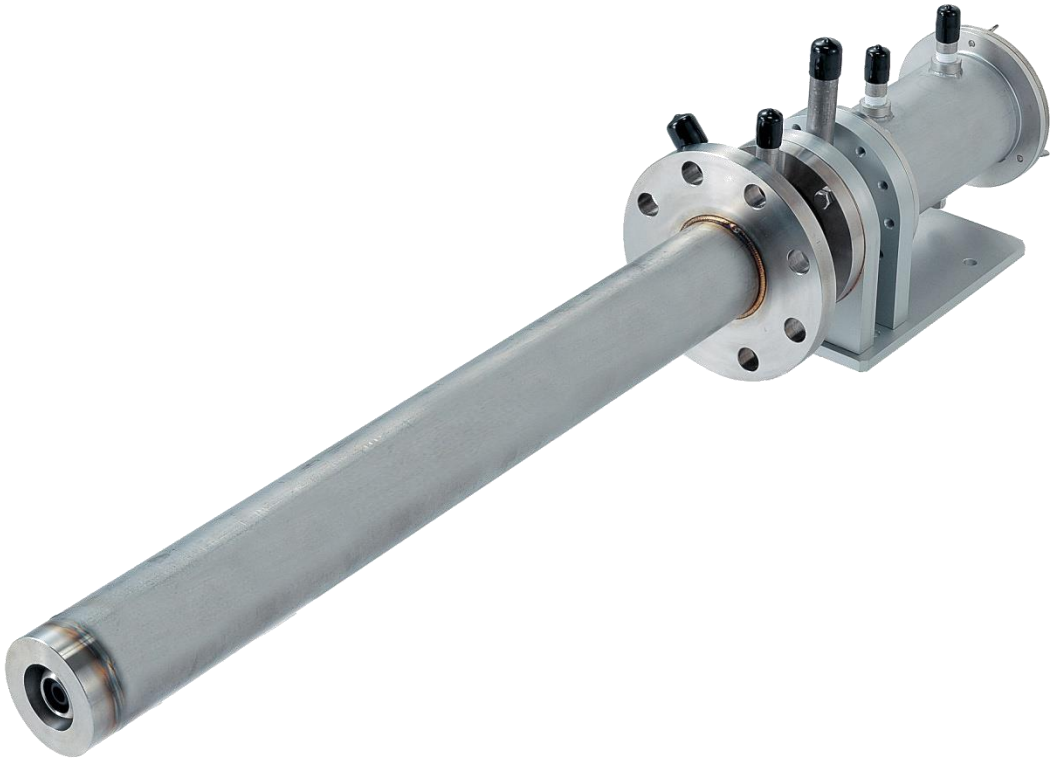
INSTRUMENTATION, CONTROL AND SYSTEMS
CHINO

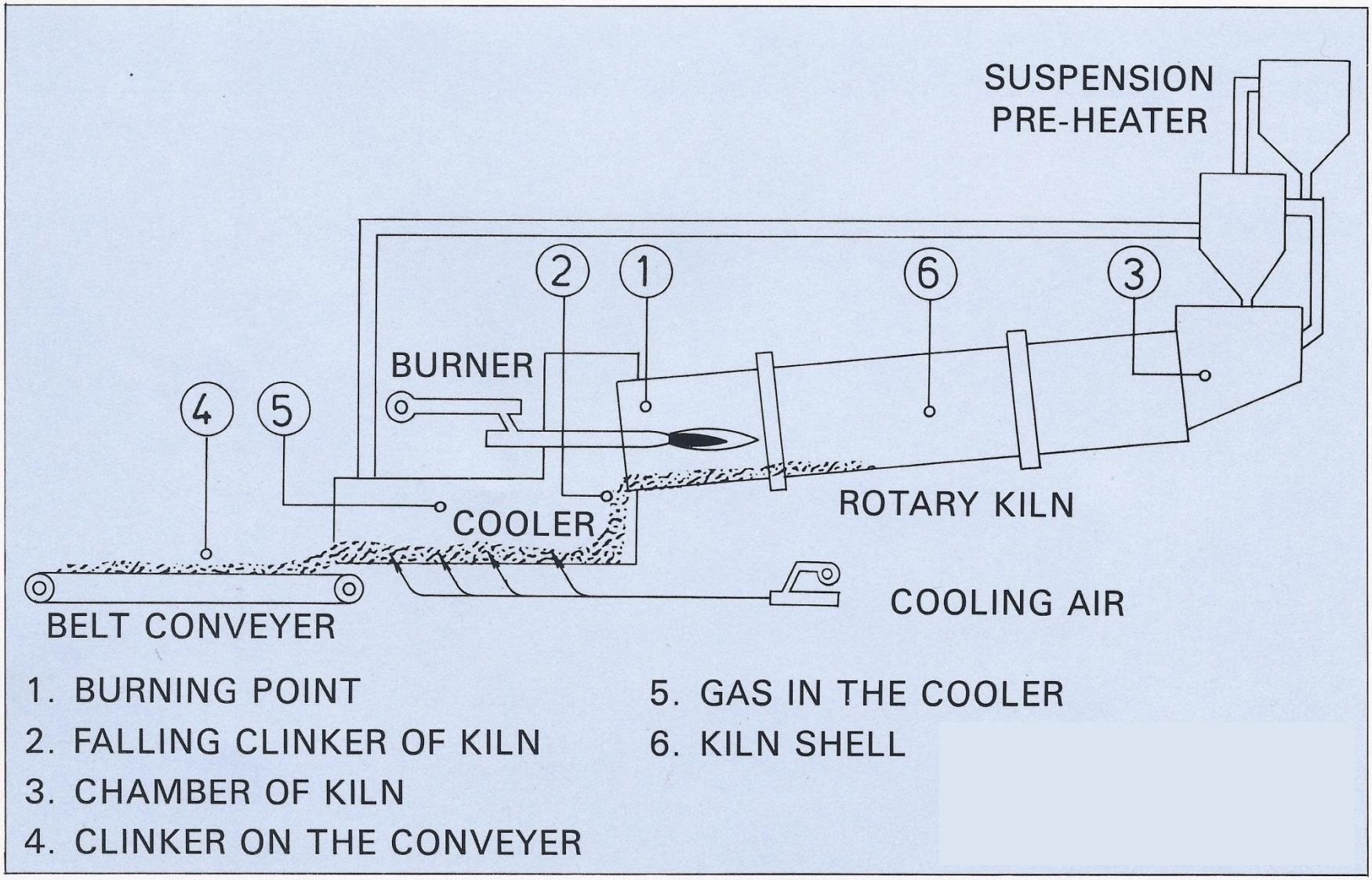
CPA-R Furnace Monitoring Application

Application for cement production



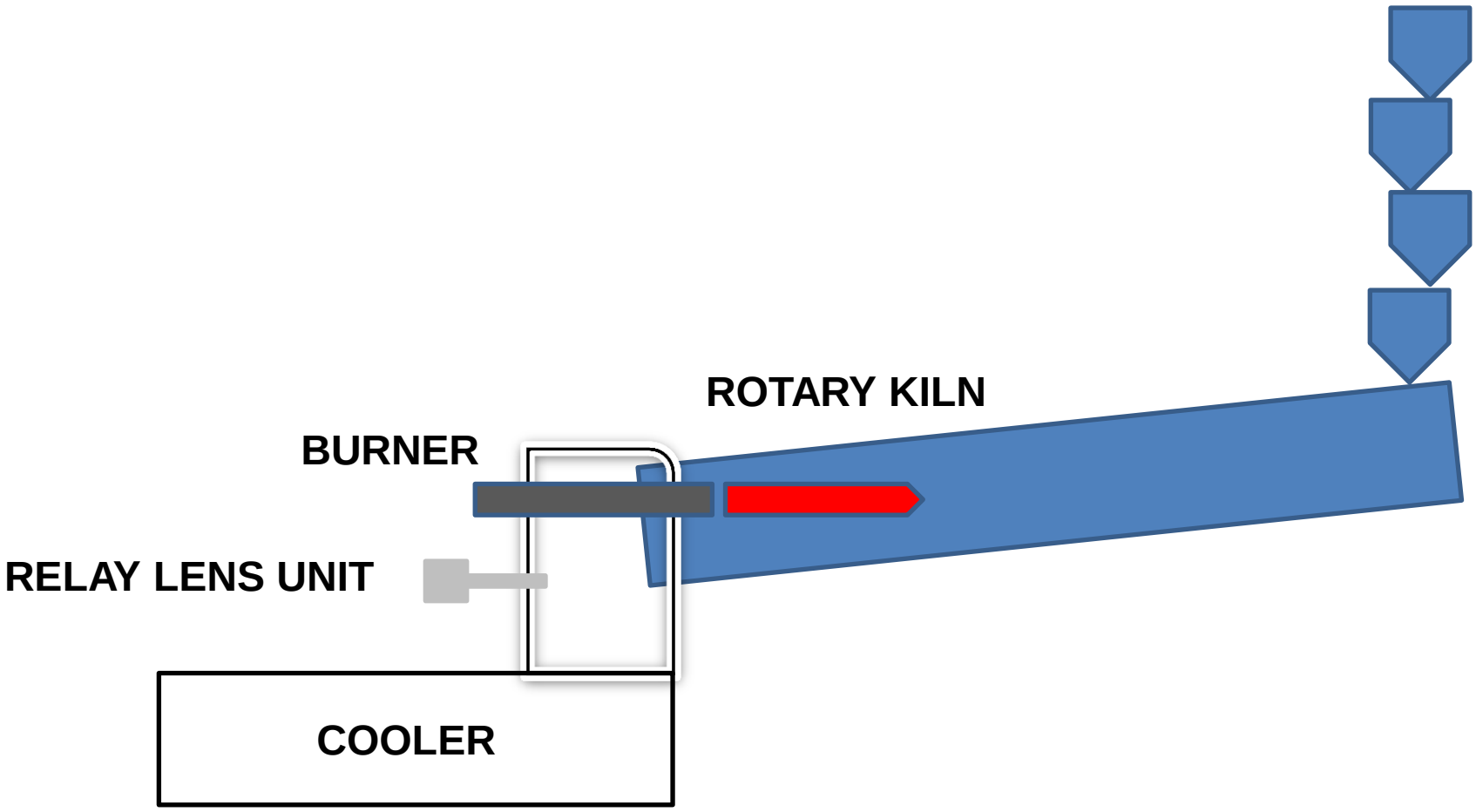
Cement Plant

TEMPERATURE MEASURING POINTS OF THE KILN



1. BURNING POINT
2. FALLING CLINKER OF KILN
3. CHAMBER OF KILN
4. CLINKER ON THE CONVEYER
5. GAS IN THE COOLER
6. KILN SHELL

MAIN CHECKING POINT1
BURNING POINT



BURNING POINT

Burning Zone of Rotary Kiln

Clinker temp. measurement (1,330 ºC)

Fallen Clinker fallen position and size is unconfirmed so normal spot type IR thermometer cannot measure. But you can measure it by the two dimensional thermal image.

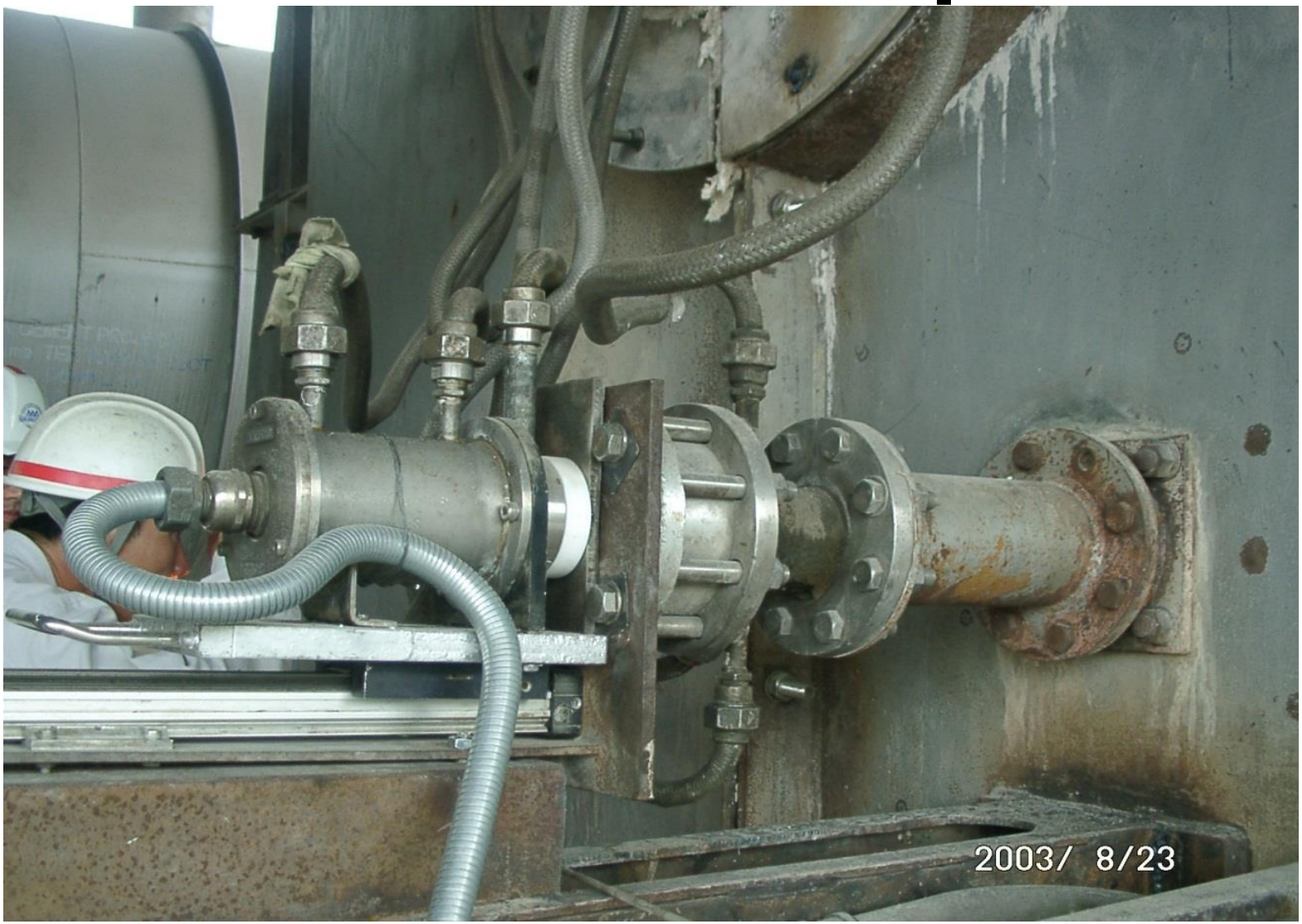
Check particular size

By monitoring the wrap up point, you can check the particular size.

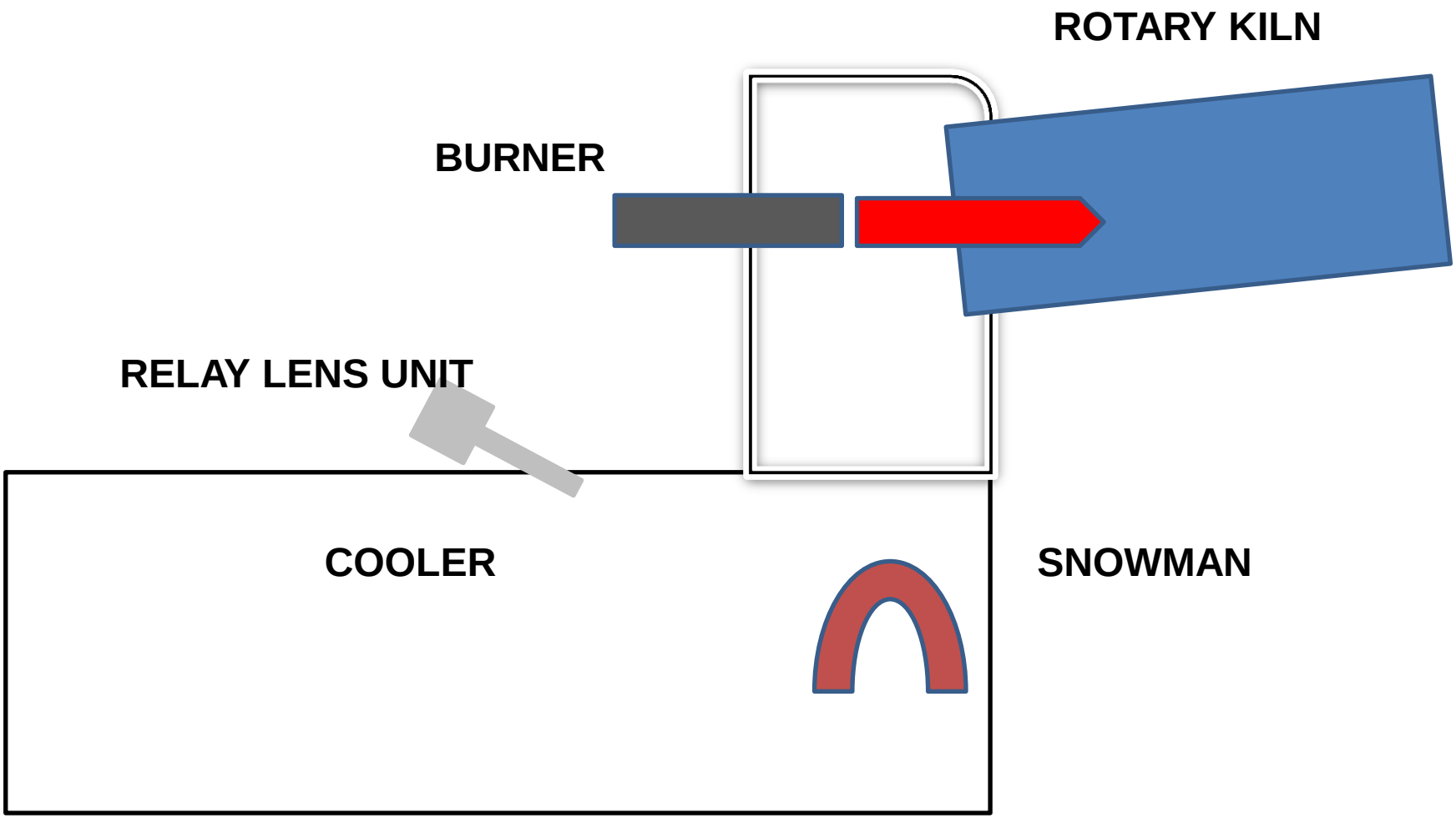
Check the burning condition (burning zone 1,500 ºC)

By monitoring the burner flame, you can check the burning condition.

BURNING POINT
Installment Example



MAIN CHECKING POINT2
COOLER



COOLER

Cement Cooler

Monitor SNOWMAN (1,300 ºC)

Clinker fallen from the kiln to the cooler sometimes piles up inside the cooler and make a dam. So it will be useful to monitor this pile up condition.

Detect RED RIVER (1,100-1,200 ºC)

If the un-cooled clinker goes to downstream, it will damage the floor of cooler which heat resistance temp. is low. By checking this hot clinker flow, you can control the air pressure and flow rate.

Monitor BUBBLING

By the bubbling condition you can check the clinker condition.

COOLER
Installment Example