

## Aluminium wire

### Classification

AWS A5.10-99	: ER5183
ISO 18273-01	: Al 5183

### General description

Solid wire for welding of high strength aluminium alloys and low temperature applications (-196°C)

Excellent feedability and very consistent welding performance.

Tight and stable arc.

Also available in 90 kg AccuPak®, that increases productivity by reducing time to change spools.

### Shielding gases (acc. EN 439)

GTAW	I1	Inert gas Ar (100%)
GMAW	I1	Inert gas Ar (100%)
	I3	Inert gas Ar+ >0-95% He

### Approvals

	ABS	BV	DB	DNV	GL	LR	TÜV
GTAW			+				+
GMAW	WC	WC	+	5183	S AlMg4.5Mn	+	+

### Chemical composition (w%), typical, wire / rod

Al	Mn	Si	Ti	Mg	Zn	Cr	Fe	Cu
bal.	0.8	0.09	0.02	4.5	0.15	0.15	0.14	0.02

### Mechanical properties, typical

	Process	Shielding gas	Condition	0.2% Proof strength (N/mm <sup>2</sup> )	Tensile strength (N/mm <sup>2</sup> )	Elongation (%)
Typical values	GTAW	I1	AW	150	290	25
	GMAW	I1	AW	140	300	30

### Physical properties

Melting range	568 - 638°C
Density	approximately 2400 kg/m <sup>3</sup>

### Materials to be welded

Material	Code	Type	W.Nr.	Int.Reg.Nr.	Int.Cast.Nr.
Aluminium-wrought alloys	DIN 1725-1	Al Mg 3	3.3535	5754	
		Al Mg 4.5 Mn	3.3547	5083	
		Al Mg 5	3.3555	6082	
		Al Mg Si 1			
Aluminium cast alloys	DIN 1725-2	G-Al Mg 3	3.3541		
		G-Al Mg 3 Si	3.3241		512.0
		G-Al Mg 5	3.3561		B 535.0
		G-Al Mg 5 Si	3.3261		

### Packaging

Process	Unit	Sizes (mm)								
		0.8	1.0	1.2	1.6	2.0	2.4	3.2	4.0	
GTAW	5 kg tube					X	X	X	X	X
GMAW	7.26 kg plastic spool S300	X	X	X	X					
	7.0 kg basket spool BS300	X	X	X	X					
	90 kg AccuPak				X					

Other sizes and packaging on request