OPERATING TEMP & FEATURE OF METAL PROTECTION TUBE

MATERIAL	MATERIAL OPERATING TEMP		FEATURE
	NOR	MAX	
SUS304	850 °C	950 °C	Having high heat resistance, acid resistance, and alkali resistance.
SU316	850 °C	950 °C	Almost same as SUS304 in heat resistance, acid resistance and alkali resistance ,but corrosion resistance is higher than SUS304 at high temperature.
SUS316L	850 °C	950 °C	C amount decreased from SUS316. Intergranular corrosion resistant material.
SUS310S	1050 °C	1100 °C	Having high Ni-Cr content. High heat resistant steel which has high oxidation resistance at high temperature.
SUH446 SANDVIK P4	1100 °C	1200 °C	27Cr steel. Endurable against reducing flame. Having resistance against sulfuric gas.
UMCO 50	1150 °C	1200 °C	Co base alloy. High heat resistant alloy which has abrasion resistance and sulfuric resistance.
KANTHAL AF	1100 °C	1300 °C	Having mechanical strength in high temperature. Not suitable for welding of metallic fittings.
NCF 600 (INCONEL 600)	1000 °C	1250 °C	Having most high resistance in both oxidized and reduced atmosphere at high temperature.
TITANIUM	250 °C	500 °C	Corrosion resistance at low temperature s fairly good, but oxidized and fragile at high temperature.

OPERATING TEMP & FEATURE OF NON-METAL PROTECTION TUBE

MATERIAL	MATERIAL OPERATING TEMP		FEATURE
	NOR	MAX	
Alumina(PT 1)	1600 °C	1700 °C	Fairly stabilized and reduced atmosphere. Hving a high corrosion resistance at high temperature. Suitable for measuring of minimum 1600℃ furnace temperature and fusing metal temperature.
high Alumina (PT 0)	1700 °C	1900 °C	Having high heat resistance, corrosion resistance and mechanical strength . Hard material, and high abrasion resistant.
Silicon carbide	1650 °C	--	Having fire resistance and good heat conductivity. Not easily corroded by zinc, aluminum, lead, acid and alkali. Strong against rapid heating and cooling and spalling. Suitable for the use for outer tube of duplex protection tube.