

OPERATING TEMP & FEATURE OF METAL PROTECTION TUBE 金屬保護管特性

MATERIAL 材質	MATERIAL OPERATING TEMP 操作溫度		FEATURE 特性
	NOR 常溫	MAX 最大溫度	
SUS304	850 °C	950 °C	Having high heat resistance, acid resistance, and alkali resistance. 耐熱、耐酸鹼。硫磺、還原氣體較弱。
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. 雖耐熱、耐酸鹼與 SUS304 相當，在高溫之耐蝕性較佳。
SUS316L	850 °C	950 °C	C amount decreased from SUS316. Intergranular corrosion resistant material. C 之含量較 SUS316 少，為耐粒界腐蝕性材料。
SUS310S	1050 °C	1100 °C	Having high Ni-Cr content. High heat resistant steel which has high oxidation resistance at high temperature. Ni-Cr 之含有率較高，在高溫抗氧化性強之耐熱鋼。
SUH446 SANDVIK P4	1100 °C	1200 °C	27Cr steel. Endurable against reducing flame. Having resistance against sulfuric gas. 27Cr 鋼，耐熱、還原炎與硫黃氣體下較強。
UMCO 50	1150 °C	1200 °C	Co base alloy. High heat resistant alloy which has abrasion resistance and sulfuric resistance. 鈷合金，耐熱、耐磨損較強、硫磺氣體下也較佳。
KANTHAL AF	1100 °C	1300 °C	Having mechanical strength in high temperature. Not suitable for welding of metallic fittings. 高溫下機械強度大。安裝金具之溶接不適。
NCF 600 (INCONEL 600)	1000 °C	1250 °C	Having most high resistance in both oxidized and reduced atmosphere at high temperature. 不論高溫氧化、還原之氣體中皆為最強。
TITANIUM	250 °C	500 °C	Corrosion resistance at low temperature s fairly good, but oxidized and fragile at high temperature. 雖在低溫下耐蝕性非常優秀、但在高溫氧化影響下變脆。

OPERATING TEMP & FEATURE OF NON-METAL PROTECTION TUBE 非金屬保護管特性

MATERIAL 材質	MATERIAL OPERATING TEMP 操作溫度		FEATURE 特性
	NOR 常溫	MAX 最大溫度	
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°C furnace temperature and fusing metal temperature. 在高溫下氧化，還原性氣體非常安定，在高溫的耐侵蝕性優秀。1600°C 以上之爐內溫度、熔融金屬之測定最適。
high Alumina (PT 0)	1700 °C	1900 °C	Having high heat resistance, corrosion resistance and mechanical strength . Hard material, and high abrasion resistant. 耐熱、耐蝕、電氣絕緣、機械強度大。因高硬度磨損性優。
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. 耐火度高熱傳導率大。對鋅、鋁、鉛、酸鹼在浸入。對急冷、急熱較強、耐碎裂性優。適合二重保護管之外管。