

### CLASSIFICATION

EN ISO 14171 : S2 (L-860 ile S 35 2 AB S2)  
AWS A5.17: EM12K

### GENERAL DESCRIPTION

LSW-12K is copper coated submerged arc welding wire designed particularly for welding of mild steels. It contains higher Si than AS S2 submerged arc welding wire.

### CHEMICAL COMPOSITION (W%) TYPICAL, WIRE

C	Si	Mn	S	Cu
0.10	0.13	1.90	0.025	< 0.30
0.05*	0.30*	1.20*	0.020*	< 0.15*

(\*) Typical weld metal composition with flux LincolnWeld 860

### MECHANICAL PROPERTIES, TYPICAL, ALL WELD METAL

Yield Strength	: 370 - 450 N/mm <sup>2</sup>	<b>with flux LincolnWeld 860 :</b>	Yield Strength	: 440 N/mm <sup>2</sup>
Tensile Strength	: 450 - 540 N/mm <sup>2</sup>		Tensile Strength	: 510 N/mm <sup>2</sup>
Elongation (L=5d)	: 25 - 30 %		Elongation (L=5d)	: 25 %
			Impact (ISO-V)	: 50 J ( - 20°C)

**Note :** Tensile and Yield Strength values are given in a wide range, as the submerged arc welding flux compositions might vary considerably.

### MATERIALS TO BE WELDED

	<b>DIN</b>	<b>EN</b>
<b>General Structural Steels</b>	St 33, St 34, St 37, St 44, St 44-2, St 44-3, St 52, St 52-3	S185, S235, S275, S355
<b>Fine Grained Steels</b>	StE 255 - StE 355 WStE 255 - WStE 355	S255N - S355N P255NH - P355NH
<b>Pipe Materials</b>	StE 210-7 - StE 360-7 StE 290-7 TM - StE 360-7 TM X42, X46, X52 (API 5LX)	L210 - L360NB L290MB - L360MB -
<b>Boiler and Pressure Vessel Steels</b>	17 Mn 4, 19 Mn 6 HI, HII	P295GH, P355GH P235GH, P265GH
<b>Elevated Temperature Steels</b>	St 35-8, St 45-8	P235G1TH - P255G1TH
<b>Ship Plates</b>	A, B, C, D AH32 - EH36	- -
<b>Cast Steels</b>	GS-38, GS-45	GE200, GE240

### PACKING AND DIAMETER INFORMATIONS

Diameter	2.0	2.4	3.2	4.0	Spool Weight	Drum Weight
<b>Submerged Arc Welding Wire</b>	X	X	X	X	25 kg	350 / 650 kg

**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.