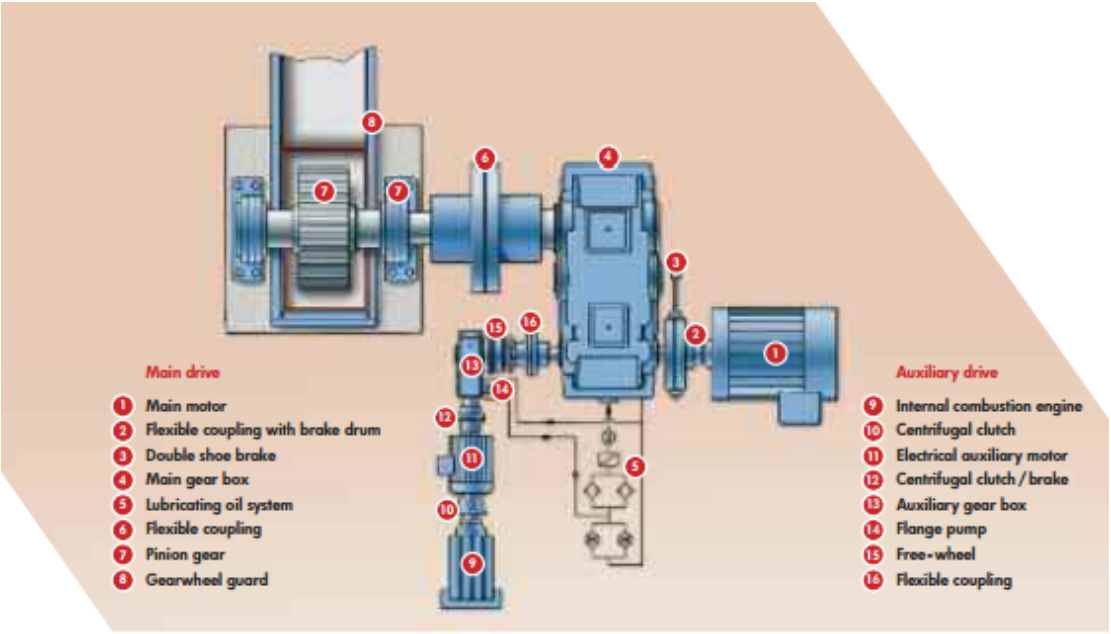
Great wall rotary kiln offers other advantages:

• Investment costs approx. 15% lower than three station kilns.
• The lower space requirements and lower weights lead to more favorable construction costs.
• Mechanical overloading is impossible. This results in higher levels of operational reliability and lower maintenance costs.
• Lower consumption of refractory lining.
• The reduced required power and lower radiation losses reduces energy costs.
• The tire at the kiln discharge

The drive components

	Gear drive (form-fit)	Roller drive (friction-fit)
Function	Transmission of loads via tyres and rollers, transmission of torque via pinions and girth gear Optimal separation of functions without reciprocal influence	Transmission of loads and torque via tyres and rollers Bearing and drive function in one unit means: functional compromise
Design	Components are optimised for the relevant function	Additional drive forces requires stronger roller bearings
Efficiency	Maximum degree of efficiency, minimum wear and tear	Slipping and friction result in wear and tear to tyres and rollers and impair efficiency
Maintenance	Ensure lubrication	Ascertain friction values

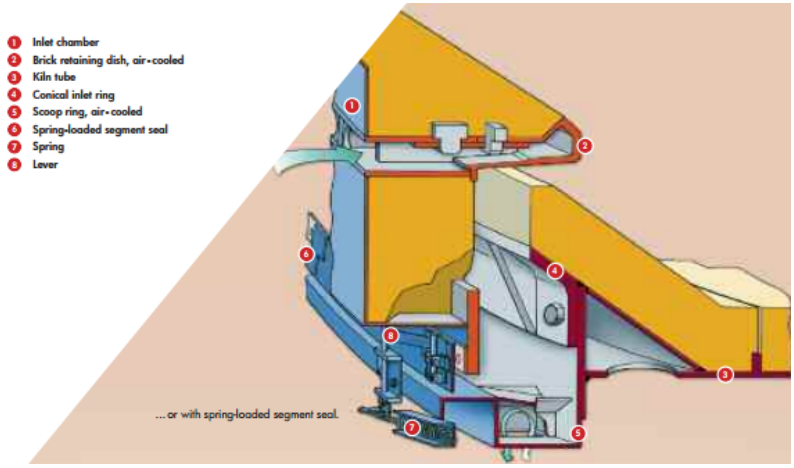
Either single, double or triple reduction gearboxes are used, depending on the torque to be transmitted. These are the most common types of drive for rotary kilns because they have a high degree of efficiency and long-term economic design.
Nothing can shake them
Even, smooth operation of the kiln and optimal contact pattern with the pinion is achieved by mounting the girth gear on the kiln shell using tangential springs. The centered action of the girth gear is adjustable.



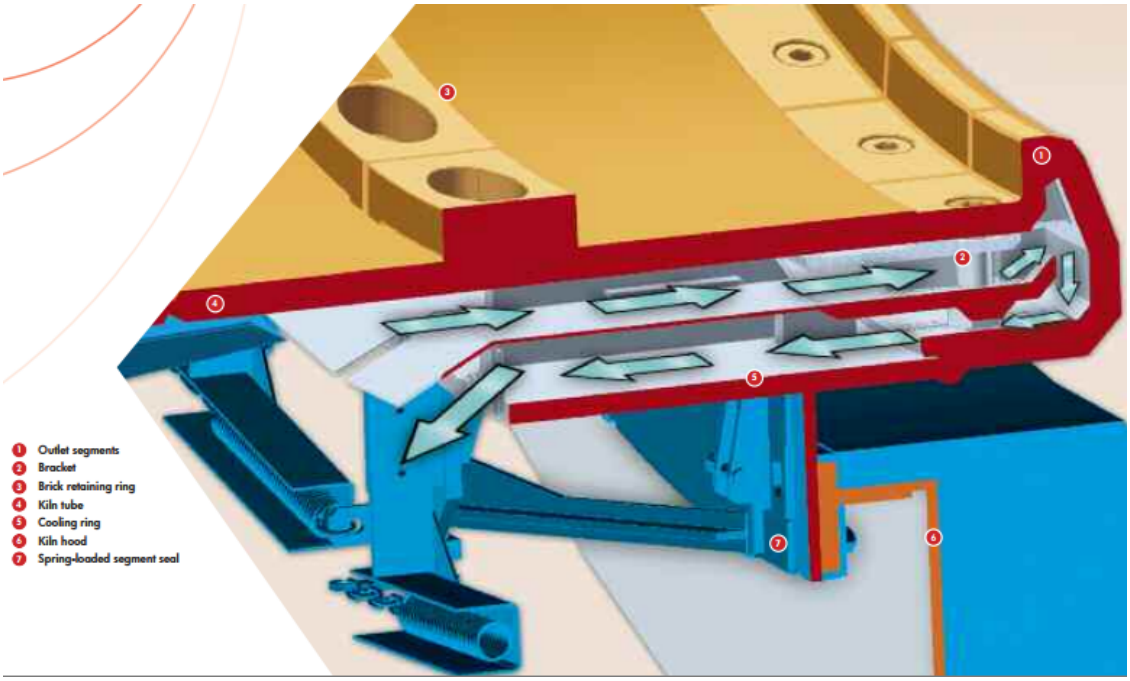
Feel free to create friction

Alternatively, it's possible to transmit the drive torque from the rollers to the tire. This type of drive is only suitable for two station kilns. The characteristics of both types of drive are listed in the adjacent table. Hydraulic drives – acting directly or via gears on the drive shaft – also permit smooth kiln operation but are less efficient. This is why they are also considerably less economical.

How ensure a long service life of the refractory lining?

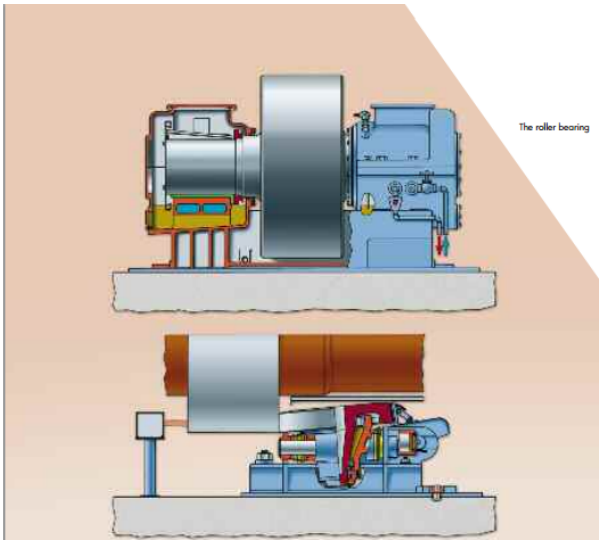


In order to ensure along service life of their factory lining, the kiln shell is optimized for minimum stress and deformation. The shell plate thickness Changes with corresponding shell stresses, which are determined from bending and tangential shell stress loads. This ensures optimal safety to material elasticity limit sat operating temperature. Elastic shell deformations remain within narrow limits.



We know what we're talking about when it comes to seals
The high efficiency and low wear rates of great wall kiln seals make important contributions to economical kiln operation. The proven spring loaded segmented seals, which were developed by great wall, are fitted to the kiln inlet and outlet. The pressure elements, springs and levers, rotate with the kiln, so they can be easily accessed at any time. Our rotary kilns can also be supplied with pneumatically operated seals. Pressure is applied to the movable suspended sealing ring by a number of stationary mounted pneumatic cylinders.

Up to date



The forged rollers and cast tires have solid rectangular profiles. They are manufactured without relief or drilled holes to ensure that no notch stresses or stress concentrations occur. The tires of the kiln are designed according to Nixes for maximum joviality of 0.15 to 0.2 percent of the nominal kiln diameter. This guarantees the rigidity of the tires.
One special feature is the constraint free and low-maintenance tire fastening system, which reliably transmits all loads via large contact surfaces at low surface pressure from the kiln shell to the tire. This also applies to the driving torque if the

kiln is powered by a friction drive. This connection also maintains a perfect contact pattern between the tire and rollers.