# ArcStar T12

AWS A5.20 E71T-1CJ / E71T-12CJ EN ISO 17632-A-T 46 4 P C1 1 H5

#### **Characteristics and Applications:**

ArcStar T12 is a gas-shielded flux cored wire designed for mild steel and 490N/mm² 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%):

С	Mn	Si	Р	S	Ni
0.04	1.13	0.23	0.009	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
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 (I/min)

Diameter (mm) Position	1.2			
F, HF	160A~280A / 24V~33V			
VU, OH	150A~220A / 24V~28V			
VD	230A~280A / 28V~33V			
Н	200A~260A / 26V~30V			

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