

## AI-1771

### Specifications

**AWS/ASME** A5.20-05: E71T1-M21A4-CS1-HB

**GB/T10045-2001**(E501T-1)

### Description and Applications

Rutile flux cored wire with fast freezing slag. AI 1771 is an all-positional wire providing good weldability with easy slag detachability. Low spatter, smooth finely rippled seam surface, notch free weld toes. Out of position welding can be carried out with increased welding current, resulting in increased deposition rates.

**Applications include:** Steels up to a maximum strength of 460 MPa with shielding gas M21. Shipbuilding steels A, B, D, E, A 32-E36. ASTM A 106 Gr A, B, C

### Typical Weldmetal Analysis

C	Mn	Si	S	P	Fe
0.06	1.2	0.5	0.02	0.02	Bal

Hydrogen content: 5 mg per 100 g weld metal

### Mechanical Properties of Weldmetal

Welded condition	Yield strength	Tensile strength	Elongation	Impact Strength K <sub>y</sub>		
	Rp <sub>0.2</sub>	MPa	%	J(RT)	-20°C	-40°C
Untreated Shielding gas <b>Ar + 15 – 25% CO<sub>2</sub></b>	500	580	26	180	130	90
Untreated Shielding gas <b>100% CO<sub>2</sub></b>	480	550	25	160	110	

### Welding Parameters

Diameter (mm)	Current type	Amps
1.2	DC(+)	150-220
1.6	DC(+)	180-300

Use 3-4 volts higher when using CO<sub>2</sub> shielding gas

### Welding Positions

(1G, 1F) Downhand/flat position, (2F) Horizontal position, (2G) Horizontal vertical position

### Disclaimer

All figures in this datasheet should be considered indicative only. No guarantee is made as to their accuracy.

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