

Basic-coated MMA electrode for welding high-temperature creep-resistant, heat resistant and corrosion resistant Ni-Cr alloys. Cryogenic toughness down to -196°C, creep resistant < 800°C, non-scaling < 1000°C. In a sulphurous atmosphere the weld metal can be used up to 500°C. Even at higher temperatures, there is only limited carbon diffusion in the weld metal thus avoiding crack-prone carbides at the weld interface of dissimilar joints. The weld metal coefficient of thermal expansion is between austenitic and ferritic steels, therefore ALIN 182 is used for joining ferritic to austenitic steels, dissimilar joints, with operating temperatures or postweld heat treatment > 300°C.

Electrode for welding 9% Ni steels and steels with working temperatures down to -196°C.

Classification	
EN ISO	14172: E Ni 6182
AWS	A5.11: E NiCrFe-3

Chemical analysis (Typical values in %)

	C	Mn	Si	P	S	Cr	Ni	Nb	Fe
All weld metal	0.03	8	0.3	≤ 0.020	≤ 0.015	15	Rem.	1.7	9

All-weld metal Mechanical Properties

Heat Treatment	Yield Strength (N/mm ²)	Tensile Strength (N/mm ²)	Elongation A5 (%)	Impact Energy ISO - V (J)
				-196 °C
As Welded	≥ 360	≥ 550	≥ 30	≥ 60

Materials

UNS N06600; UNS N08800; UNS N08810

2.4816; 1.4876; 1.4958

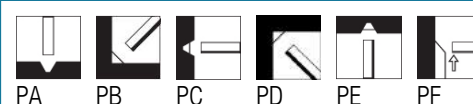
Storage

Keep dry and avoid condensation.

Re-dry at 300-350 °C for 2 hours, 5 times max

Current condition and welding position

DC+



Packaging data

Diam. (mm)	Length (mm)	Current (A)	Approx. weightn(kg/1000)	CBOX		VPMD	
				PC	Code	PC	Code
2.5	300	50-75	19.3	200	●	90	●
3.2	350	70-95	36.3	125	●	60	●
4.0	350	95-135	54.0	80	●	40	●
5.0	350	150-185	75.2	55	●	25	●

Basic coated MMA electrode for welding highly corrosion-resistant Cr-Mo-Nickel base alloys, such as 625, 825 and similar alloys. Also suitable for molybdenum alloyed corrosion-resistant steels, e.g. 7%Mo, such as X1NiCrMoCuN25-20-7 and cryogenic toughness nickel steels. Very resistant to stress corrosion cracking and pitting corrosion. Cryogenic toughness down to -196°C. In sulphur-free atmospheres, non-scaling < 1200°C and in sulphurous atmospheres the weld metal can be used for operating temperatures < 500°C. Even at higher temperatures there is only limited carbon diffusion in the weld metal thus avoiding crack-prone carbides at the weld interface of dissimilar joints. The coefficient of thermal expansion is between austenitic and ferritic steels, therefore ALIN 625 is also suited for joining ferritic to austenitic steels, dissimilar joints, at operating temperatures or postweld heat treatment > 300°C.

Electrode for welding Ni alloy 625 and 825 type steels. Used for dissimilar steels with operating temperatures down to -196°C. Note: all diameters in all lengths are supplied in VACUUM PACKING.

Classification	
EN ISO	14172: E Ni 6625
AWS	A5.11: E NiCrMo-3

Approvals		
ABS	BV	DNV
ENiCrMo3	UP	1,5Ni/NV9Ni

CE

Chemical analysis (Typical values in %)

	C	Mn	Si	Cr	Ni	Mo	Nb	Fe	Al
All weld metal	0.02	0.9	0.2	22	Rem	9	3.7	1.5	≤ 0.4

All-weld metal Mechanical Properties

Heat Treatment	Yield Strength (N/mm ²)	Tensile Strength (N/mm ²)	Elongation A5 (%)	Impact Energy ISO - V (J)	
				+20 °C	-196 °C
As Welded	≥ 420	≥ 760	≥ 30	≥ 60	≥ 50

Materials

2.4856 (Alloy 625, NiCr22Mo9Nb); 2.4858 (Alloy 825, NiCr21Mo)

UNS N06625; UNS N08825

1.4539 (X2NiCrMoCu 25-20); X2CrNiMoCuN20-18-6; 1.4529 (X1NiCrMoCuN 25-20-6)

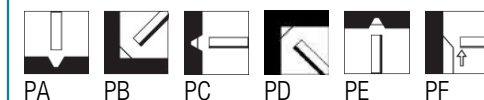
Storage

Keep dry and avoid condensation.

Re-dry at 300-350 °C for 2 hours, 5 times max

Current condition and welding position

DC+



Packaging data

Diam. (mm)	Length (mm)	Current (A)	Approx. weightn(kg/1000)	CBOX		DRYF		VPM D	
				PC	Code	PC	Code	PC	Code
2.5	300	50-70	17.1	220	●	32	●	105	●
3.2	350	70-95	34.4	140	●	24	●	65	●
4.0	350	90-120	50.0	90	●	20	●	45	●
5.0	350	130-170	77.1	60	●	8	●	30	●