



**UNIWEELD IND. DE ELETRODOS LTDA**

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**COMMERCIAL NAME:** ESSEN CR MO 2 IG

**Revision:** 02

**STANDARD:** AWS A5.28: 2005 ER90S-B3 / ASME SFA5.28 ER90S-B3 Edition 2015

**Date:** 12/2018

Chemical characteristic of the deposited metal	C	Mn	Si	P	S	Cr	Ni	Mo	Cu
	0.07 to 0.12%	0.40 to 0.70%	0.40 to 0.70%	0.025% max.	0.025% max.	2.30 to 2.70%	0.20% Max.	0.90 to 1.20%	0.35% Max.

<b>APPLICATION FIELD</b>	Wire or rod Essen CR MO 2 GI is suitable for steel of type ASTM A335 Gr. P22 10 Cr Mo 9 10 10 Cr Si Mo V 7, SAE 4340 and 8630, similar alloy cast steel, steels for cementation, nitriding, beneficiáveis steels having a strength of 1100 N / mm <sup>2</sup> , similar cast steel, steels for boilers and pipes heat resistant pressure vessels, superheaters, steam generators, heat exchangers in the Oil Industry, oil and gas, capacitors and other equipment in industry Refining, cracking in Superheaters.					
<b>TECHNICAL CHARACTERISTICS</b>	Presents a specially developed welding alloy that allows free of pores, fissures and cracks, suitable for beneficiáveis steels, fine grain alloy steels 2.5% Cr and 1% Mo. Deposited weld beads with smooth arc medium, stable and uniform, having high toughness conferring great resistance to cracking, impact on working temperatures -60 ° C to + 350 ° C, outstanding mechanical strength, has excellent low welding splash index . Pre-heating (200 ° C approx.), Control interpass temperature (approximately 350 ° C.) And stress relief (between 600-700 ° C) are recommended.					
<b>MECHANICAL PROPERTIES</b>	Elongation: 17% (min.) flow limit: 470 MPa (min.) Tensile strength: 550 MPa (min.)					
<b>OPERATIONAL CHARACTERISTICS</b>	<b>welding position Mig:</b> All the positions <b>Tig welding position:</b> All the positions					
	<b>Mig shielding gas:</b> 100% Ar / O2 Ar 1-5% (Class SG-AO-1 / AO-SG-5) <b>Tig shielding gas:</b> Air 100%					
	<b>Diameter (mm) Mig</b>	1.20 Ø				
	<b>Packaging (kg) Mig</b>	15				
	<b>Diameter (mm) Tig</b>	1.00 Ø	Ø 1.60	Ø 2.00	2.40 Ø	Ø 3.20
<b>Packaging (kg) Tig</b>	5	5	5	5	5	
<b>WELDING TECHNIQUE</b>	Make cleaning the area to be welded with grinder or using mechanical rotary brush impregnated with mill scale and impurities must be removed not to cause contamination, making the appropriately adjusting the amperage and voltage of the machine according to the diameter to be used to avoid overloading the tank wire and regulate the flow of gas.					