


Technical data sheet <small>011121MBA</small>	Coated SMAW Electrode WA GAMMA 59-E	
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CLASSIFICATION

ASME II C SFA 5.11 / AWS A 5.11:	ENiCrMo-13
EN ISO 14172:	E Ni 6059 (NiCr23Mo16)
Material number:	2.4321
UNS-base material:	N06059
Equivalent Base Material number :	2.4605
ASME IX Qualification	QW432 F-N° 43

DESCRIPTION

- Basic coated 22% Cr and 16% Mo SMAW electrode with a NiCrMo alloyed core
- Extreme low levels of carbon and silicon to minimise occurrence of deleterious precipitates
- Outstanding operability
- Good handling even in difficult welding positions
- Weld metal shows excellent resistance to pitting, crevice and stress corrosion cracking

APPLICATIONS

- Welding nickel alloys of corresponding types.
- Dissimilar weldments between nickel base alloys and stainless steels, including superaustenitic stainless steels.
- Joining cryogenic steel grades

Examples:

Alloy	UNS	EN Designation	Material Number
59	N06059	NiCr23Mo16Al	2.4605
C-22	N06022	NiCr21Mo14W	2.4602
C-276	N10276	NiMo16Cr15W	2.4819
C-4	N06455	NiMo16Cr16Ti	2.4610
625	N06625	NiCr22Mo9Nb	2.4856
825	N08825	NiCr21Mo	2.4858
6% Mo super austenitic stainless steels	N08028	X1 NiCrMoCu 31-27-4	1.4563
	N08031	X1 NiCrMoCu 32-28-7	1.4562
	N08926	X1 NiCrMoCuN 25-20-7	1.4529
	S31254	X1 CrNiMoCuN 20-18-7	1.4547

TYPICAL ALL-WELD METAL ANALYSIS [%]

C	Mn	Si	Cr	Mo	Fe	P	S	Ni
0.01	0.2	0.15	23	15.8	1	0.01	0.008	Bal.

MINIMUM ALL-WELD METAL MECHANICAL PROPERTIES

Rm [MPa]	Rp0.2[MPa]	As [%]	CVN [J]
690	350	25	-196°C: 47

TYPICAL ALL-WELD METAL MECHANICAL PROPERTIES

Rm [MPa]	Rp0.2[MPa]	As [%]	CVN [J]
750	520	32	-196°C: 60

OPERATING CONDITIONS

Electrode Ø x L [mm]	2.5 x 350	3.2 x 350	4.0 x 350
Current [A]	50-70	70-100	90 -130
= +	~ 70V		

Re-drying: if necessary 1h at 350°C.

WELDING POSITIONS

EN ISO 6947: PA, PB, PC, PF, PE
ASME IX: 1G, 2G, 2F, 3G, 4G

PACKAGING

Electrode Ø x L [mm]	2.5 x 350	3.2 x 350	4.0 x 350
Weight/box [kg]	4.0	5.0	5.0

Other packaging and other sizes: please consult us

Welding products and techniques evolve constantly. All descriptions, illustrations and properties given in this data sheet are subject to change without notice and can only be considered as suitable for general guidance. This document is intended to help the user make the correct choice of product. It is his responsibility to assess its suitability for his intended application.