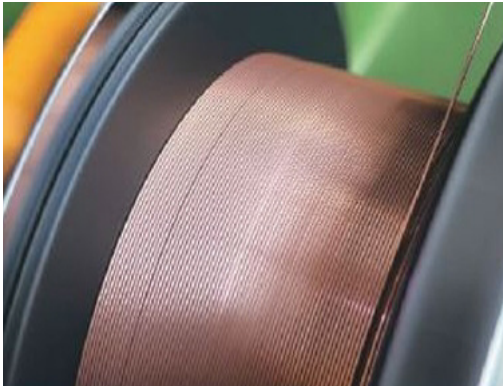


Challenging the limits of low hydrogen Seamless Flux Cored Wire

SL-71MAG

Introduction to Hyundai's Seamless Flux 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-71MAG is a seamless rutile flux cored wire applicable for all-positional welding with Ar + 20% CO₂ shielding gas.

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

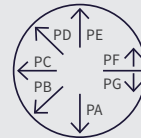
FCAW

Specifications

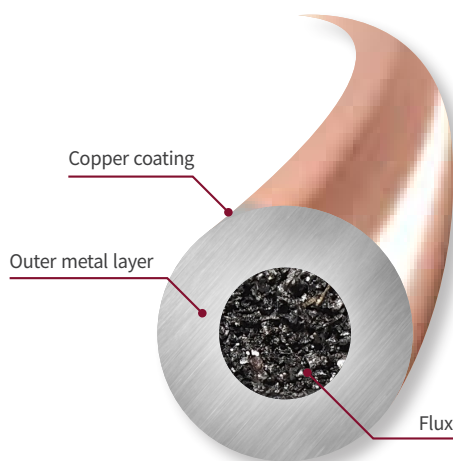
- AWS 5.20 E71T-1M
- EN ISO 17632-A: T46 3 P M21 1 H5

Welding Position

- All position welding



Features & Benefits



- Optimal protection against hydrogen induced cracking, due to extremely low diffusible hydrogen content (under 3ml/100g weld metal)
- Superior wire feeding properties, and excellent weldability in all positions
- Excellent impact properties in low temperature
- Use Ar+20% CO₂ shielding gas
- Stable arc and deep penetration into base metal
- Unique powder filling system, ensuring even composition of core
- Environmentally friendly and safe to use

SL-71MAG

Mechanical Properties of All Weld Metal

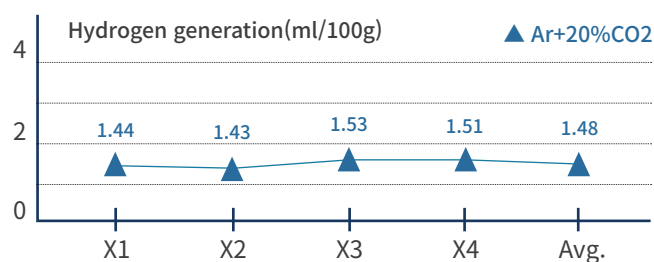
Shielding Gas	Yield Strength	Tensile Strength	Elongation	Impact Value (Joule)			
M21 (Ar+20% CO ₂)	MPa	MPa	%	Temp(°C)	Avg.(J)	Temp(°C)	Avg.(J)
	522	593	29.8	-20	110	-30	80

Chemical Composition of All Weld Metal

Shielding Gas	Chemical Composition of All Weld Metal(wt%)				
M21 (Ar+20% CO ₂)	C	Si	Mn	P	S
	0.036	0.38	1.35	0.011	0.004

Diffusible Hydrogen Generation

Shielding Gas	Diffusible Hydrogen Contents (ml/100g)				
M21 (Ar+20% CO ₂)	X1	X2	X3	X4	Avg.
	1.44	1.43	1.53	1.51	1.48



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)	220-300	250-350	300-400
Voltage(V)	23-32	25-33	25-35
Stick-out(mm)	15-20	15-20	18-25
Flow rate(l/min)	15-25	15-25	15-25