TEMPSENS

Thermocouple for Fluid Catalytic Cracking Unit

Fluid catalytic cracking (FCC) is one of the most important conversion processes used in petroleum refineries. It is widely used to convert the high-boiling, high-molecular weight hydro carbon fractions of petroleum crude oils into more valuable gasoline, olefin gases and other products. Cracking of petroleum hydrocarbons was originally done by thermal cracking.

The purpose of Shear Valve is to close the valve manually & to cut the thermocouple probe, if the protection tube fails or get punctured inside the process which in turns will avoid any leakages.

A boron coating minimize the formation of hydrocarbons on the surface of the parent material at a temperature of around 900°C in order to achieve all the desirable properties. An extremely hard coating can be done with a thickness (0.007 to 0.4 mm) and a surface hardness (1200 to 2800 HV) depending on the material type, temperature and process reaction time.

SPECIFICATIONS

Measuring Range	Ambient to 1500°C (S Type/R Type/ B Type)
Type of Sensor	Simplex, Duplex (Ungrounded)
Sheath Materials	Ceramic KER – 710/C799
Flange Material	Carbon Steel or Stainless Steel
Working Pressure	Up to 10 Bar