

## MT-AI 99,5 Ti

## 3.0805

Aluminium MIG/TIG wire for welding pure aluminium.

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### Standard designation

Material No.	3.0805
AWS/ASME SFA-5.10	ER 1450
EN ISO 18273	S Al 1450

### Main base metals

Pure aluminium  
e.g. Al 99,5 (3.0255), Al 99 (3.0205)

### Physical properties (typical values)

El.conductivity at 20°C [S · m/mm <sup>2</sup> ]	Thermal conductivity at 20°C [W/(m · K)]	Linear thermal expansions coefficient (20-100°C) [1/K]
34 - 36	210 - 230	23,5 · 10 <sup>-6</sup>

### Mechanical properties of all – weld – metal (typical values)

Welding process Gas shield Thermal treatment Test temperature		TIG I1 untreated +20°C	MIG I1 untreated +20°C
		[°C]	
0,2%-yield strength	R <sub>p0,2</sub>	MPa	30
Tensile strength	R <sub>m</sub>	MPa	80
Elongation	A <sub>5</sub>	[%]	40

### Average chemical composition of all-weld-metal (%)

Al	Ti
basic	0,15

### Application notes

The weld seam area has to be clean and free from oxide film. On larger work pieces and for wall thickness exceeding 15 mm preheat the welding groove area to +150°C.

### Gas types applicable TIG Gas types applicable MIG

I1  
I1

### TIG rod diameters, unit weights

Diameter [mm]	Length [mm]	Kg per box
1,60	1000	10,0
2,00	1000	10,0
2,40	1000	10,0
3,20	1000	10,0
4,00	1000	10,0
5,00	1000	10,0

### MIG welding wire

Diameter                      0,8mm                      1,0mm                      1,2mm                      1,6mm

### Welding positions MIG acc.to EN ISO 6947

PA, PB, PF

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PA, PB, PF

### Current/Polarity TIG

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### Current/Polarity MIG

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