

# ArcStar T12

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

## Characteristics and Applications:

ArcStar T12 is a gas-shielded flux cored wire designed for mild steel and 490N/mm<sup>2</sup> high tensile steel. It is suitable for all position welding. It features include stable arc, less spatter, easy slag removable, excellent X-Ray inspection, low diffusible hydrogen (less than 5 ml/100g) and good low temperature impact value due to 0.4%Ni in weld metal. The typical applications are shipbuilding, offshore, storage tank, pressure vessels, piping etc.

## Notes on Usage:

1. Use DC(+) polarity.
2. Use CO<sub>2</sub> as shielding gas.
3. Maintain interpass temperature under 150°C in multi-pass welding to keep excellent mechanical properties.
4. Keep the product dry, while it is stored or delivered.

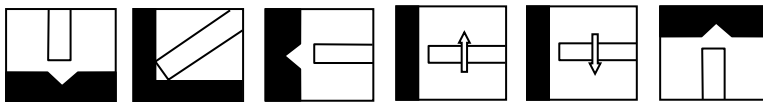
## Typical chemical composition of weld metal (wt%) :

	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	0.04	1.13	0.23	0.015	0.005	0.41

## Typical mechanical properties of weld metal :

	Yield strength MPa(ksi)	Tensile strength MPa(ksi)	Elongation %	Charpy V-Notch J (ft-lbf)		PWHT
AWS	≥390(58)	490-620(70-90)	≥22	-40°C(-40°F)	≥27(20)	-
EN ISO	≥420(61)	500-640(73-93)	≥20	-40°C(-40°F)	≥47(35)	-
Typical value	529(77)	574(83)	30	-40°C(-40°F)	169(125)	-
	490(71)	550(80)	32	-46°C(-50°F)	116(86)	610°C×13hrs

## Welding position



## Sizes and recommended parameter range ( DC <+ > ):

Stick out : 15-25 (mm), gas flow rate : 20-25 (l/min)

Position	Diameter (mm)	1.2
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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