

## Aluminium wire

### Classification

AWS A5.10	: ER4043
ISO 18273	: S Al 4043 A (AlSi5)

### General description

**Solid wire for welding of aluminium-silicium alloys**

**Excellent feedability and very consistent welding performance**

**Tight and stable arc**

**Also available in 120 kg AccuPak<sup>®</sup>, that increases productivity by reducing time to change spools**

### Shielding gases (acc. ISO 14175)

I1	Inert gas Ar (100%)
I3	Inert gas Ar+ 0.5-95% He

### Approvals

TÜV

+

### Chemical composition (w%) typical wire

Al	Mn	Si	Ti	Fe	Zn	Cu	Mg
bal.	0.01	4.7	0.001	0.3	0.002	0.01	0.004

### Mechanical properties, typical, all weld metal

	Shielding gas	Condition	0.2% Proof strength (N/mm <sup>2</sup> )	Tensile strength (N/mm <sup>2</sup> )	Elongation (%)	Impact ISO-V(J)	
						+20°C	-60°C
Typical values	I1	AW	100	160	15	20	20

### Physical properties

Melting range	573 - 625°C
Density	approximately 2680 kg/m <sup>3</sup>

### Materials to be welded

Aluminium grades	Standard	Type	W. Nr	Int.Reg.Nr.	Int.Cast.Nr.
<b>Aluminium cast alloys</b>	DIN 1725-1	Al Mg Si 0.5	3.3206	6060	
		Al Mg Si 0.7	3.3210	6005A	
		Al Mg Si 0.8	3.2316	6181	
<b>Aluminium cast alloys</b>	DIN 1725-2	G-Al Si 5			443.0

### Packaging and available sizes

Unit type	Diameter (mm)			
	0.8	1.0	1.2	1.6
0.5 kg plastic spool S100	X	X	X	X
7.26 kg spool S300	X	X	X	X
7.0 kg spool BS300	X	X	X	X
125 kg AccuPak			X	
Other sizes and packaging on request				

SuperGlaze<sup>®</sup> MIG 4043: rev. EN 21

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## Aluminium rod

### Classification

AWS A5.10 : R4043  
ISO 18273 : S Al 4043 A (AlSi5)

### General description

**Solid rod for welding of aluminium-silicium alloys**  
**Excellent feedability and very consistent welding performance**  
**Tight and stable arc**

### Shielding gases (acc. ISO 14175)

I1 Inert gas Ar (100%)  
I3 Inert gas Ar+ 0.5-95% He

### Approvals

TÜV  
+

### Chemical composition (w%), Typical, rod

Al	Mn	Si	Ti	Fe	Zn
bal.	0.05	5.0	0.15	0.4	0.1

### Mechanical properties, typical, all weld metal

	Shielding gas	Condition	0.2% Proof strength (N/mm <sup>2</sup> )	Tensile strength (N/mm <sup>2</sup> )	Elongation (%)	Impact ISO-V(J)	
						+20°C	-60°C
Typical values	I1	AW	100	160	15	20	20

### Physical properties

Melting range 573 - 625°C  
Density approximately 2680 kg/m<sup>3</sup>

### Materials to be welded

Aluminium grades	Standard	Type	W. Nr	Int.Reg.Nr.	Int.Cast.Nr.
Aluminium cast alloys	DIN 1725-1	Al Mg Si 0.5	3.3206	6060	
		Al Mg Si 0.7	3.3210	6005A	
		Al Mg Si 0.8	3.2316	6181	
Aluminium cast alloys	DIN 1725-2	G-Al Si 5			443.0

### Packaging and available sizes

Unit type	Diameter (mm)				
	1.6	2.0	2.4	3.2	4.0
2 and 5 kg tube	X	X	X	X	X
Other sizes and packaging on request					

SuperGlaze® TIG 4043: rev. EN 21

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## Aluminium wire

### Classification

AWS A5.10 : ER5183  
 ISO 18273 : S Al 5183 (AlMg4.5Mn0,7)

### 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. ISO 14175)

I1 Inert gas Ar (100%)  
 I3 Inert gas Ar+ 0.5-95% He

### Approvals

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

### Chemical composition (w%) typical wire

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

### Mechanical properties, typical, all weld metal

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

### Physical properties

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

### Materials to be welded

Aluminium grades	Standard	Type	W. Nr	Int.Reg.Nr.	Int.Cast.Nr.
<b>Aluminium wrought alloys</b>	DIN 1725-1	Al Mg 3	3.3535	5754	
		Al Mg 4.5 Mn	3.3547	5083	
		Al Mg 5	3.3555	6082	
<b>Aluminium cast alloys</b>	DIN 1725-2	Al Mg Si 1			
		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 and available sizes

Unit type	Diameter (mm)			
	0.8	1.0	1.2	1.6
7.26 kg spool S300	X	X	X	X
7.0 kg spool BS300	X	X	X	X
136 kg AccuPak			X	
Other sizes and packaging on request				

SuperGlaze® MIG 5183: rev. EN 21

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## Aluminium rod

### Classification

AWS A5.10	: R5183
ISO 18273	: S Al 5183 (AlMg4.5Mn0,7)

### General description

**Solid rod for welding of high strength aluminium alloys and low temperature applications (-196°C)**  
**Excellent feedability and very consistent welding performance**  
**Tight and stable arc**

### Shielding gases (acc. ISO 14175)

I1	Inert gas Ar (100%)
I3	Inert gas Ar+ 0.5-95% He

### Approvals

TÜV  
+

### Chemical composition (w%), Typical, rod

Al	Mn	Si	Ti	Mg	Zn	Cr	Fe
bal.	0.8	0.1	0.02	4.5	0.15	0.15	0.2

### Mechanical properties, typical, all weld metal

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

### Physical properties

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

### Materials to be welded

Aluminium grades	Standard	Type	W. Nr	Int.Reg.Nr.	Int.Cast.Nr.
<b>Aluminium wrought alloys</b>	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			
<b>Aluminium cast alloys</b>	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 and available sizes

Unit type	Diameter (mm)				
	1.6	2.0	2.4	3.2	4.0
5 kg tube	X	X	X	X	X
Other sizes and packaging on request					

SuperGlaze® TIG 5183: rev. EN 21

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## Aluminium wire

### Classification

AWS A5.10 : ER5356  
 ISO 18273 : S Al 5356 (AlMg5Cr)

### General description

**Solid wire for welding aluminium alloys containing more than 3% Mg**  
**Excellent feedability and very consistent welding performance**  
**Tight and stable arc**  
**Also available in 90 kg AccuPak<sup>®</sup>, that increases productivity by reducing time to change spools**

### Shielding gases (acc. ISO 14175)

I1 Inert gas Ar (100%)  
 I3 Inert gas Ar+ 0.5-95% He

### Approvals

ABS	BV	DNV	GL	LR	TÜV
WB	WB	5356	S ALMg5	+	+

### Chemical composition (w%) typical wire

Al	Mn	Si	Ti	Mg	Cr	Cu	Fe	Zn
bal.	0.11	0.08	0.06	4.9	0.07	0.01	0.2	0.03

### Mechanical properties, typical, all weld metal

	Shielding gas	Condition	0.2% Proof strength (N/mm <sup>2</sup> )	Tensile strength (N/mm <sup>2</sup> )	Elongation (%)
Typical values	I1	AW	110	250	25

### Physical properties

Melting range 562 - 633°C  
 Density approximately 2640 kg/m<sup>3</sup>

### Materials to be welded

Aluminium grades	Standard	Type	W. Nr	Int.Reg.Nr.	Int.Cast.Nr.
<b>Aluminium wrought alloys</b>	DIN 1725-1	Al Mg 3	3.3535	5754	
		Al Mg 4,5	3.3345	5082	
		Al Mg 5	3.3555	5056A	
		Al Mg 2 Mn 0,8	3.3527	5049	
		Al Mg 2,7 Mn	3.3537	5454	
		Al Mg 4 Mn	3.3545	5086	
		Al Zn 4,5 Mg 1	3.4335	7020	
<b>Aluminium cast alloys</b>	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 and available sizes

Unit type	Diameter (mm)			
	0.8	1.0	1.2	1.6
0.5 kg plastic spool S100	X	X	X	X
2.0 kg plastic spool S200			X	
7.26 kg spool S300	X	X	X	X
7.0 kg spool BS300	X	X	X	X
136 kg AccuPak			X	
Other sizes and packaging on request				

SuperGlaze<sup>®</sup> MIG 5356: rev. EN 22

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## Aluminium rod

### Classification

AWS A5.10 : R5356  
 ISO 18273 : S Al 5356 (AlMg5)

### General description

**Solid rod for welding aluminium alloys containing more than 3% Mg**  
**Excellent feedability and very consistent welding performance**  
**Tight and stable arc**

### Shielding gases (acc. ISO 14175)

I1 Inert gas Ar (100%)  
 I3 Inert gas Ar+ 0.5-95% He

### Approvals

TÜV  
 +

### Chemical composition (w%), Typical, rod

Al	Mn	Si	Ti	Mg	Cr
bal.	0.10	0.1	0.10	5.0	0.15

### Mechanical properties, typical, all weld metal

	Shielding gas	Condition	0.2% Proof strength (N/mm <sup>2</sup> )	Tensile strength (N/mm <sup>2</sup> )	Elongation (%)
Typical values	I1	AW	130	285	25

### Physical properties

Melting range 562 - 633°C  
 Density approximately 2640 kg/m<sup>3</sup>

### Materials to be welded

Aluminium grades	Standard	Type	W. Nr	Int.Reg.Nr.	Int.Cast.Nr.
<b>Aluminium wrought alloys</b>	DIN 1725-1	Al Mg 3	3.3535	5754	
		Al Mg 4,5	3.3345	5082	
		Al Mg 5	3.3555	5056A	
		Al Mg 2 Mn 0,8	3.3527	5049	
		Al Mg 2,7 Mn	3.3537	5454	
		Al Mg 4 Mn	3.3545	5086	
		Al Zn 4,5 Mg 1	3.4335	7020	
<b>Aluminium cast alloys</b>	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 and available sizes

Unit type	Diameter (mm)					
	1.6	2.0	2.4	3.2	4.0	5.0
5 kg tube	X	X	X	X	X	X

Other sizes and packaging on request

SuperGlaze® TIG 5356: rev. EN 22

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## Aluminium wire

### Classification

AWS A5.10 : ER1100\*

\* Nearest classification

### General description

Solid wire for welding pure aluminium with maximum of 0.5% alloying elements

### Shielding gases (acc. ISO 14175)

I1 Inert gas Ar (100%)  
I3 Inert gas Ar+ 0.5-95% He

### Chemical composition (w%) typical wire

Al	Zn	Ti	Cu	Mn	Si	Si+Fe	Fe
bal.	0.02	0.04	0.04	<0.01	0.05	0.2	0.12

### Mechanical properties, typical, all weld metal

	Shielding gas	Condition	0.2% Proof strength (N/mm <sup>2</sup> )	Tensile strength (N/mm <sup>2</sup> )	Elongation (%)
Typical values	I1	AW	30	80	40

### Physical properties

Melting range 647 - 658°C  
Density approximately 2700 kg/m<sup>3</sup>

### Materials to be welded

Standard	Type	W. Nr	Int.Reg.Nr.
DIN 1712-3	Al 99.8	3.0285	1080 A
	Al 99.7	3.0275	1070 A
	Al 99.5	3.0255	1050 A
	E-Al	3.0257	1350 A
	Al 99	3.0205	1200

### Packaging and available sizes

Unit type	Diameter (mm)		
	1.0	1.2	1.6
7 kg spool B300	X	X	X
Other sizes and packaging on request			

LNМ AI99.5: rev. EN 21

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## Aluminium rod

### Classification

AWS A5.10 : ER1100\*

\* Nearest classification

### General description

Solid rod for welding pure aluminium with maximum of 0.5% alloying elements

### Shielding gases (acc. ISO 14175)

I1 Inert gas Ar (100%)

### Chemical composition (w%), Typical, rod

Al	Zn	Ti	Cu	Mn	Si
bal.	0.02	0.04	0.04	<0.01	0.05

### Mechanical properties, typical, all weld metal

	Shielding gas	Condition	0.2% Proof strength (N/mm <sup>2</sup> )	Tensile strength (N/mm <sup>2</sup> )	Elongation (%)
Typical values	I1	AW	30	80	40

### Physical properties

Melting range 647 - 658°C  
Density approximately 2700 kg/m<sup>3</sup>

### Materials to be welded

Standard	Type	W. Nr	Int.Reg.Nr.
DIN 1712-3	Al 99.8	3.0285	1080 A
	Al 99.7	3.0275	1070 A
	Al 99.5	3.0255	1050 A
	E-Al	3.0257	1350 A
	Al 99	3.0205	1200

### Packaging and available sizes

Unit type	Diameter (mm)			
	2.0	2.4	3.2	4.0
5 kg tube	X	X	X	X
Other sizes and packaging on request				

LNT AI99.5: rev. EN 21

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## Aluminium wire

### Classification

ISO 18273 : S Al 5754 (AlMg3)

### General description

Solid wire for welding of aluminium alloys up to 3%Mg

### Shielding gases (acc. ISO 14175)

I1 Inert gas Ar (100%)  
I3 Inert gas Ar+ 0.5-95% He

### Approvals

TÜV  
+

### Chemical composition (w%) typical wire

Al	Mg	Zn	Cr	Ti	Mn	Si	Cu	Fe
bal.	3.4	0.1	0.19	0.09	0.01	0.06	0.01	0.13

### Mechanical properties, typical, all weld metal

	Shielding gas	Condition	0.2% Proof strength (N/mm <sup>2</sup> )	Tensile strength (N/mm <sup>2</sup> )	Elongation (%)
Typical values	I1	AW	100	210	30

### Physical properties

Melting range 580 - 642°C  
Density approximately 2660 kg/m<sup>3</sup>

### Materials to be welded

Aluminium grades	Standard	Type	W. Nr	Int.Reg.Nr.	Int.Cast.Nr.
Aluminium wrought alloys	DIN 1725-1	Al Mg 1	3.3315	5005 A	
		Al Mg 1.5	3.3316	5050 B	
		Al Mg 1.8	3.3326	5051 A	
		Al Mg 2.5	3.3523	5052	
		Al Mg 3	3.3535	5754	
		Al Mg 1	3.0515	3103	
		Al Mg Si 0.5	3.3206	6060	
		Al Mg Si 0.7	3.3210	6005 A	
		Al Mg Si 0.8	3.2316	6181	
Aluminium cast alloys	DIN 1725-2	G-AlMg 3	3.3541		
		G-AlMg 3 Si	3.3241		512.0

### Packaging and available sizes

Unit type	Diameter (mm)		
	1.0	1.2	1.6
7 kg spool B300	X	X	X
Other sizes and packaging on request			

LNМ AIMg3: rev. EN 21

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## Aluminium rod

### Classification

ISO 18273 : S Al 5754 (AlMg3)

### General description

Solid rod for welding of aluminium alloys up to 3%Mg

### Shielding gases (acc. ISO 14175)

I1 Inert gas Ar (100%)  
I3 Inert gas Ar+ 0.5-95% He

### Approvals

TÜV  
+

### Chemical composition (w%), Typical, rod

Al	Mg	Zn	Cr	Ti	Mn	Si	Cu
bal.	3.2	0.1	0.20	0.10	0.01	0.06	0.01

### Mechanical properties, typical, all weld metal

	Shielding gas	Condition	0.2% Proof strength (N/mm <sup>2</sup> )	Tensile strength (N/mm <sup>2</sup> )	Elongation (%)
Typical values	I1	AW	100	220	33

### Physical properties

Melting range 580 - 642°C  
Density approximately 2660 kg/m<sup>3</sup>

### Materials to be welded

Aluminium grades	Standard	Type	W. Nr	Int.Reg.Nr.	Int.Cast.Nr.
Aluminium wrought alloys	DIN 1725-1	Al Mg 1	3.3315	5005 A	
		Al Mg 1.5	3.3316	5050 B	
		Al Mg 1.8	3.3326	5051 A	
		Al Mg 2.5	3.3523	5052	
		Al Mg 3	3.3535	5754	
		Al Mg 1	3.0515	3103	
		Al Mg Si 0.5	3.3206	6060	
		Al Mg Si 0.7	3.3210	6005 A	
		Al Mg Si 0.8	3.2316	6181	
Aluminium cast alloys	DIN 1725-2	G-AlMg 3	3.3541		
		G-AlMg 3 Si	3.3241		512.0

### Packaging and available sizes

Unit type	Diameter (mm)				
	1.6	2.0	2.4	3.2	4.0
5 kg tube	X	X	X	X	X
Other sizes and packaging on request					

LNT AlMg3: rev. EN 21

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## Aluminium wire

### Classification

AWS A5.10 : ER5356  
ISO 18273 : S Al 5356 (AIMg5)

### General description

Solid wire for welding aluminium alloys containing more than 3% Mg

### Shielding gases (acc. ISO 14175)

I1 Inert gas Ar (100%)  
I3 Inert gas Ar+ 0.5-95% He

### Approvals

ABS	BV	DNV	GL	LR	TÜV
WB	WB	5356	S ALMg5	+	+

### Chemical composition (w%) typical wire

Al	Mn	Si	Ti	Mg	Cr	Cu	Fe	Zn
bal.	0.11	0.08	0.06	4.9	0.07	0.01	0.2	0.03

### Mechanical properties, typical, all weld metal

	Shielding gas	Condition	0.2% Proof strength (N/mm <sup>2</sup> )	Tensile strength (N/mm <sup>2</sup> )	Elongation (%)
Typical values	I1	AW	110	250	25

### Physical properties

Melting range 562 - 633°C  
Density approximately 2640 kg/m<sup>3</sup>

### Materials to be welded

Aluminium grades	Standard	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	3.3345	5082	
		Al Mg 5	3.3555	5056A	
		Al Mg 2 Mn 0,8	3.3527	5049	
		Al Mg 2,7 Mn	3.3537	5454	
		Al Mg 4 Mn	3.3545	5086	
		Al Zn 4,5 Mg 1	3.4335	7020	
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 and available sizes

Unit type	Diameter (mm)			
	0.8	1.0	1.2	1.6
7 kg spool B300	X	X	X	X
Other sizes and packaging on request				

LNM AIMg5: rev. EN 22

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## Aluminium rod

### Classification

AWS A5.10	: ER5356
ISO 18273	: S Al 5356 (AlMg5)

### General description

Solid rod for welding aluminium alloys containing more than 3% Mg

### Shielding gases (acc. ISO 14175)

I1	Inert gas Ar (100%)
I3	Inert gas Ar+ 0.5-95% He

### Approvals

RINA	TÜV
RC	+

### Chemical composition (w%), Typical, rod

Al	Mn	Si	Ti	Mg	Cr
bal.	0.10	0.10	0.10	5.0	0.15

### Mechanical properties, typical, all weld metal

	Shielding gas	Condition	0.2% Proof strength (N/mm <sup>2</sup> )	Tensile strength (N/mm <sup>2</sup> )	Elongation (%)
Typical values	I1	AW	130	285	25

### Physical properties

Melting range	562 - 633°C
Density	approximately 2640 kg/m <sup>3</sup>

### Materials to be welded

Aluminium grades	Standard	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	3.3345	5082	
		Al Mg 5	3.3555	5056A	
		Al Mg 2 Mn 0,8	3.3527	5049	
		Al Mg 2,7 Mn	3.3537	5454	
		Al Mg 4 Mn	3.3545	5086	
		Al Zn 4,5 Mg 1	3.4335	7020	
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 and available sizes

Unit type	Diameter (mm)					
	1.6	2.0	2.4	3.2	4.0	5.0
5 kg tube	X	X	X	X	X	X
Other sizes and packaging on request						

LNT AlMg5: rev. EN 22

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# LNM AlMg4.5Mn

## Aluminium wire

### Classification

AWS A5.10 : ER5183  
ISO 18273 : S Al 5183 (AlMg4.5Mn0,7)

### General description

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

### Shielding gases (acc. ISO 14175)

I1 Inert gas Ar (100%)  
I3 Inert gas Ar+ 0.5-95% He

### Approvals

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

### Chemical composition (w%) typical wire

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, all weld metal

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

### Physical properties

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

### Materials to be welded

Aluminium grades	Standard	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	
Aluminium cast alloys	DIN 1725-2	Al Mg Si 1			
		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 and available sizes

Unit type	Diameter (mm)		
	1.0	1.2	1.6
7 kg spool B300	X	X	X
Other sizes and packaging on request			

LNM AlMg4.5Mn: rev. EN 21

**Liability:** All information in this data sheet is based on the best available knowledge, is subject to change without notice and can only be considered as suitable for general guidance **Fumes:** Consult information on Welding Safety Sheet, available upon request

# LNT AlMg4.5Mn

## Aluminium rod

### Classification

AWS A5.10 : ER5183  
ISO 18273 : S Al 5183 (AlMg4.5Mn0,7)

### General description

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

### Shielding gases (acc. ISO 14175)

I1 Inert gas Ar (100%)  
I3 Inert gas Ar+ 0.5-95% He

### Approvals

TÜV

+

### Chemical composition (w%), Typical, rod

Al	Mn	Si	Ti	Mg	Zn	Cr	Fe
bal.	0.80	0.10	0.02	4.5	0.15	0.15	0.20

### Mechanical properties, typical, all weld metal

	Shielding gas	Condition	0.2% Proof strength (N/mm <sup>2</sup> )	Tensile strength (N/mm <sup>2</sup> )	Elongation (%)	Impact ISO-V(J) +20°C
Typical values	I1	AW	150	290	25	40

### Physical properties

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

### Materials to be welded

Aluminium grades	Standard	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	
Aluminium cast alloys	DIN 1725-2	Al Mg Si 1			
		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 and available sizes

Unit type	Diameter (mm)			
	2.0	2.4	3.2	4.0
5 kg tube	X	X	X	X
Other sizes and packaging on request				

LNT AlMg4.5Mn: rev. EN 21

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# LNM AlMg4.5MnZr

## Aluminium wire

### Classification

ISO 18273 : S Al 5087 (AlMg4.5MnZr)

### General description

Solid wire for welding of high strength aluminium alloys and low temperature applications (-196°C)  
Zr added to increase hot cracking resistance and improve structure

### Shielding gases (acc. ISO 14175)

I1 Inert gas Ar (100%)  
I3 Inert gas Ar+ 0.5-95% He

### Approvals

TÜV  
+

### Chemical composition (w%) typical wire

Al	Mn	Si	Ti	Mg	Zn	Cr	Zr
bal.	0.8	0.2	0.15	4.5	0.15	0.15	0.1

### Mechanical properties, typical, all weld metal

	Shielding gas	Condition	0.2% Proof strength (N/mm <sup>2</sup> )	Tensile strength (N/mm <sup>2</sup> )	Elongation (%)	Impact ISO-V(J)	
						+20°C	-196°C
Typical values	I1	AW	140	300	30	25	15

### Physical properties

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

### Materials to be welded

Aluminium grades	Standard	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 and available sizes

Unit type	Diameter (mm)		
	1.0	1.2	1.6
7 kg spool B300	X	X	X
Other sizes and packaging on request			

LNM AlMg4.5MnZr: rev. EN 21

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## Aluminium wire

### Classification

AWS A5.10 : ER4043  
ISO 18273 : S Al 4043A (AlSi5(Al))

### General description

Solid wire for welding of aluminium-silicium alloys

### Shielding gases (acc. ISO 14175)

I1 Inert gas Ar (100%)  
I3 Inert gas Ar+ 0.5-95% He

### Approvals

TÜV  
+

### Chemical composition (w%) typical wire

Al	Mn	Si	Ti	Fe	Zn	Cu	Mg
bal.	0.01	4.7	0.001	0.3	0.002	0.01	0.004

### Mechanical properties, typical, all weld metal

	Shielding gas	Condition	0.2% Proof strength (N/mm <sup>2</sup> )	Tensile strength (N/mm <sup>2</sup> )	Elongation (%)	Impact ISO-V(J)	
						+20°C	-60°C
Typical values	I1	AW	100	160	15	20	20

### Physical properties

Melting range 573 - 625°C  
Density approximately 2680 kg/m<sup>3</sup>

### Materials to be welded

Aluminium grades	Standard	Type	W. Nr	Int.Reg.Nr.	Int.Cast.Nr.
Aluminium cast alloys	DIN 1725-1	Al Mg Si 0.5	3.3206	6060	
		Al Mg Si 0.7	3.3210	6005A	
		Al Mg Si 0.8	3.2316	6181	
Aluminium cast alloys	DIN 1725-2	G-Al Si 5			443.0

### Packaging and available sizes

Unit type	Diameter (mm)				
	0.8	1.0	1.2	1.6	2.4
7 kg spool B300	X	X	X	X	X
Other sizes and packaging on request					

LNМ AISi5: rev. EN 21

**Liability:** All information in this data sheet is based on the best available knowledge, is subject to change without notice and can only be considered as suitable for general guidance **Fumes:** Consult information on Welding Safety Sheet, available upon request



## Aluminium rod

### Classification

AWS A5.10 : ER4043  
 ISO 18273 : S Al 4043A (AlSi5(Al))

### General description

Solid rod for welding of aluminium-silicium alloys

### Shielding gases (acc. ISO 14175)

I1 Inert gas Ar (100%)

### Approvals

TÜV

+

### Chemical composition (w%), Typical, rod

Al	Mn	Si	Ti	Fe	Zn
bal.	0.05	5.0	0.15	0.4	0.10

### Mechanical properties, typical, all weld metal

	Shielding gas	Condition	0.2% Proof strength (N/mm <sup>2</sup> )	Tensile strength (N/mm <sup>2</sup> )	Elongation (%)	Impact ISO-V(J)	
						+20°C	-60°C
Typical values	I1	AW	100	160	15	20	20

### Physical properties

Melting range 573 - 625°C  
 Density approximately 2680 kg/m<sup>3</sup>

### Materials to be welded

Aluminium grades	Standard	Type	W. Nr	Int.Reg.Nr.	Int.Cast.Nr.
Aluminium cast alloys	DIN 1725-1	Al Mg Si 0.5	3.3206	6060	
		Al Mg Si 0.7	3.3210	6005A	
		Al Mg Si 0.8	3.2316	6181	
Aluminium cast alloys	DIN 1725-2	G-Al Si 5			443.0

### Packaging and available sizes

Unit type	Diameter (mm)				
	1.6	2.0	2.4	3.2	4.0
5 kg tube	X	X	X	X	X
Other sizes and packaging on request					

LNT AISi5: rev. EN 21

**Liability:** All information in this data sheet is based on the best available knowledge, is subject to change without notice and can only be considered as suitable for general guidance **Fumes:** Consult information on Welding Safety Sheet, available upon request

## Aluminium wire

### Classification

AWS A5.10 : ER4047  
ISO 18273 : S Al 4047A (AlSi12 (A))

### General description

Solid wire for welding of cast aluminium alloys containing up to 12% Si

### Shielding gases (acc. ISO 14175)

I1 Inert gas Ar (100%)  
I3 Inert gas Ar+ 0.5-95% He

### Chemical composition (w%) typical wire

Al	Mn	Si	Ti	Fe	Zn	Cu
bal.	0.01	11.4	0.01	0.4	0.01	0.04

### Mechanical properties, typical, all weld metal

	Shielding gas	Condition	0.2% Proof strength (N/mm <sup>2</sup> )	Tensile strength (N/mm <sup>2</sup> )	Elongation (%)
Typical values	I1	AW	80	180	6

### Physical properties

Melting range 573 - 585°C  
Density approximately 2650 kg/m<sup>3</sup>

### Materials to be welded

Aluminium grades	Standard	Type	W. Nr	Int.Cast.Nr.
Aluminium cast alloys	DIN 1725-2	G-Al Si 12	3.3581	A 413.0
		G-Al Si 12 (Cu)	3.3583	
		G-Al Si 11		
		G-Al Si 10 Mg	3.2381	361.0
		G-Al Si 10 Mg (Cu)	3.2383	
		G-Al Si 9 Mg	3.2373	359.0
		G-Al Si 9 Cu 3	3.2161	
		G-Al Si 7 Mg	3.2371	356.0
		G-Al Si 6 Cu 4	3.2151	319.0

### Packaging and available sizes

Unit type	Diameter (mm)		
	1.0	1.2	1.6
7 kg spool B300	X	X	X
Other sizes and packaging on request			

LNM AISi12: rev. EN 21

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## Aluminium rod

### Classification

AWS A5.10 : ER4047  
ISO 18273 : S Al 4047A (AlSi12 (A))

### General description

Solid rod for welding of cast aluminium alloys containing up to 12% Si

### Shielding gases (acc. ISO 14175)

I1 Inert gas Ar (100%)  
I3 Inert gas Ar+ 0.5-95% He

### Chemical composition (w%), Typical, rod

Al	Si	Fe	Zn	Mg
bal.	12.0	0.5	0.10	0.10

### Mechanical properties, typical, all weld metal

	Shielding gas	Condition	0.2% Proof strength (N/mm <sup>2</sup> )	Tensile strength (N/mm <sup>2</sup> )	Elongation (%)
Typical values	I1	AW	80	180	5

### Physical properties

Melting range 573 - 585°C  
Density approximately 2650 kg/m<sup>3</sup>

### Materials to be welded

Aluminium grades	Standard	Type	W. Nr	Int.Cast.Nr.
Aluminium cast alloys	DIN 1725-2	G-Al Si 12	3.3581	A 413.0
		G-Al Si 12 (Cu)	3.3583	
		G-Al Si 11		
		G-Al Si 10 Mg	3.2381	361.0
		G-Al Si 10 Mg (Cu)	3.2383	
		G-Al Si 9 Mg	3.2373	359.0
		G-Al Si 9 Cu 3	3.2161	
		G-Al Si 7 Mg	3.2371	356.0
		G-Al Si 6 Cu 4	3.2151	319.0

### Packaging and available sizes

Unit type	Diameter (mm)			
	2.0	2.4	3.2	4.0
5 kg tube	X	X	X	X

Other sizes and packaging on request

LNT AISi12: rev. EN 21

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