ArcStar T12SR

AWS A5.20 E71T-1CJ / E71T-12CJ
EN ISO 17632-A-T 42 4 P C1 1 H5

Characteristics and Applications:

ArcStar T12SR is a gas-shielded flux cored wire designed for mild steel and 490N/mm^2 high tensile steel. It is suitable for all position welding. It provides stable arc, less spatter, easy slag removable, excellent X-Ray inspection, low diffusible hydrogen (less than 5 ml/100g) and excellent mechanical properties at lower temperatures in both the as welded and post weld heat treat conditions. The typical applications include shipbuilding, offshore, storage tank, pressure vessels, piping etc.

Notes on Usage:

1. Use DC(+) polarity.
2. Use CO_2 as shielding gas.
3. Maintain interpass temperature under 150°C in multi-pass welding to keep excellent mechanical properties.

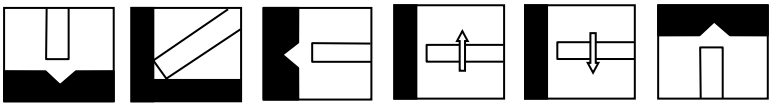
Typical chemical composition of weld metal (wt%)：

	C	Mn	Si	P	S	Ni
AWS	≦ 0.12	≦ 1.60	≦ 0.90	≦ 0.03	≦ 0.03	≦ 0.50
EN ISO	-	≦ 2.0	-	-	-	≦ 0.5
Typical value	0.05	1.25	0.31	0.014	0.008	0.42

Typical mechanical properties of weld metal：

	Yield Strength MPa(ksi)	Tensile Strength MPa(ksi)	Elongation %	Charpy V-Notch J(ft-lbs)		PWHT
AWS	≧ 390(58)	490-620(70-90)	≧ 22	-40℃(-40℉)	≧ 27(20)	-
EN ISO	≧ 420(61)	500-640(73-93)	≧ 20	-40℃(-40℉)	≧ 47(35)	-
Typical value	485(70)	550(80)	29	-40℃(-40℉)	165(122)	-
	440(64)	520(75)	32	-40℃(-40℉)	145(107)	610℃×13hrs

Welding position



Sizes and recommended operating range (DC＜+＞):
Stick out : 15-25 (mm), gas flow rate : 20-25 (l/min)

Position \ Diameter (mm)	ϕ1.2mm
F, HF	160A~280A, 24V~33V
VU, OH	150A~220A, 24V~28V
VD	230A~280A, 28V~33V
H	200A~260A, 26V~30V

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