Ni59 (DC+)

NICKEL ALLOY

DESCRIPTION

Basic coated electrode with an alloyed core wire for welding of Nickel-Base alloys (alloy 59) and other highly corrosion resistant Ni-Cr-Mo, Ni-Cr-Mo-W alloys as well as special stainless steel types. Stable arc, regular drop transfer, easy to watch weld pool, nice aspect of the weld beads. Very resistant in sulfurous acid environment, highly concentrated with chlorides and also in the presence of oxidizing solutions (FeCl, CuCl).

CLASSIFICATION

AWS A5.11: ENiCrMo-13 ISO 14172: E-Ni 6059 (NiCr23Mo16) UNS: W86059

TYPICAL APPLICATIONS

Welding of Off-shore components, boilers, containers, piping systems in the chemical and petrochemical industries as well as components of flue gas de-sulphuring plants.

BASE MATERIALS

Alloys: C-22, 59, C-276, C-4, 625, 825, 254SMo

PROCEDURE

Redrying 1h at 482- 572°F (250-300°C). Joints to weld must be clean, exempt from grease, cracks. Guide electrodes with a slight declination, weld with a short arc and prevent a high heat input by applying the stringer bead technique (weaving max. 2 times core wire diameter). Nickel base alloys are welded without preheating and an interpass temperature < 302°F (150°C).

MECHANICAL PROPERTIES

Tensile strength:	> 104 427 psi (> 720 MPa)
Yield strength:	> 68 167 psi (> 470 MPa)
Elongation:	> 30 %
Impact (Charpy V):	> 70 J at +68°F (20ºC)

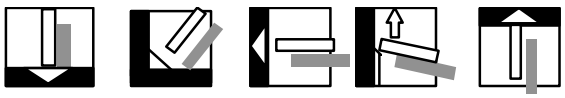
TYPICAL WELD METAL COMPOSITION (%)

C	Mn	Si	Cr	Fe	Mo	Cu	Ni
<0.02	0.2	<0.2	23.0	<1.5	15.8	0.1	Rem

WELDING PARAMETERS

Diameter:	4.0 mm (5/32")	3.2 mm (1/8")	2.5 mm (3/32")
Amperage:	90-120 A	70-100 A	50-70 A

WELDING POSITIONS



1G/PA 2F/PB 2G/PC 3G/PF 4G/PE

Rev.: 14_08

Specialized welding alloys and technology. For technical assistance or for ordering:

FSH WELDING Canada
Membre de / Member of SELECTARC GROUP - FRANCE

info@fsh-welding.ca
www.fsh-welding.ca

2204, 46e avenue
Lachine (Mtl),Québec
Canada H8T 2P3

Tél : 514.631.7670
1.800.361.9097
Fax : 514.636.3339