

SUPRANEL 92 is a basic coated MMA electrode for the welding of heat and corrosion resistant nickel alloys. The weld metal retains ISO-V toughness down to -196°C and is creep-resistant <800°C. Due to the high toughness properties and resistance to cracking, applications include the joining of difficult-to-weld steels and maintenance welding of critical components. Even at higher temperatures, there is only limited carbon diffusion in the weld metal, thus avoiding the formation of crack-prone carbides at the weld interface of dissimilar joints. The coefficient of thermal expansion is between austenitic and ferritic steels, therefore applications include the joining of ferritic to austenitic steels, dissimilar welding, at operating temperatures or postweld heat treatment >300°C.

SUPRANEL 92 applications include the welding of 5% and 9% nickel steel transport or storage tanks used for cryogenic products. The chemical or petrochemical industries use such as valve seats and gates, coal gasification and wet process desulphurization equipment.

SUPRANEL 92 has good weldability in all position. Smooth and stable arc with good slag removal.

Classification	
EN ISO	14172: E Ni 6133
AWS	A5.11: E NiCrFe-2

Approvals	Grade
ABS	ENiCrFe2
BV	UP
DNV	H10

CE

Chemical analysis (Typical values in %)

C	Mn	Si	P	S	Cr	Ni	Mo	Nb	Fe
≤ 0.05	2	0.2	≤ 0.020	≤ 0.015	16	Rem	1	1.8	8.5

All-weld metal Mechanical Properties

Heat Treatment	Yield Strength (MPa)	Tensile Strength (MPa)	Elongation	Impact Energy ISO - V (J)	
				+20 °C	-196 °C
As Welded	≥ 360	≥ 550	≥ 35	≥ 80	≥ 60

Materials

UNS N06600; UNS N08800; UNS N08810

2.4816 (NiCr15Fe); 1.4876 (X10NiCrAlTi32-20); 1.4958 (X5NiCrAlTi31-20)

beurrage ou couche de beurrage sur acier

Storage

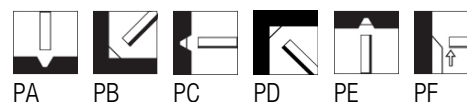
Keep dry and avoid condensation.

Re-drying not generally required.

Re-dry at 300-350°C for 1 hour, 5 times max.

Current condition and welding position

DC+



Packaging data

Diam. (mm)	Length (mm)	Current (A)	Approx. weightn(kg/1000)	VPMD	
				PC	Code
2.5	300	50-70	17.3	110	W000258484
3.2	350	70-95	33.9	65	W000258485
4.0	350	95-130	48.6	45	W000258486