Supercored 70NS

Type : Metal-Cored

CE

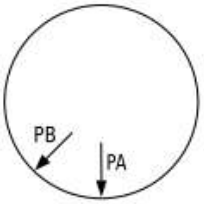
Conformances

AWS A5.36/ ASME SFA5.36 E70T15-M21A2-CS1
(AWS A5.18/ ASME SFA5.18 E70C-6M)
JIS Z3313 T49 3 T15 0 M A H5
EN ISO 17632-A-T 42 3 M M 21 3 H5
ABS 3SAH5, 3YSA
LR 3YSH5
BV SA3M, SA3YM HHH
DNV-GL IIIYMS H5
TÜV EN ISO 17632-A-T423MM3
CWB CSA W48 E492C-6M-H4
CE
DB DIN EN ISO 17632-A-T422MM3
RINA 3YS H5

Applications

- Machinery
- Structural fabrication
- Automotive or robotic welding.
- Shipbuilding

Welding Position



Features

- Designed for welding with Ar + CO_2 shielding gas
- High deposition rates, stable arc, travel speed
- Low spatter
- Good anti-porosity

Current

DC +

Shielding Gas

Ar + 20~25% CO_2

Diameter / Packaging

Diameter	Spool			Pac		
mm (in)	5kg (11lbs)	15kg (33lbs)	20kg (44lbs)	250kg (551lbs)	300kg (661lbs)	350kg (771lbs)
1.2 (0.045)	√	√	√	√	√	√
1.4 (0.052)	√	√	√	√	√	√
1.6 (1/16)	√	√	√	√	√	√

Typical Chemical Composition of All-Weld Metal (%)

	C	Si	Mn	P	S
80% Ar + 20% CO_2	0.05	0.55	1.45	0.011	0.010
90% Ar + 10% CO_2	0.04	0.69	1.67	0.012	0.005

Typical Mechanical Properties of All-Weld Metal

	YS MPa(lbs/in²)	TS MPa(lbs/in²)	EL (%)	Temp °C(°F)	CVN-Impact Value J (ft-lbs)
80% Ar + 20% CO_2	480 (69,700)	550 (79,800)	25	-30 (-22)	50 (37)
90% Ar + 10% CO_2	492 (71,340)	564 (81,700)	24	-30 (-22)	49 (36)

Typical Welding Parameters

Diameter, Polarity Shielding Gas	CTWD mm (in)	Wire Feed Speed m/min (in/min)	Amp. (A)	Volt. (V)	Deposition Rate kg/hr (lb/hr)	Efficiency (%)
1.2mm (0.045 in) DC+						
		Flat & Horizontal				
80% Ar + 20% CO_2	19-25 (3/4-1)	7.3 (288)	190–210	22–26	3.4 (7.6)	90–96
		9.7 (382)	240–260	23–27	4.5 (9.7)	
		12.2 (489)	280–310	24–30	5.9 (12.8)	
1.4mm (0.052 in) DC+						
		Flat & Horizontal				
80% Ar + 20% CO_2	19–25 (3/4–1)	6.7 (261)	250–270	22–26	3.8 (8.3)	92–96
		7.8 (307)	290–310	25–31	4.9 (10.4)	
		9.4 (370)	330–350	28–32	5.5 (12.0)	
1.6mm (1/16 in) DC+						
		Flat & Horizontal				
80% Ar + 20% CO_2	25–32 (1–1 1/4)	5.6 (220)	290–310	26–32	4.5 (9.3)	93–96
		6.8 (270)	340–350	29–33	5.6 (12.1)	
		7.8 (310)	350–370	31–34	6.7 (14.3)	

Caution	① For preheating guidelines, please refer to your local standards and codes relative to your best practices.
	② Use Ar + 20-25% CO_2 mixed gas.
Purpose	① Machinery
	② Structural fabrication
	③ Automotive or robotic welding. • Shipbuilding
Attribute	① Designed for welding with Ar + CO2 shielding gas
	② High deposition rates, stable arc, travel speed
	③ Low spatter
	④ Good anti-porosity
	⑤ Meets AWS D1.8 seismic lot waiver requirements