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COMMERCIAL NAME: ESSEN MS 1118M IG Revision: 01

STANDARD: AWS A5.28: 2005 ER110S-1 / ASME SFA5.28 ER110S-1 Edition 2015 Date: 06/2020

Chemical Characteristics of Deposited Metal	C	Mn	Si	P	S	Ni	Mo	Cr	V	Ti	Zr	Al	Cu
	0.09% Max.	1.40 to 1.80%	0.20 to 0.55%	0.01% Max.	0.01% Max.	1.90 to 2.60%	0.25 to 0.55%	0.50% Max.	0.04% Max.	0.10% Max.	0.10% Max.	0.10% Max.	0.25% Max.

APPLICATION FIELD	ESSEN MS 1118M IG low alloy rods and wires, originally developed for welding HY-80 and HY-100 steels, for military applications. Also used for a variety of structural applications where the tensile strength requirements exceed 690 MPa. Highly resistant weld metal deposit for critical applications.				
FEATURES TECHNIQUES	Solid copper wire for welding low alloy steel subject to very high mechanical stress, used in the shipbuilding industry, joining shafts, recovering cast steel. It deposits weld beads with a smooth to medium arc, stable and uniform, with a low splash index, having great resistance to cracking with excellent mechanical resistance and fatigue.				
MECHANICAL PROPERTIES	Tensile strength: 760 MPa (Min.) Flow Limit: 660 MPa (Min.) Impact: 68J-50 ° C (Min.) Stretching: 15% (Min.) (AS WELDED)				
OPERATIONAL FEATURES	Welding position: All the positions				
	Voltage / Current Type: AC + / DC +				
	MIG shielding gas: CLASS SG-AO-2% (98% Argon + 2% Oxygen) SPRAY				
	TIG shielding gas: 100% ARGONIUM				
	Stickout: 10 to 15 mm				
	Diameter (mm) MIG	Ø 0.80	Ø 0.90	Ø1.00	Ø 1.20
	Packing (kg) MIG	15	15	15	15
Diameter (mm) TIG	Ø1,60X1000	Ø2.40X1000	Ø3.20X1000		
Packing (kg) TIG	5	5	5		
	Amperage will vary depending on the thickness of the base metal and the welding position.				
WELDING TECHNIQUE	Cleaning the area to be welded with a grinder or using a rotating mechanical brush, impregnated with scale and impurities must be removed so as not to cause contamination, properly adjust the ampere and voltage of the equipment according to the diameter to be used so as not to overload the deposit wire, regulate the gas flow.				