

# CORAIL incandescent type ignitors at the Fos sur Mer ESSO REFINERY

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## BACKGROUND

The Esso refinery at Fos sur Mer has four desulphurisation lines to remove sulphur from natural gas before commercialisation. The continuous operation of these very high temperature furnaces, as well as the corrosive and hazardous nature of the acid gases, requires that for burner ignition, the installation of a retractable ignitor with shut-off to ensure sealing of the furnace is implemented.

The ESSO refinery has fitted its four sulphur furnaces with Fives Pillard incandescent ignitors' CORAL 1400P type, to cope with the particular constraints of the Claus units.

## CHARACTERISTIQUES OF THE INSTALLATION

- 3 furnaces fitted with a Fives Pillard sulphur burner
- A sulphur furnace fitted with two Fives Pillard sulphur burners

The inherent characteristics of this installation are :

- corrosive nature of the gases
- toxicity of the gases
- high temperature
- classified area (Atex)
- Infrequent ignitions
- outdoor installation

#### SUPPLY & SERVICES CARRIED OUT BY FIVES PILLARD

Fives Pillard supplied :

- 4 incandescent CORAL ignitors + ADF panel, length 1650 mm
- 1 incandescent CORAL ignitor + ADF panel, length 950 mm
- 1 incandescent CORAL ignitor + ADF panel, length 1950
- The sheath tubes for protection of the ignitors





#### GENERAL CHARACTERISTICS OF CORAIL IGNITORS

Power supply	220 V (18 A) ou 110 V (36 A)
Consumption	3960 VA
Electrode temperature	1200 °C à 1500 °C
Time required for electrode temperature rise	2 Sec.
Panel	Atex Ex d IIB -T6 Z1 & Z2
Weight	31 kg
Rod length	500 to 2500 mm (up to 10 m, on request)
Cable length supplied	3 m (up to 6 m, on request)

# CONCLUSION

The CORAL 1400P ignitor enables ignition of all liquid fuel or gas burners without the need for an auxiliary ignition fuel, whatever the burner's operating conditions.

With its easy installation and use, as well as its reliability, it is ideal for users who only occasionally need to ignite a burner, but need it to be guaranteed.

