



DATA SHEET
DS 362
Rev. 0 dd 06/03/2014
INEFIL AL4%MG – 5183

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CLASSIFICATION

AWS SPECIFICATIONS	EN SPECIFICATIONS
AWS A 5.10: ER5183	EN ISO 18273: S AlMg4,5Mn0,7(A)
AWS A 5.10M: R5183	EN ISO 18273: S Al 5183
ASME SFA 5.10: ER5183	
ASME SFA 5.10M: R5183	

APPROVALS

ALLOY TYPE

5183 for welding aluminum alloy containing 4.5% magnesium.

APPLICATIONS

Solid wire designed for welding aluminum alloys with an average magnesium content of 4.5%. It finds application in offshore fields, shipbuilding, cryogenic equipment, railway construction and automotive industry. Suitable in case where are required high values of tensile and resistance to corrosion from seawater. To be used under the shield of Argon.

MATERIALS TO BE WELDED

ASTM	EN	Others
		Al Mg 4,5 Mn
		Al Mg 5
		Al Mg 2 Mn 0,8
		Al Zn Mg 1
		Al Zn Mg Cu 0,5
		Al Mg Si 0,5
		Al Mg Si 1
		G-Al Mg 10
		G-Al Mg 5
		G-Al Mg 5 Si

WELDING GUIDELINES

PWHT is not required.

TECHNICAL INFORMATION

Gas: Argon (EN ISO 14175)
 Welding positions: all positions





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TYPICAL CHEMICAL COMPOSITION OF WIRE

Mn %	Si %	Cu %	Cr %	Ti %	Mg %	Zn %	Fe %	Al.	
0.60	0.05	0.01	0.08	0.10	4.80	0.01	0.13	Bal.	

TYPICAL MECHANICAL PROPERTIES

GAS		Yield strength	Tensile strength	Elongation on % 5d
		Rs	Rm	A 5d
		(MPa)	(MPa)	%
I1	as welded	125	275	17

PRODUCTS AVAILABLE

Process	Product	Classification AWS	Classification EN
MIG/MAG Solid wire			
TIG Rods	INETIG AL4%MG - 5183	AWS A 5.10: ER5183	EN 18273: S AlMg4,5Mn0,7(A)
SMAW Electrodes			