

1 HEATING UP THE KILN LINE

Before firing the flame the pressure at kiln hood has to be adjusted to ± 0 mbar, in case of heavy oil combustion pay attention to an oil temperature of at least 120°C (spray viscosity 2°E).

The firing of the flame takes place with a firing device or with the traditional fuse cord.

With the primary air (axial and radial air) the flame is to adjust in a short and compact way, burning out in the first part of the sintering zone. The amount of fuel for heating up the plant depends on the plant size and should be 500 to 1000 l/h at the beginning of heating up.

Rotation of the kiln during heating up with auxiliary drive, beginning with the cold condition:

Time	Rotation
After ca. 3 hours	180°
4th to 12th hour	Every 2 hours 120°
13th to 26th hour	Every hour 120°
27th to 34th hour	Every 40 min 120°
35th to 40th hour	Every 20 min 120°
41th to 46th hour	Every 10 min 120°
47th to 48th hour	Continuous with auxiliary drive

While rotating the kiln, the supporting roller bearings have to get enough oil at any time. If necessary, the bearings have to be extra lubricated.

NOTE: If there is no **Lagerumlaufschmierung** (bearing circulation lubrication?) installed, oil must be pumped onto the **Lagerzapfen**, especially after a longer period of stoppage.

In the first 2 to 3 hours the initial amount of fuel is not being modified. When reached a constant kiln inlet temperature, the amount of fuel is increased step by step. The whole heating up process should last 36 to 48 hours. (**See Heating up-Diagram rotary kiln**).

NOTE: During heating up the instructions of the refractory (brick) supplier are to be followed!

Until the first feed of material, the pressure conditions in the kiln have to be adjusted in a way, that the fuel burns without formation of CO at the lowest amount of combustion air, and the heat is kept in the sintering zone

Heat-up diagram rotary kiln

