

## Ni-base solid wire

### Classification

AWS A5.9 : ER383  
ISO 14343-A : G 27 31 4 Cu L

### General description

**Solid wire for welding of Cu-alloyed NiCrMo-steels**  
Excellent resistance to general corrosion, pitting and stress corrosion in acid and alkaline environments  
Especially for applications in phosphoric and sulphuric acid

### Shielding gases (acc. ISO 14175)

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

### Chemical composition (w%) typical wire

C	Mn	Si	Ni	Cr	Mo	Cu
0.01	1.5	0.2	31.0	27.0	3.5	1.0

### 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	400	610	35	100	50

### Materials to be welded

Steel grades	EN 10088-1/2	Mat. Nr	ASTM/ACI	UNS
<b>Copper alloyed CrNiMo and NiCrMo-steels</b>				
	X1NiCrMoCu 31-27-4	1.4563		N08028
	X1NiCrMoCu 25-20-5 DIN 17744	1.4539	Alloy 904L	N08904
	NiCr 21 Mo	2.4858	Alloy 825	N08825
	NiCr 21 Mo 6Cu	2.6410	Alloy 825 h Mo	N08821
	X3NiCrCuMoTi 27-23	1.4503		

### Packaging and available sizes

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

LNM NiCro 31/27: rev. EN 22

**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 NiCro 31/27

## Ni-base solid rod

### Classification

AWS A5.9 : ER383  
ISO 14343-A : W 27 31 4 Cu L

### General description

Solid rod for welding of Cu-alloyed NiCrMo-steels  
Excellent resistance to general corrosion, pitting and stress corrosion in acid and alkaline environments  
Especially for applications in phosphoric and sulphuric acid

### Shielding gases (acc. ISO 14175)

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

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

C	Mn	Si	Ni	Cr	Mo	Cu
0.01	1.5	0.2	31.0	27.0	3.5	1.0

### 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	400	600	35	120	80

### Materials to be welded

Steel grades	EN 10088-1/2	Mat. Nr	ASTM/ACI	UNS
<b>Copper alloyed CrNiMo and NiCrMo-steels</b>				
	X1NiCrMoCu 31-27-4	1.4563		N08028
	X1NiCrMoCu 25-20-5 DIN 17744	1.4539	Alloy 904L	N08904
	NiCr 21 Mo	2.4858	Alloy 825	N08825
	NiCr 21 Mo 6Cu	2.6410	Alloy 825 h Mo	N08821
	X3NiCrCuMoTi 27-23	1.4503		

### Packaging and available sizes

Unit type	Diameter (mm)	
	2.0	2.4
2 kg tube	X	X

Other sizes and packaging on request

LNT NiCro 31/27: rev. EN 21

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## Ni-base solid wire

### Classification

AWS A5.14/A5.14M : ERNiCrMo-3  
ISO 18274 : S Ni 6625 (NiCr22Mo9Nb)

### General description

**Solid wire for welding of nickel alloys**  
**Extreme resistance to various corrosion forms**  
**High chromium and molybdenum content**

### Shielding gases (acc. ISO 14175)

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

### Chemical composition (w%) typical wire

C	Mn	Si	Ni	Cr	Mo	Nb	Fe
0.02	0.06	0.07	64	21.9	9	3.5	0.4

### 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	520	770	34	80	60

### Materials to be welded

Ni-alloy grades	DIN/EN	Mat. Nr	ASTM/ACI	UNS
<b>NiCrMo-steel type alloy 625 and welding dissimilar high NiCrMo-steels for corrosion and heat resisting purposes</b>				
	X1NiCrMoCuN25-20-6	1.4529	Alloy 925	N08925
	X1NiCrMoCu25-20-5	1.4539	Alloy 904L	N08904
	X1CrNiMoCuN20-18-7	1.4547	Alloy 254	S31254
	X2NiCrAlTi32-20	1.4558	Alloy 800L	N08800
	G-X10NiCrNb32-20	1.4859		
	X10NiCrAlTi32-20	1.4876	Alloy 800/800H	N08800/-10
	NiCr22Mo6Cu	2.4618	Alloy G	N06007
	NiCr22Mo7Cu	2.4619	Alloy G-3	N06985
	NiCr21Mo6Cu	2.4641	Alloy 825hMo	N08821
	NiCr20CuMo	2.4660	Alloy 20	N08020
	NiCr15Fe	2.4816	B168-Alloy 600	N06600
	NiCr22Mo9Nb	2.4856	B443-Alloy 625	N06625
	NiCr21Mo	2.4858	B424-Alloy 825	N08825
	NiCr20Ti	2.4951	Alloy 75	N06075
	NiCr20TiAl	2.4952	Alloy 80A	N07080
<b>Low alloyed steels</b>				
	10Ni14 (3.5% Ni)	1.5637	ASTM A333 Grade 3	-
	12Ni19, X12Ni5	1.5680	-	K41583
<b>9% Ni-steel for LNG storage tanks</b>				
	X8Ni9	1.5662	A353/A353M	-
	X8Ni9 / 8%Ni	1.5662	A553/A553M Type I/II	- / K71340

### Packaging and available sizes

Unit type	Diameter (mm)		
	0.8	1.0	1.2
5 kg plastic spool S200		X	
15 kg spool BS300	X	X	X
Other sizes and packaging on request			

LNM NiCro 60/20: rev. EN 21

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# LNT NiCro 60/20

## Ni-base solid rod

### Classification

AWS A5.14/A5.14M : ERNiCrMo-3  
ISO 18274 : S Ni 6625 (NiCr22Mo9Nb)

### General description

**Solid rod for welding of nickel alloys**  
**Extreme resistance to various corrosion forms**  
**High chromium and molybdenum content**

### 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

C	Mn	Si	Ni	Cr	Mo	Nb	Fe
0.03	0.1	0.1	bal.	22	9	3.5	0.4

### 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	520	800	35	130	100

### Materials to be welded

Ni-alloy grades	DIN/EN	Mat. Nr	ASTM/ACI	UNS
<b>NiCrMo-steel type alloy 625 and welding dissimilar high NiCrMo-steels for corrosion and heat resisting purposes</b>				
	X1NiCrMoCuN25-20-6	1.4529	Alloy 925	N08925
	X1NiCrMoCu25-20-5	1.4539	Alloy 904L	N08904
	X1CrNiMoCuN20-18-7	1.4547	Alloy 254	S31254
	X2NiCrAlTi32-20	1.4558	Alloy 800L	N08800
	G-X10NiCrNb32-20	1.4859		
	X10NiCrAlTi32-20	1.4876	Alloy 800/800H	N08800/-10
	NiCr22Mo6Cu	2.4618	Alloy G	N06007
	NiCr22Mo7Cu	2.4619	Alloy G-3	N06985
	NiCr21Mo6Cu	2.4641	Alloy 825hMo	N08821
	NiCr20CuMo	2.4660	Alloy 20	N08020
	NiCr15Fe	2.4816	B168-Alloy 600	N06600
	NiCr22Mo9Nb	2.4856	B443-Alloy 625	N06625
	NiCr21Mo	2.4858	B424-Alloy 825	N08825
	NiCr20Ti	2.4951	Alloy 75	N06075
	NiCr20TiAl	2.4952	Alloy 80A	N07080
<b>Low alloyed steels</b>				
	10Ni14 (3.5% Ni)	1.5637	ASTM A333 Grade 3	-
	12Ni19, X12Ni5	1.5680	-	K41583
<b>9% Ni-steel for LNG storage tanks</b>				
	X8Ni9	1.5662	A353/A353M	-
	X8Ni9 / 8%Ni	1.5662	A553/A553M Type I/II	- / K71340

### Packaging and available sizes

Unit type	Diameter (mm)			
	1.6	2.0	2.4	3.2
2 and 10 kg tube	X	X	X	X
Other sizes and packaging on request				

LNT NiCro 60/20: rev. EN 21

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## Ni-base solid wire

### Classification

AWS A5.14/A5.14M : ERNiCr-3  
ISO 18274 : S Ni 6082 (NiCr20Mn3Nb)

### General description

**Solid wire for welding nickel based alloys, dissimilar metals and cladding**  
**High resistance to oxidation and high impact toughness at low temperature**

### 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

C	Mn	Si	Ni	Cr	Nb	Fe	Cu
0.03	3.1	0.08	72.5	20.5	2.6	0.8	0.01

### Mechanical properties, typical, all weld metal

	Shielding gas	Condition	Yield 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	390	640	35	150	50

### Materials to be welded

Ni-alloy grades	BS3076	DIN 17744/17465 SEW 595	Mat. Nr	ASTM/ACI B366	UNS
<b>Ni-base high Cr alloyed steel for low and high corrosion searching application</b>					
Na 14		NiCr15Fe	2.4816	B168-Alloy 600	N06600
		LC-NiCr15Fe	2.4817	Alloy 600L	N06600
		NiCr20Ti	2.4951	Alloy 75	
		NiCr20TiA1	2.4952	Alloy 80A	N07080
Na 15		X10NiCrAlTi32 20	1.4876	Alloy 800/800H	N0800/10
		NiCr23Fe	2.4851	Alloy 601(H)	N06601
Na 17		X12NiCrSi36 16	1.4864	330	N08330
		G-X40NiCrNb35 25	1.4852		
		G-X40NiCrSi35 25	1.4857	HP	

Un- and low alloyed heat and creep resistant steel to stainless steel

### Application advice

Limit heat-input (HI<1.5kJ/mm) and interpass temperature (Ti<150°C)

### Packaging and available sizes

Unit type	Diameter (mm)	
	1.0	1.2
15 kg spool BS300	X	X
Other sizes and packaging on request		

LNM NiCrO 70/19: rev. EN 21

## Ni-base solid rod

### Classification

AWS A5.14/A5.14M : ERNiCr-3  
ISO 18274 : S Ni 6082 (NiCr20Mn3Nb)

### General description

**Solid rod for welding nickel based alloys, dissimilar metals and cladding**  
**High resistance to oxidation and high impact toughness at low temperature**

### 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

C	Mn	Si	Ni	Cr	Nb	Fe	Cu
0.03	3.0	0.2	bal.	20	2.5	1.0	0.1

### Mechanical properties, typical, all weld metal

	Shielding gas	Condition	Yield 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	400	680	40	150	120

### Materials to be welded

Ni-alloy grades	BS3076	DIN 17744/17465 SEW 595	Mat. Nr	ASTM/ACI B366	UNS
<b>Ni-base high Cr alloyed steel for low and high corrosion searching application</b>					
	Na 14	NiCr15Fe	2.4816	B168-Alloy 600	N06600
		LC-NiCr15Fe	2.4817	Alloy 600L	N06600
		NiCr20Ti	2.4951	Alloy 75	
		NiCr20TiA1	2.4952	Alloy 80A	N07080
	Na 15	X10NiCrAlTi32 20	1.4876	Alloy 800/800H	N0800/10
		NiCr23Fe	2.4851	Alloy 601(H)	N06601
	Na 17	X12NiCrSi36 16	1.4864	330	N08330
		G-X40NiCrNb35 25	1.4852		
		G-X40NiCrSi35 25	1.4857	HP	

Un- and low alloyed heat and creep resistant steel to stainless steel

### Application advice

Limit heat-input (HI<1.5kJ/mm) and interpass temperature (Ti<150°C)

### Packaging and available sizes

Unit type	Diameter (mm)		
	2.0	2.4	3.2
2 and 10 kg tube	X	X	X
Other sizes and packaging on request			

LNT NiCrO 70/19: rev. EN 21

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# LNT NiCrMo 59/23

## Ni-base solid rod

### Classification

AWS A5.14/A5.14M : ERNiCrMo-13  
ISO 18274 : S Ni 6059 (NiCr23Mo16)

### General description

Solid rod for welding nickel base alloys with high CrMo content  
Excellent resistance against pitting, stress, and crevice corrosion in acid sulfur phosphorus and chlorine surroundings  
Suitable for dissimilar joints

### 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

C	Mn	Si	Ni	Cr	Mo	Fe	Al
0.015	0.5	0.06	59	23	16	1.5	0.4

### 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	400	720	30

### Materials to be welded

Ni-alloy grades	DIN 17744	Mat. Nr	ASTM / ACI	UNS
<b>Ni-base high CrMo steel</b>				
	NiCr23Mo16	2.4605		N06059
	NiMo16Cr16Ti	2.4610	C-4	N06455
	NiMo16Cr15Ti	2.4819	C-276	N10276
	NiCr21Mo 14W	2.4602	C-22	N06022
	NiCr22Mo 9Nb	2.4856	625	N06625
<b>High Mo stainless steel for high corrosion environments</b>				
	EN 10088-1/-2			
	X1 NiCrMoCuN25-20-7	1.4529	904hMo	N08925
	X1 CrNiMoCuN20-18-7	1.4547		S31254

### Packaging and available sizes

Unit type	Diameter (mm)
	2.0
2 kg tube	X
Other sizes and packaging on request	

LNT NiCrMo 59/23: rev. EN 21

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# LNM NiCrMo 60/16

## Ni-base solid wire

### Classification

AWS A5.14/A5.14M : ERNiCrMo-4  
ISO 18274 : S Ni 6276 (NiCr15Mo16Fe6W4)

### General description

**Solid wire for welding CrMoW-alloyed nickel alloys (e.g. Alloy C276)**  
**Depending on the corrosion requirements also applicable for welding C-22 and C-4**  
**Extreme resistance to corrosion environments containing sulphuric acid and chlorides**  
**Applicable for surfacing in high temperature applications (up to 1200°C)**

### Shielding gases (acc. ISO 14175)

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

### Chemical composition (w%) typical wire

C	Mn	Si	Ni	Cr	Mo	W	Fe
0.006	0.5	0.04	57.8	16	16.0	3.6	5.8

### Mechanical properties, typical, all weld metal

	Shielding gas	Condition	Yield Strength (N/mm <sup>2</sup> )	Tensile Strength (N/mm <sup>2</sup> )	Elongation (%)	Impact ISO-V(J) +20 °C
Typical values	I1	AW	400	700	25	90

### Materials to be welded

Ni-alloy grades	DIN/EN	Mat. Nr.	ASTM/ACI	UNS
<b>Ni Base high CrMo steel for high corrosion environments</b>				
	NiMo 16Cr15W	2.4819	C-276	N10276
	NiCr21Mo14W	2.4602	C-22	N06022
	NiMo 16Cr16Ti	2.4610	C-4	N06455

- LNT/LNM NiCrMo 60/16 is developed for welding C-276 material
- Can also be applied for welding C-22 and C-4, depending on the corrosion requirements

### Packaging and available sizes

Unit type	Diameter (mm)	
	1.0	1.2
15 kg spool B300	X	X

LNM NiCrMo 60/16: rev. EN 21

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# LNT NiCrMo 60/16

## Ni-base solid rod

### Classification

AWS A5.14/A5.14M : ERNiCrMo-4  
ISO 18274 : S Ni 6276 (NiCr15Mo16Fe6W4)

### General description

Solid rod for welding CrMoW-alloyed nickel alloys (e.g. Alloy C276)  
Depending on the corrosion requirements also applicable for welding C-22 and C-4  
Extreme resistance to corrosion environments containing sulphuric acid and chlorides  
Applicable for surfacing in high temperature applications (up to 1200°C)

### Shielding gases (acc. ISO 14175)

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

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

C	Mn	Si	Ni	Cr	Mo	W	Fe
0.006	0.5	0.04	57.8	16	16	3.6	5.8

### Mechanical properties, typical, all weld metal

	Shielding gas	Condition	Yield Strength (N/mm <sup>2</sup> )	Tensile Strength (N/mm <sup>2</sup> )	Elongation (%)	Impact ISO-V(J) +20 °C
Typical values	I1	AW	410	720	27	100

### Materials to be welded

Ni-alloy grades	DIN/EN	Mat. Nr.	ASTM/ACI	UNS
<b>Ni Base high CrMo steel for high corrosion environments</b>				
	NiMo 16Cr15W	2.4819	C-276	N10276
	NiCr21Mo14W	2.4602	C-22	N06022
	NiMo 16Cr16Ti	2.4610	C-4	N06455

- LNT/LNM NiCrMo 60/16 is developed for welding C-276 material
- Can also be applied for welding C-22 and C-4, depending on the corrosion requirements

### Packaging and available sizes

Unit type	Diameter (mm)			
	1.6	2.0	2.4	3.2
2 kg tube	X	X	X	X

LNT NiCrMo 60/16: rev. EN 21

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# LNM NiCu 70/30

## Ni-base solid wire

### Classification

AWS A5.14/A5.14M : ERNiCu-7  
ISO 18274 : S Ni 4060 (NiCu30MnTi)

### General description

Solid wire for welding Monel and NiCu-alloys to mild and low-alloyed steels  
Can be used as well for welding mild and low alloyed steels to NiCu alloys  
High resistance to seawater corrosion

### 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

C	Mn	Si	Ni	Cu	Fe	Ti
0.10	3.3	0.6	64	29	1.5	2.4

### Mechanical properties, typical, all weld metal

	Shielding gas	Condition	Yield 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	300	500	35	150	60

### Materials to be welded

Ni-alloy grades	BS3076	DIN 17743	Mat. Nr	ASTM/ACI	UNS
	NA 13	NiCu30Fe	2.4360	Monel 400	N04400
		G-NiCu30Nb	2.4365		
	NA 18	NiCu30Al	2.4375	Monel K500	N05500

### Packaging and available sizes

Unit type	Diameter (mm)	
	1.0	1.2
15 kg spool BS300	X	X
Other sizes and packaging on request		

LNM NiCu 70/30: rev. EN 22

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## Ni-base solid rod

### Classification

AWS A5.14/A5.14M : ERNiCu-7  
ISO 18274 : S Ni 4060 (NiCu30MnTi)

### General description

Solid rod for welding Monel and NiCu-alloys to mild and low-alloyed steels  
Can be used as well for welding mild and low alloyed steels to NiCu alloys  
High resistance to seawater corrosion

### 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

C	Mn	Si	Ni	Cu	Fe	Ti
0.06	3.5	0.5	65	30	1.1	2.0

### Mechanical properties, typical, all weld metal

	Shielding gas	Condition	Yield 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	350	550	40	160	140

### Materials to be welded

Ni-alloy grades	BS3076	DIN 17743	Mat. Nr	ASTM/ACI	UNS
	NA 13	NiCu30Fe	2.4360	Monel 400	N04400
		G-NiCu30Nb	2.4365		
	NA 18	NiCu30Al	2.4375	Monel K500	N05500

### Packaging and available sizes

Unit type	Diameter (mm)			
	1.6	2.0	2.4	3.2
2 and 10 kg tube	X	X	X	X
Other sizes and packaging on request				

LNT NiCu 70/30: rev. EN 22

**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

## Ni-base solid wire

### Classification

AWS A5.14/A5.14M : ERNi1  
 ISO 18274 : S Ni 2061 (NiTi3)

### General description

Solid wire for welding pure nickel and nickel alloys and joining these materials with unalloyed/low-alloyed steel  
 Suitable for surfacing carbon steels

### 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

C	Mn	Si	Ni	Ti	Fe
0.02	0.4	0.2	bal.	3.1	0.06

### 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	250	460	30	120

### Materials to be welded

DIN-classification	Mat. Nr	ASTM/ACI
Ni 99.6	2.4060	
Ni 99.8	2.4050	
Ni 99.6Si	2.4056	
Ni 99.4Fe	2.4062	
Ni 99.2	2.4066	Alloy 200
LC-Ni 99	2.4068	Alloy 201
LC-Ni 99.6	2.4061	Alloy 205
NiMn 10	2.4108	
NiMn 5	2.4116	

### Packaging and available sizes

Unit type	Diameter (mm)
	1.2
15 kg spool BS300	X
Other sizes and packaging on request	

LNМ NiTi: rev. EN 21

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## Ni-base solid rod

### Classification

AWS A5.14/A5.14M : ERNi1  
 ISO 18274 : S Ni 2061 (NiTi3)

### General description

Solid rod for welding pure nickel and nickel alloys and joining these materials with unalloyed/low-alloyed steel  
 Suitable for surfacing carbon steels

### Shielding gases (acc. ISO 14175)

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

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

C	Mn	Si	Ni	Ti	Fe
0.03	0.5	0.4	bal.	2.8	0.06

### 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	250	460	30	120

### Materials to be welded

DIN-classification	Mat. Nr	ASTM/ACI
Ni 99.6	2.4060	
Ni 99.8	2.4050	
Ni 99.6Si	2.4056	
Ni 99.4Fe	2.4062	
Ni 99.2	2.4066	Alloy 200
LC-Ni 99	2.4068	Alloy 201
LC-Ni 99.6	2.4061	Alloy 205
NiMn 10	2.4108	
NiMn 5	2.4116	

### Packaging and available sizes

Unit type	Diameter (mm)	
	2.0	2.4
2 and 10 kg tube	X	X
Other sizes and packaging on request		

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## Ni-base solid wire

### Classification

AWS A5.15 : ENiFe-CI  
ISO 1071 : S NiFe-CI

### General description

Solid wire for butt welds and hardfacing application in cast iron  
Suitable for dissimilar joints cast iron/steel  
Hardness approximately 200HB  
Optimal welding characteristics

### Shielding gases (acc. ISO 14175)

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

### Chemical composition (w%) typical wire

C	Mn	Si	Ni	Fe	Cu
0.05	0.83	0.14	54.8	bal.	0.4

### Mechanical properties, typical, all weld metal

	Typical hardness values
2 Layers, AW	approx. 200 HB

### Packaging and available sizes

Unit type	Diameter (mm)
	1.2
15 kg spool BS300	X
Other sizes and packaging on request	

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