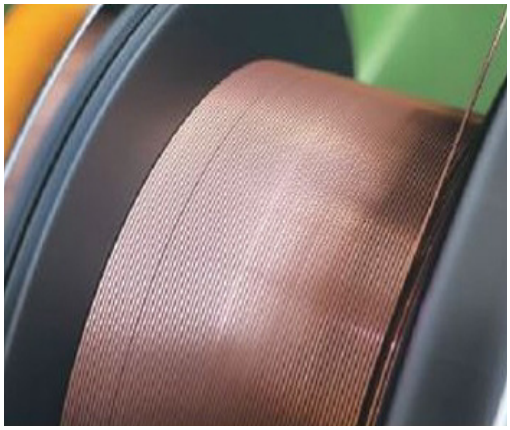
SL-71

Seamless Cored Wire (C1 Shielding Gas) challenging the limits of low hydrogen

FCAW

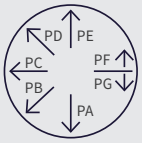
Introduction to Seamless Cored Wires



Within FCAW (Flux Cored Arc Welding), seamless cored wires offer optimal protection against moisture reabsorption. During use, moisture cannot penetrate into the filling since there is no closed seam running over the wire length. This extremely low level of diffusible hydrogen prevents the weld from hydrogen induced cracking or cold cracking.

SL-71 is a seamless rutile flux cored wire applicable for all-positional welding with 100% CO_2 shielding gas. Thanks to its unique seamless structure, SL-71 generates low spatter and has excellent impact properties in low temperature.

These properties make SL-71 the perfect seamless cored wire for industries such as shipbuilding, steel construction, bridges, offshore, pipes, and pressure vessels.

Specifications	Welding Position	Approvals
• AWS A5.20 E71T-1C/-9C H4 • EN ISO 17632-A-T46 3 P C1 1 H5	• All position welding 	• LR: 3YS H5 • ABS: 3YSA H5

Features & Benefits

- Optimal protection against hydrogen induced cracking, due to ultra-low diffusible hydrogen content (under 3ml/100g weld metal)
- Stable welding arc with low spatter and perfect weld bead
- Good weldability in all positions and less post-weld cleaning
- Unique seamless structure allow excellent feedability and electrical conductivity
- Use 100% CO_2 shielding gas
- Excellent impact properties in low temperature, down to -30°C (-20°F) in pure CO_2 gas

Mechanical Properties of All Weld Metal

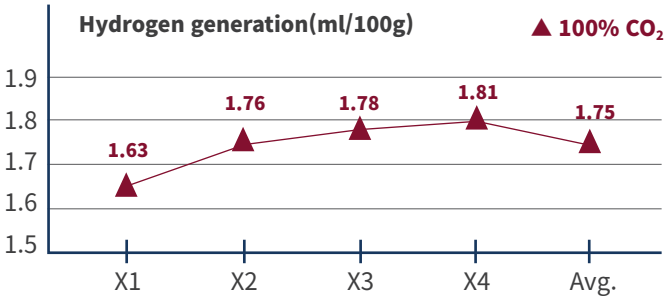
Shielding Gas	Yield Strength	Tensile Strength	Elongation	CVN Impact Value			
	Mpa (lbs/in^2)	Mpa (lbs/in^2)	%	Temperature °C (°F)	Avg. J (ft·lbs)	Temperature °C (°F)	Avg. J (ft·lbs)
C1 (100% CO_2)	520 (75,400)	590 (85,600)	28	-20 (0)	101 (74)	-30 (-20)	70 (52)

Chemical Composition of All Weld Metal

Shielding Gas	Chemical Composition of All Weld Metal(wt%)				
	C	Si	Mn	P	S
C1 (100% CO_2)	0.047	0.37	1.47	0.011	0.007

Diffusible Hydrogen Generation

Shielding Gas	Diffusible Hydrogen Contents (ml/100g)				
	X1	X2	X3	X4	Avg.
C1 (100% CO_2)	1.63	1.76	1.78	1.81	1.75



Packaging

Diameter	Spool	
mm (in)	5kg (11lbs)	15kg (33lbs)
1.2 (0.045)	V	V
1.4 (0.052)	V	V
1.6 (1/16)	V	V

Proper Welding Parameters

Item	1.2mm (0.045in)	1.4mm (0.052in)	1.6mm (1/16in)
Current (A)	180-300	250-350	300-400
Voltage (V)	22-32	25-33	25-35
Stick-out (mm)	15-20	15-20	18-25
Flow rate (l/min)	15-25	15-25	15-25