

LNT/LNM AIMg 4.5Mn

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)

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	DNV	GL	LR	TÜV
GTAW						+
GMAW	WC	WC	5183	S AIMg4.5Mn	+ *	+

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

Al	Mn	Si	Ti	Mg	Zn	Cr	Fe	Cu
bal.	0.65	0.09	0.02	5	0.03	0.06	0.14	0.02

Mechanical properties, typical

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

Physical properties

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

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)						
		1.0	1.2	1.6	2.0	2.4	3.2	4.0
GTAW	5 kg tube				X	X	X	X
GMAW	7 kg spool B300	X	X	X				

Other sizes and packaging on request

LNT/LNM AIMg 4.5Mn: rev. EN 15

LINCOLN
ELECTRIC

GMAW/GTAW