

CLASSIFICATION

ISO 14341-A : G 42 3 C G3Si1 / G 42 3 M G3Si1
AWS A5.18 : ER70S-6

GENERAL DESCRIPTION

LC-50 is a copper coated gas metal arc welding wire in 15 kg spools or 250 kg drums. It is particularly designed for semi-automatic and full-automatic GMAW applications. Working temperature can range between -50 to 450°C.

CO₂ or 80% Ar - 20% CO₂ are used for gas shielding.

SHIELDING GASES (ISO 14175 / EN 439)

MAG : M21 - Ar + 5-25% CO₂ / C1 - CO₂ (100%)

APPROVALS

CE, DB, GOST, NAKS, SEPRO, TSE, TÜV.

Shielding gas : CO₂

ABS	BV	DNV	GL	LRS	RINA	RMRS	TL
3SA,3YSA	3YM	III YMS	3YS	3S 3YS H15	3Y42	3Y	3YMS

CHEMICAL COMPOSITION (W%) TYPICAL, WIRE

C	Si	Mn
0.08	0.85	1.50
0.06*	0.55*	1.10*

(*) Typical weld metal composition (CO₂ gas shielding)

MECHANICAL PROPERTIES, TYPICAL, ALL WELD METAL

Yield Strength	: 440 N/mm ²
Tensile Strength	: 540 N/mm ²
Elongation (L=5d)	: 30 %
Impact (ISO-V)	: 60 J (-30°C)

MATERIALS TO BE WELDED

	DIN	EN
General Structural Steels	St 33, St 34, St 37, St 44, St 44-2 St 44-3, St 52, St 52-3 St 37-4, St 44-4, St 52-4 St 50-2, St 60-2 C 10 - C 35 ; Ck 10 - Ck 35	S185, S235, S275, S355 P235TR2 - P355T2 E295, E335 C10 - C35
Fine Grained Steels	StE 255 - StE 420 WStE 255 - WStE 355	S255N - S420N P255NH - P355NH
Pipe Materials	StE 210-7 - StE 360-7 StE 290-7 TM - StE 360-7 TM X42, X46, X52, X60 (API 5LX)	L210 - L360NB L290MB - L360MB -
Boiler and Pressure Vessel Steels	17 Mn 4, 19 Mn 6 HI, HII	P295GH, P355GH P235GH, P265GH
Elevated Temperature Steels	St 35-8, St 45-8	P235G1TH - P255G1TH
Ship Plates	A, B, C, D, E AH32 - EH36	- -
Cast Steels	GS-38, GS-45, GS-52	GE200, GE240, GE260

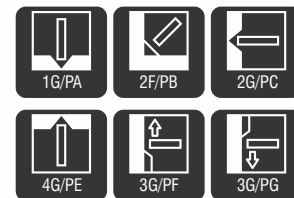
Shielding gas : Ar+CO₂

ABS	DNV	GL	TL
3YSA	III YMS	3YS	3YMS

WELDING PARAMETERS / WELDING POSITIONS

Current Type and Polarity : DC (+)

Arc Type	Diameter [mm]	Current [A]	Voltage [V]
Short Arc	0.8	60 - 140	18 - 22
Short Arc	1.0	80 - 175	18 - 24
Short Arc	1.2	120 - 200	18 - 27
Sprey Arc	1.2	150 - 280	25 - 40
Sprey Arc	1.6	225 - 480	28 - 40



PACKING AND DIAMETER INFORMATIONS

Diameter	0.8	1.0	1.2	1.6	2.0	2.4	3.2	Spool Weight	Drum Weight
MIG/MAG Wire	X	X	X	X	-	-	-	15 kg	250 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.