



**DATA SHEET**  
**DS 275**  
**Rev. 1 dd 09/10/2017**  
**INE JC-100™ SAW**

INE SpA  
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**CLASSIFICATION**

AWS SPECIFICATIONS	EN SPECIFICATIONS
AWS A 5.23: EG	
AWS A 5.23M: EG	
ASME SFA 5.23: EG	
ASME SFA 5.23M: EG	

**APPROVALS**


**ALLOY TYPE**

Copper-coated solid wire for submerged arc welding of high strength steels.

**APPLICATIONS**

Copper-coated solid wire with Ni-Cr-Mo additions for submerged arc welding designed for welding high yield strength steels, with tensile strength higher than 700 MPa. Good impact strength at low temperatures. Suitable for the metal working industry, offshore fabrication, chemical and petrochemical industry. It also has applications in fabrications of HSLA (high-strength low-alloy) steels, which may be used for industrial machinery construction, cranes and other highly stressed structural components. To be used with INEFLEX BL KV flux.

**MATERIALS TO BE WELDED**

ASTM		EN		Others
A 514	API 5LX X65	10137-2 S460	10208-2 L480	RQT 601
A 517	API 5LX X70	10137-2 S500	10208-2 L550	Navy Q1
HY80	API 5LX X80	10137-2 S550	(BS 4360 Gr 55F)	WELDOX 700

**WELDING GUIDELINES**

Preheat and interpass temperature 150°C. PWHT is not required. To obtain the best mechanical properties results, the use with low heat input is advised (follow the steel producer recommendations).

**TECHNICAL INFORMATION**

Welding positions: Flat and flat-frontal.





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**WELDING PARAMETERS**

Current	DC + Reverse polarity, AC					
Diameter (mm)	2.0	2.4	3.2	4.0		
Intensity (A)	300 ÷ 400	350 ÷ 450	430 ÷ 530	480 ÷ 580		
Volts (V)	26 ÷ 29	27 ÷ 30	27 ÷ 30	27 ÷ 30		

**TYPICAL CHEMICAL COMPOSITION OF WIRE**

C %	Mn %	Si %	S %	P %	Cr %	Ni %	Mo %	Cu %	
0.13	1.50	0.60	0.010	0.010	0.30	0.95	0.45	0.12	

**NOTE:** refer to the results obtained with the relevant flux for the mechanical characteristics of the deposited metal.

**PRODUCTS AVAILABLE**

Process	Product	Classification AWS	Classification EN
<b>MIG/MAG</b> <b>Solid wire</b>	INEFIL 100	AWS A 5.28: ER100S-1	EN 16834-A: G Mn3Ni1,5Mo
	INEFIL 110	AWS A 5.28: ER110S-1	(EN 16834-A: G Mn3Ni2,5CrMo)
	INEFIL 70	AWS A 5.28: ER100S-G	EN 16834-A: G Mn3NiCrMo
	INEFIL NIMO	AWS A 5.28: ER100S-G	EN 16834-A: G Mn3Ni1Mo
	INEFIL NIMOCR	AWS A 5.28: ER100S-G	EN 16834-A: G M Mn3Ni1CrMo
<b>TIG</b> <b>Rods</b>	INETIG 100	AWS A 5.28: ER100S-1	EN 16834-A: W Mn3Ni1,5Mo
	INETIG 110	AWS A 5.28: ER110S-1	(EN 16834-A: W Mn3Ni2,5CrMo)
<b>SAW</b> <b>Submerged arc</b>	INESUB S3NIMO	AWS A 5.23: EG	EN 26304-A: S3Ni1Mo
	INESUB EF3	AWS A 5.23: EF3	EN 26304-B: SUN2M33
<b>FCAW</b> <b>Cored wire</b>	INETUB M111TG-K3	AWS A 5.28: E110C-K3	EN 18276-A: T 2NiMo
	INETUB M91TG	AWS A 5.28: E90C-G	EN 18276-A: T 55 5 Z M M
	INETUB M121TG-K4	AWS A 5.28: E120C-K4	EN 18276-A: T Mn2NiCrMo
	INETUB B121T5-K4	AWS A 5.29: E121T5-K4	EN 18276-A: T Mn2NiCrMo
<b>SMAW</b> <b>Electrodes</b>	INE 80 B	AWS A 5.5: E10018M	EN 18275-A: E 1NiMo