

# FCB Kiln

A proven and reliable rotary kiln



With over 80 years of experience in supplying industrial solutions for pyroprocessing, Fives offers sturdy and proven rotary kiln technology

- Rotary kiln on 2 or on 3 supports
- Pinion and girth gear
- Hydraulic thrust roller
- Downstream & upstream seals
- Kiln tyres with floating shims
- Roller stations with swiveled bearings
- Nose-ring cooling

# FCB Kiln can be supplied with 2 or 3 supports

## DESIGN

### Tyres with floating shims

Floating shims are machined to avoid undesirable slipping movement. The clearance in operation is optimum. Stress concentration in mechanical parts is minimized, ensuring both the high reliability of each kiln roller station and a long service life of the brick lining.

### Pinion and girth gear

The girth gear is linked to kiln shell by flexible ties. The pinion and gear assembly is oil lubricated by a very reliable paddle wheel system.

### Roller stations

The sturdiness and good behavior of FCB Kiln roller stations are ensured by:

- Swiveling of the bearings at each end
- The use of Main Metall® bushings which accept high loads
- A direct and efficient water cooling
- A trouble-free oil lubrication system by bucket wheel

### Kiln seals

The newest experience with bricks lining demonstrates that kiln outlet refractories can withstand severe conditions during more than one year without repair. Heat-protected jacks of upstream seal compensate the kiln movements and ensure a perfect tightness.



Upstream seal



Downstream seal with nose-ring cooling

### Hydraulic thrust roller

A sturdy hydraulic thrust roller assembly ensures a scanning movement of tyres on rollers, thus equalizing the wear.

### Friction drive

A friction drive can be installed with the short FCB Kiln on 2 supports. FCB Kiln with friction drive offers the floating tyre technology.

- With a low clearance in operation, floating shims are a simple technique which ensures a long life of the refractory lining and allows easy maintenance
- The moulded end parts of the downstream seal last several years
- All seals (downstream and upstream) can be supplied separately