

### CLASSIFICATION

EN ISO 2560-A : E 50 6 1 Ni B 42 H5  
AWS A5.1 : E8018-C3 H4

### GENERAL DESCRIPTION

L-8018-C3 is a thick coated basic electrode. The weld metal contains 1 % Ni. It is particularly used for the welding of fine-grained steels and steels which maintain their toughness at low temperatures down to -60°C. Weldability is very good at all positions except vertical down. The weld metal diffusible hydrogen level is below 5 ml/100 g. Recovery is 120 %.

### APPROVALS

TSE

### CHEMICAL COMPOSITION (W%), TYPICAL, ALL WELD METAL

C	Si	Mn	Ni	P	S
0.05	0.35	1.50	1.00	<0.02	<0.02

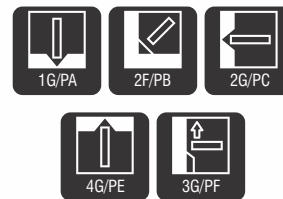
### MECHANICAL PROPERTIES, TYPICAL, ALL WELD METAL

Yield Strength	: 540 N/mm <sup>2</sup>
Tensile Strength	: 620 N/mm <sup>2</sup>
Elongation (L=5d)	: 27 %
Impact (ISO-V)	: 80 J (-50°C) 60 J (-60°C)

### WELDING PARAMETERS / PACKING AND DIAMETER INFORMATIONS / WELDING POSITIONS

Current Type and Polarity : DC (+)

Diameter [ mm ]	Length [ mm ]	Current [ A ]	Electrode Weight [ g/100 pcs ]	Box Weight [ kg ] Quantity [ pcs/box ]	Export Box Box Weight [ kg ]
2.50	350	80 - 115	2380	4.8 / 200	5
3.25	350	100 - 150	3700	5.0 / 135	5
4.00	450	140 - 190	7300	6.6 / 90	6
5.00	450	180 - 240	10850	6.1 / 56	6



### APPLICATIONS AND MATERIALS TO BE WELDED

It is especially suitable for high strength low alloy steels used at low temperatures and at weld joints which require high impact strength. It is used at root and other passes for chemical industry, cold air warehouses, pressure and boiler vessels, piping/tubing and offshore platforms.

	DIN	EN
<b>General Structural Steels</b>	St 52-3 St 60-2, St 70-2	S355 E335, E360
<b>Fine Grained Steels</b>	StE 255 - StE 500 WStE 255 - WStE 500 TStE 255 - TStE 500 EStE 255 - EStE 500 -	S255N - S500N P255NH - P500NH S255NL - S500NL / P275NL1 - P460NL1 S255NL1 - S500NL1 / P275NL2 - P460NL2 S355NH - S460NH
<b>Pipe Materials</b>	X42, X46, X52, X56, X60, X65 (API 5LX) -	- L290GA - L360GA
<b>Boiler and Pressure Vessel Steels</b>	HI, HII, HIII 17 Mn 4, 19 Mn 5	P235GH, P265GH, P285NH P295GH, P310GH
<b>Ship Plates</b>	A, D, E AH32 - EH36	- -
<b>Low Temperature Steels</b>	TTSt 35 N, TTSt 35 V, 15 MnNi 6 3 -	- 11 MnNi 5 3, 13 MnNi 6 3

**Liability** : All information in this data sheet is based on the best available knowledge, is subject to change without notice and can only be considered as suitable for general guidance.  
**Fumes** : Consult information on Welding Safety Sheet, available upon request.

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