GTAW CONSUMABLES

TIG RODS

GTAW
CONSUMABLES
TIG RODS

LNT 24

TOP FEATURES
- Stable Arc
- Smooth bead appearance

TYPICAL APPLICATIONS
- Galvanized Steels
- General Construction

CLASSIFICATION
AWS A5.18 ER70S-2

SHIELDING GASES (ACC. EN ISO 14175)
I1 Inert gas Ar (100%)

APPROVALS

CE
+

CHEMICAL COMPOSITION (WEIGHT %), TYPICAL

C	Mn	Si	Ti	Zr	Al
0.05	1.20	0.5	0.10	0.05	0.08

MECHANICAL PROPERTIES, TYPICAL, ALL WELD METAL

	Shielding gas	Yield strength (MPa)	Tensile strength (MPa)	Elongation (%)	Impact ISO-V (J)	
					-20°C	-30°C
Typical values	I1	550	620	23	≥ 47J	≥ 27J

PACKAGING AND AVAILABLE SIZES

Diameter x Length (mm)	Packaging	Weight (kg)	Item number
2.4	PE Tube	5.0	580210

LNT 25

TOP FEATURES

- Excellent mechanical and toughness properties for low temperature applications, down to -40°C.
- Stable Arc
- Good feedability

TYPICAL APPLICATIONS

- General fabrication
- Thermal Power

CLASSIFICATION

AWS A5.18	ER70S-3
EN ISO 636-A	W 42 5 2Si

SHIELDING GASES (ACC. EN ISO 14175)

I1	Inert gas Ar (100%)

APPROVALS

TÜV	DB	CE
+	+	+

CHEMICAL COMPOSITION (WEIGHT %), TYPICAL

C	Mn	Si
0.08	1.1	0.6

MECHANICAL PROPERTIES, TYPICAL, ALL WELD METAL

	Shielding gas	Condition*	Yield strength (MPa)	Tensile strength (MPa)	Elongation (%)	Impact ISO-V (J)	
						-20°C	-50°C
Typical values	I1	AW	450	560	26	170	100

* AW = As welded

PACKAGING AND AVAILABLE SIZES

Diameter x Length (mm)	Packaging	Weight (kg)	Item number
1.6	PE Tube	5.0	T16T005R1S00
2.0	PE Tube	5.0	T20T005R1S00
2.4	PE Tube	5.0	T24T005R1S00
3.0	PE Tube	5.0	T30T005R1S00
3.2	PE Tube	5.0	T32T005R1S00

LNT 26

TOP FEATURES

- Excellent mechanical and toughness properties for low temperature applications, down to -50°C.
- Smooth bead appearance

TYPICAL APPLICATIONS

- General Constructions

CLASSIFICATION

AWS A5.18	ER70S-6
EN ISO 636-A	W 42 5 3Si1

SHIELDING GASES (ACC. EN ISO 14175)

I1	Inert gas Ar (100%)

APPROVALS

TÜV	DB	CE
+	+	+

CHEMICAL COMPOSITION (WEIGHT %), TYPICAL

C	Mn	Si
0.1	1.5	0.9

MECHANICAL PROPERTIES, TYPICAL, ALL WELD METAL

	Shielding gas	Condition*	Yield strength (MPa)	Tensile strength (MPa)	Elongation (%)	Impact ISO-V (J)		
						-20°C	-30°C	-50°C
Typical values	I1	AW	460	580	26	170	170	120

* AW = As welded

PACKAGING AND AVAILABLE SIZES

Diameter x Length (mm)	Packaging	Weight (kg)	Item number
1.6	PE Tube	5.0	T16T005R6S00
2.0	PE Tube	5.0	T20T005R6S00
2.4	PE Tube	5.0	T24T005R6S00
3.2	PE Tube	5.0	T32T005R6S00

LNT 27

TOP FEATURES

- Excellent mechanical and toughness properties for low temperature applications, down to -50°C.
- Smooth bead appearance

TYPICAL APPLICATIONS

- General Constructions

CLASSIFICATION

AWS A5.18	ER70S-6
EN ISO 636-A	W 46 5 4Si1

SHIELDING GASES (ACC. EN ISO 14175)

I1	Inert gas Ar (100%)

APPROVALS

TÜV
+

CHEMICAL COMPOSITION (WEIGHT %), TYPICAL

C	Mn	Si
0.1	1.5	0.9

MECHANICAL PROPERTIES, TYPICAL, ALL WELD METAL

	Shielding gas	Condition*	Yield strength (MPa)	Tensile strength (MPa)	Elongation (%)	Impact ISO-V (J)		
						-20°C	-30°C	-50°C
Typical values	I1	AW	460	580	26	170	170	120

* AW = As welded

PACKAGING AND AVAILABLE SIZES

Diameter x Length (mm)	Packaging	Weight (kg)	Item number
1.6	PE Tube	5.0	T16T005R3S00
2.0	PE Tube	5.0	T20T005R3S00
2.4	PE Tube	5.0	T24T005R3S00
3.2	PE Tube	5.0	T32T005R3S00

LNT 12

TOP FEATURES

- Used for welding low alloy creep resistant ferritic steels and fine grained steels
- Ideal for low temperature applications in the as welded condition with service temperatures in range -20°C to +500°C

TYPICAL APPLICATIONS

- Chemical
- Petrochemical
- Oil & Gas
- Thermal Power

CLASSIFICATION

AWS A5.28	ER70S-A1
EN ISO 636-A	W 46 3 2Mo
EN ISO 21952-A	W MoSi

SHIELDING GASES (ACC. EN ISO 14175)

I1	Inert gas Ar (100%)

APPROVALS

DNV	TÜV	DB	CE
+	+	+	+

CHEMICAL COMPOSITION (WEIGHT %), TYPICAL

C	Mn	Si	Mo
0.1	1.2	0.6	0.5

MECHANICAL PROPERTIES, TYPICAL, ALL WELD METAL

	Shielding gas	Condition*	Yield strength (MPa)	Tensile strength (MPa)	Elongation (%)	Impact ISO-V (J)	
						+20°C	-20°C
Typical values	I1	AW	635	670	22	170	110

* AW = As welded

PACKAGING AND AVAILABLE SIZES

Diameter x Length (mm)	Packaging	Weight (kg)	Item number
1.6	PE Tube	5.0	604245
2.0	PE Tube	5.0	604269
2.4	PE Tube	5.0	604283
3.0	PE Tube	5.0	604306

LNT 19

TOP FEATURES

- Excellent mechanical characteristics.
- Also suitable where some resistance to hydrogen attack by sulphur bearing crude oil is required

TYPICAL APPLICATIONS

- Oil & Gas
- Thermal Power
- Pressure vessels
- Chemical
- Boilers, plates, tubes steels

CLASSIFICATION

AWS A5.28	ER80S-G*
EN ISO 21952-A	W CrMo1Si

* Nearest classification ER80S-B2

SHIELDING GASES (ACC. EN ISO 14175)

I1	Inert gas Ar (100%)

APPROVALS

TÜV	CE
+	+

CHEMICAL COMPOSITION (WEIGHT %), TYPICAL

C	Mn	Si	Cr	Mo
0.1	1.0	0.6	1.2	0.5

MECHANICAL PROPERTIES, TYPICAL, ALL WELD METAL

	Shielding gas	Condition*	Yield strength (MPa)	Tensile strength (MPa)	Elongation (%)	Impact ISO-V (J) +20°C
Typical values	I1	PWHT 700°C/1h	540	640	22	250

* PWHT = Post Weld Heat Treatment

PACKAGING AND AVAILABLE SIZES

Diameter x Length (mm)	Packaging	Weight (kg)	Item number
2.0	PE Tube	5.0	604344
2.4	PE Tube	5.0	604368
3.0	PE Tube	5.0	604382

LNT 20

TOP FEATURES

- Deposit insensitive to cracking.
- Also suitable for the welding of 1¼Cr½Mo steels where improved resistance to hydrogen attack or corrosion by sulphur is required.

TYPICAL APPLICATIONS

- Oil & Gas
- Thermal Power
- Pressure vessels
- Chemical
- Boilers, plates, tubes steels

CLASSIFICATION

AWS A5.28	ER90S-G*
EN ISO 21952-A	W CrMo2Si

* Nearest classification ER90S-B3

SHIELDING GASES (ACC. EN ISO 14175)

I1	Inert gas Ar (100%)

APPROVALS

TÜV	CE
+	+

CHEMICAL COMPOSITION (WEIGHT %), TYPICAL

C	Mn	Si	Cr	Mo
0.08	1.0	0.6	2.5	1.0

MECHANICAL PROPERTIES, TYPICAL, ALL WELD METAL

	Shielding gas	Condition*	Yield strength (MPa)	Tensile strength (MPa)	Elongation (%)	Impact ISO-V (J) +20°C
Typical values	I1	PWHT 700°C/1h	560	640	22	140

* PWHT = Post Weld Heat Treatment

PACKAGING AND AVAILABLE SIZES

Diameter x Length (mm)	Packaging	Weight (kg)	Item number
2.0	PE Tube	5.0	600247
2.4	PE Tube	5.0	605563

LNT 28

TOP FEATURES

- The addition of Ni and Cu to the weld metal provides increased resistance to atmospheric corrosion compared to conventional C-Mn steels
- Copper percentage help preventing further oxidation of the weld bead
- Excellent mechanical characteristics and resistance to corrosion.

CLASSIFICATION

AWS A5.28 ER80S-G

SHIELDING GASES (ACC. EN ISO 14175)

I1 Inert gas Ar (100%)

TYPICAL APPLICATIONS

- Infrastructures
- Weather Resisting Steels

APPROVALS

CE
+

CHEMICAL COMPOSITION (WEIGHT %), TYPICAL

C	Mn	Si	Ni	Cu
0.1	1.4	0.75	0.8	0.3

MECHANICAL PROPERTIES, TYPICAL, ALL WELD METAL

	Shielding gas	Condition*	Yield strength (MPa)	Tensile strength (MPa)	Elongation (%)	Impact ISO-V (J) -20°C
Typical values	I1	AW	570	620	26	80

* AW = As welded

PACKAGING AND AVAILABLE SIZES

Diameter x Length (mm)	Packaging	Weight (kg)	Item number
2.4	PE Tube	5.0	606324

LNT Ni1

TOP FEATURES

- The weld metal contains less than 1% Ni conforming to NACE requirements
- Ideal for low temperature applications.

TYPICAL APPLICATIONS

- Cryogenic Applications
- Pipelaying
- LNG

CLASSIFICATION

AWS A5.28	ER80S-Ni 1
EN ISO 636-A	W 42 6 3Ni1

SHIELDING GASES (ACC. EN ISO 14175)

I1	Inert gas Ar (100%)

APPROVALS

TÜV	CE
+	+

CHEMICAL COMPOSITION (WEIGHT %), TYPICAL

C	Mn	Si	Ni
0.1	1.2	0.6	0.9

MECHANICAL PROPERTIES, TYPICAL, ALL WELD METAL

	Shielding gas	Condition*	Yield strength (MPa)	Tensile strength (MPa)	Elongation (%)	Impact ISO-V (J) -60°C
Typical values	I1	AW	480	580	30	60

* AW = As welded

PACKAGING AND AVAILABLE SIZES

Diameter x Length (mm)	Packaging	Weight (kg)	Item number
1.6	PE Tube	5.0	600162
2.0	PE Tube	5.0	605112
2.4	PE Tube	5.0	605136
3.0	PE Tube	5.0	605235

LNT Ni2.5

TOP FEATURES

- Excellent mechanical characteristic both when welded and after stress relieving.
- High impact value at low temperature (-60°C as welded and -90°C after stress relieving 15h/580°C)
- Ideal for low temperature applications.

CLASSIFICATION

AWS A5.28	ER80S-Ni2
EN ISO 636-A	W 46 6 2Ni2

SHIELDING GASES (ACC. EN ISO 14175)

I1	Inert gas Ar (100%)

TYPICAL APPLICATIONS

- Cryogenic Applications
- Pipelaying
- LNG

APPROVALS

CE
+

CHEMICAL COMPOSITION (WEIGHT %), TYPICAL

C	Mn	Si	Ni
0.1	1.1	0.55	2.4

MECHANICAL PROPERTIES, TYPICAL, ALL WELD METAL

	Shielding gas	Condition*	Yield strength (MPa)	Tensile strength (MPa)	Elongation (%)	Impact ISO-V (J)	
						-62°C	-90°C
Typical values	I1	AW	525	605	28	280	133

* AW = As welded

PACKAGING AND AVAILABLE SIZES

Diameter x Length (mm)	Packaging	Weight (kg)	Item number
2.4	PE Tube	5.0	600223
3.0	PE Tube	5.0	605211

LNT 304L

TOP FEATURES

- The low carbon content reduces the propensity to intergranular carbide precipitation, which increases the resistance to intergranular corrosion without the use of stabilizers.
- The weld metal provides good corrosion resistance properties to intergranular attack from a range of liquid media at service temperatures up to 300 °C.
- Excellent mechanical strength and corrosion resistance.

CLASSIFICATION

AWS A5.9	ER308L
EN ISO 14343-A	W 19 9 L

SHIELDING GASES (ACC. EN ISO 14175)

I1	Inert gas Ar (100%)

TYPICAL APPLICATIONS

- Pipework
- Petrochemical
- Nuclear Power generation

APPROVALS

CE
+

CHEMICAL COMPOSITION (WEIGHT %), TYPICAL

C	Mn	Si	Cr	Ni	Mo
0.01	1.7	0.4	20	10	0.1

MECHANICAL PROPERTIES, TYPICAL, ALL WELD METAL

	Shielding gas	Condition*	0.2% Proof strength (MPa)	Tensile strength (MPa)	Elongation (%)	Impact ISO-V (J)	
						+20 °C	-196 °C
Typical values	I1	AW	472	692	34	120	91

* AW = As welded

PACKAGING AND AVAILABLE SIZES

Diameter x Length (mm)	Packaging	Weight (kg)	Item number
1.2	PE Tube	5.0	595460
1.6	PE Tube	5.0	595468
2.0	PE Tube	5.0	595470
2.4	PE Tube	5.0	595475
3.2	PE Tube	5.0	595482

LNT 304LSi

TOP FEATURES

- The low carbon content reduces the propensity to intergranular carbide precipitation, which increases the resistance to intergranular corrosion without the use of stabilizers.
- The increased silicon content results in increased weld pool fluidity to give a smooth deposit appearance.
- Better weldability and appearance

CLASSIFICATION

AWS A5.9	ER308LSi
EN ISO 14343-A	W 19 9 LSi

SHIELDING GASES (ACC. EN ISO 14175)

I1	Inert gas Ar (100%)

TYPICAL APPLICATIONS

- Pipework
- Plates fabrication
- Shipbuilding

APPROVALS

DNV	TÜV	DB	CE
+	+	+	+

CHEMICAL COMPOSITION (WEIGHT %), TYPICAL

C	Mn	Si	Cr	Ni	Mo
0.02	2.0	0.8	20	10	0.1

MECHANICAL PROPERTIES, TYPICAL, ALL WELD METAL

	Shielding gas	Condition*	0.2% Proof strength (MPa)	Tensile strength (MPa)	Elongation (%)	Impact ISO-V (J)	
						+20°C	-196°C
Typical values	I1	AW	467	622	37	147	67

* AW = As welded

PACKAGING AND AVAILABLE SIZES

Diameter x Length (mm)	Packaging	Weight (kg)	Item number
1.0	PE Tube	5.0	580174
1.2	PE Tube	5.0	580198
1.6	PE Tube	5.0	582512
2.0	PE Tube	5.0	582796
2.4	PE Tube	5.0	582802
3.2	PE Tube	5.0	583045

LNT 316L

TOP FEATURES

- The weld metal has a high resistance to crevice corrosion by oxidising acids.
- Excellent mechanical and chemical characteristics.
- Suitable for welding or hard-facing stainless steels with the same chemical composition

CLASSIFICATION

AWS A5.9	ER316L
EN ISO 14343-A	W 19 12 3 L

SHIELDING GASES (ACC. EN ISO 14175)

I1	Inert gas Ar (100%)

TYPICAL APPLICATIONS

- Pipework
- Petrochemical
- Nuclear Power generation

APPROVALS

CE
+

CHEMICAL COMPOSITION (WEIGHT %), TYPICAL

C	Mn	Si	Cr	Ni	Mo
0.01	1.5	0.5	18.5	12	2.7

MECHANICAL PROPERTIES, TYPICAL, ALL WELD METAL

	Shielding gas	Condition*	0.2% Proof strength (MPa)	Tensile strength (MPa)	Elongation (%)	Impact ISO-V (J)		
						+20°C	-120°C	-196°C
Typical values	I1	AW	400	620	35	100	80	40

* AW = As welded

PACKAGING AND AVAILABLE SIZES

Diameter x Length (mm)	Packaging	Weight (kg)	Item number
1.2	PE Tube	5.0	601020
1.6	PE Tube	5.0	582239
2.0	PE Tube	5.0	600807
2.4	PE Tube	5.0	582499
3.2	PE Tube	5.0	582437

LNT 316LSi

TOP FEATURES

- The higher Si level results in a smooth weld bead shape and even appearance with excellent toe blending particularly in fillet welds.
- The weld metal has a high resistance to pitting and crevice corrosion by non-oxidising acids.
- Used for applications with service temperatures <400°C.

CLASSIFICATION

AWS A5.9	ER316LSi
EN ISO 14343-A	W 19 12 3 LSi

SHIELDING GASES (ACC. EN ISO 14175)

I1	Inert gas Ar (100%)

TYPICAL APPLICATIONS

- Pipework
- Plates fabrication
- Shipbuilding

APPROVALS

DNV	TÜV	DB	CE
+	+	+	+

CHEMICAL COMPOSITION (WEIGHT %), TYPICAL

C	Mn	Si	Cr	Ni	Mo
0.03	1.9	0.8	18.5	12.0	2.7

MECHANICAL PROPERTIES, TYPICAL, ALL WELD METAL

	Shielding gas	Condition*	0.2% Proof strength (MPa)	Tensile strength (MPa)	Elongation (%)	Impact ISO-V (J)	
						+20°C	-196°C
Typical values	I1	AW	484	624	32	100	82

* AW = As welded

PACKAGING AND AVAILABLE SIZES

Diameter x Length (mm)	Packaging	Weight (kg)	Item number
1.0	PE Tube	5.0	580259
1.2	PE Tube	5.0	580235
1.6	PE Tube	5.0	583915
2.0	PE Tube	5.0	583922
2.4	PE Tube	5.0	582819
3.2	PE Tube	5.0	583571

LNT 309L

TOP FEATURES

- The weld metal has a delta-ferrite content of ~12% resulting in a high resistance to hot cracking.
- Also used for the welding of clad steels where service temperatures are below 300 °C.
- 300 °C maximum operating temperature.

CLASSIFICATION

AWS A5.9	ER309L
EN ISO 14343-A	W 23 12 L

SHIELDING GASES (ACC. EN ISO 14175)

I1	Inert gas Ar (100%)

TYPICAL APPLICATIONS

- Pipework
- Petrochemical
- Nuclear Power generation

APPROVALS

CE
+

CHEMICAL COMPOSITION (WEIGHT %), TYPICAL

C	Mn	Si	Cr	Ni	Mo
0.01	1.65	0.5	24	13	0.1

MECHANICAL PROPERTIES, TYPICAL, ALL WELD METAL

	Shielding gas	Condition*	0.2% Proof strength (MPa)	Tensile strength (MPa)	Elongation (%)
Typical values	I1	AW	390	600	35

* AW = As welded

PACKAGING AND AVAILABLE SIZES

Diameter x Length (mm)	Packaging	Weight (kg)	Item number
1.6	PE Tube	5.0	582240
2.0	PE Tube	5.0	582242
2.4	PE Tube	5.0	582245

LNT 309LSi

TOP FEATURES

- Also used for the welding of clad steels where service temperatures are below 300°C.
- The weld metal has a delta-ferrite content of ~12% resulting in a high resistance to hot cracking.
- The increased silicon content results in increased weld pool fluidity to give a smooth deposit appearance.

CLASSIFICATION

AWS A5.9	ER309LSi
EN ISO 14343-A	W 23 12 LSi

SHIELDING GASES (ACC. EN ISO 14175)

I1	Inert gas Ar (100%)

TYPICAL APPLICATIONS

- General fabrication
- Cladding

APPROVALS

DNV	TÜV	CE
+	+	+

CHEMICAL COMPOSITION (WEIGHT %), TYPICAL

C	Mn	Si	Cr	Ni	Mo
0.02	2.0	0.8	23.5	13	0.1

MECHANICAL PROPERTIES, TYPICAL, ALL WELD METAL

	Shielding gas	Condition*	0.2% Proof strength (MPa)	Tensile strength (MPa)	Elongation (%)	Impact ISO-V (J) -120°C
Typical values	I1	AW	400	600	35	65

* AW = As welded

PACKAGING AND AVAILABLE SIZES

Diameter x Length (mm)	Packaging	Weight (kg)	Item number
1.2	PE Tube	5.0	606008
1.6	PE Tube	5.0	604405
2.0	PE Tube	5.0	604566
2.4	PE Tube	5.0	604641
3.2	PE Tube	5.0	604665

LNT 347Si

TOP FEATURES

- The weld metal has a high resistance to corrosive media at service temperatures <400°C.
- The presence of niobium reduces the propensity of intergranular chromium carbide precipitation and thus reduces the susceptibility to intergranular corrosion.
- The increased silicon content results in increased weld pool fluidity to give a smooth deposit appearance.

CLASSIFICATION

AWS A5.9	ER347Si
EN ISO 14343-A	W 19 9 Nb Si

SHIELDING GASES (ACC. EN ISO 14175)

I1	Inert gas Ar (100%)

TYPICAL APPLICATIONS

- Process Industries
- High Temperature Stainless Applications

APPROVALS

TÜV	DB	CE
+	+	+

CHEMICAL COMPOSITION (WEIGHT %), TYPICAL

C	Mn	Si	Cr	Ni	Mo	Nb
0.05	1.4	0.7	19.5	9.5	0.01	0.6

MECHANICAL PROPERTIES, TYPICAL, ALL WELD METAL

	Shielding gas	Condition*	0.2% Proof strength (MPa)	Tensile strength (MPa)	Elongation (%)	Impact ISO-V (J)	
						+20°C	-196°C
Typical values	I1	AW	400	650	35	80	45

* AW = As welded

PACKAGING AND AVAILABLE SIZES

Diameter x Length (mm)	Packaging	Weight (kg)	Item number
1.6	PE Tube	5.0	600664
2.0	PE Tube	5.0	600671
2.4	PE Tube	5.0	600678

LNT 310

TOP FEATURES

- High temperature ductility and excellent resistance to oxidation at working temperatures <1000°C.
- The weld deposit is fully austenitic
- Excellent corrosion resistance even when hot.

TYPICAL APPLICATIONS

- Heat Exchangers
- Hot water boilers
- Fabrication of furnaces

CLASSIFICATION

AWS A5.9	ER310
EN ISO 14343-A	W 25 20

SHIELDING GASES (ACC. EN ISO 14175)

I1	Inert gas Ar (100%)

APPROVALS

CE
+

CHEMICAL COMPOSITION (WEIGHT %), TYPICAL

C	Mn	Si	Cr	Ni	Mo
0.1	1.7	0.5	26	21	0.1

MECHANICAL PROPERTIES, TYPICAL, ALL WELD METAL

	Shielding gas	Condition*	Yield strength (MPa)	Tensile strength (MPa)	Elongation (%)	Impact ISO-V (J) +20°C
Typical values	I1	AW	360	600	35	100

* AW = As welded

PACKAGING AND AVAILABLE SIZES

Diameter x Length (mm)	Packaging	Weight (kg)	Item number
1.6	PE Tube	5.0	604773
2.0	PE Tube	5.0	604790
2.4	PE Tube	5.0	604797

LNT 4455

TOP FEATURES

- TIG rod for welding fully austenitic CrNiMnMo stainless steels and low temperature steels
- Not susceptible for hot cracking

TYPICAL APPLICATIONS

- Non-magnetic applications
- Cryogenic Applications
- LNG

CLASSIFICATION

AWS A5.9	ER316Mn
EN ISO 14343-A	W 20 16 3 MnL

SHIELDING GASES (ACC. EN ISO 14175)

I1	Inert gas Ar (100%)

CHEMICAL COMPOSITION (WEIGHT %), TYPICAL

C	Mn	Si	Cr	Ni	Mo	N
0.015	7.0	0.4	20	16	3.0	0.15

MECHANICAL PROPERTIES, TYPICAL, ALL WELD METAL

	Shielding gas	Condition*	0.2% Proof strength (MPa)	Tensile strength (MPa)	Elongation (%)	Impact ISO-V (J) -196°C
Typical values	I1	AW	430	650	35	75

* AW = As welded

PACKAGING AND AVAILABLE SIZES

Diameter x Length (mm)	Packaging	Weight (kg)	Item number
2.0	PE Tube	5.0	600581

LNT CuSi3

TOP FEATURES

- This wire is frequently used for joining in artistic foundries, for welding galvanized sheets and even as a steel cladding.
- It is also suitable for surfaces subject to corrosion.

TYPICAL APPLICATIONS

- Cladding
- Brazing
- Automotive

CLASSIFICATION

AWS A5.7	ERCuSi-A
EN ISO 24373-A	S Cu 6560 (CuSi3Mn1)

SHIELDING GASES (ACC. EN ISO 14175)

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

APPROVALS

CE
+

CHEMICAL COMPOSITION (WEIGHT %), TYPICAL

Cu	Sn	Mn	Si	Zn
bal.	0.1	1.0	3.0	0.1

MECHANICAL PROPERTIES, TYPICAL, ALL WELD METAL

	Shielding gas	Condition*	Yield strength (MPa)	Tensile strength (MPa)	Elongation (%)	Hardness (HB)	Impact ISO-V (J) +20°C
Typical values	I1	AW	120	350	40	95	60

* AW = As welded

PACKAGING AND AVAILABLE SIZES

Diameter x Length (mm)	Packaging	Weight (kg)	Item number
1.6	PE Tube	2.5	604694
2.0	PE Tube	2.5	604698
2.4	PE Tube	2.5	604721

LNT CuSn6

TOP FEATURES

- Good electrical conductivity
- Excellent corrosion resistance

CLASSIFICATION

AWS A5.7	ERCuSn-A
EN ISO 24373-A	S Cu 5180 (CuSn6P)

TYPICAL APPLICATIONS

- Copper Tin Alloys

SHIELDING GASES (ACC. EN ISO 14175)

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

CHEMICAL COMPOSITION (WEIGHT %), TYPICAL

Cu	Sn	P
bal.	6.0	0.2

MECHANICAL PROPERTIES, TYPICAL, ALL WELD METAL

	Shielding gas	Condition*	Yield strength (MPa)	Tensile strength (MPa)	Elongation (%)	Hardness (HB)	Impact ISO-V (J) +20°C
Typical values	I1	AW	150	260	20	75	80

* AW = As welded

PACKAGING AND AVAILABLE SIZES

Diameter x Length (mm)	Packaging	Weight (kg)	Item number
2.0	PE Tube	2.5	605022
2.4	PE Tube	2.5	605039

SuperGlaze® TIG 4043

TOP FEATURES

- Use on many weldable cast and wrought aluminium alloys
- Generally recommended for welding 5052, any 6XXX series alloys and castings
- Alloy embossed on each rod for easy identification

TYPICAL APPLICATIONS

- Bicycle frames
- Pressure vessels

CLASSIFICATION

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

SHIELDING GASES (ACC. EN ISO 14175)

I1	Inert gas Ar (100%)
I3	Inert gas Ar+ 0.5-95% He
Flow rate	14.2-23.6 l/min

APPROVALS

TÜV	DB	CE
+	+	+

CHEMICAL COMPOSITION (WEIGHT %), TYPICAL

Al	Si	Fe	Cu	Mn	Mg	Zn	Ti	Be
bal.	5.01	0.13	0.008	0.009	0.03	0.002	0.007	0.0002

MECHANICAL PROPERTIES, TYPICAL, ALL WELD METAL

	Shielding gas	Condition*	Yield strength (MPa)	Tensile strength (MPa)	Elongation (%)
Typical values	I1	AW	20-40	120-165	3-18

* AW = As welded

PACKAGING AND AVAILABLE SIZES

Diameter x Length (mm)	Packaging	Weight (kg)	Item number
1.6	CARTON BOX	4.5	ED031111
	CARTON BOX	5.0	ED701957
2.0	CARTON BOX	5.0	ED702537
2.4	CARTON BOX	5.0	ED701958
3.2	CARTON BOX	5.0	ED701959, ED703877

SuperGlaze® TIG 5183

TOP FEATURES

- Designed for applications where higher strength is required
- For 5083 and 5456 base materials
- Excellent corrosion resistance ideal for Ship building and marine applications

TYPICAL APPLICATIONS

- Marine
- Shipbuilding
- Cryogenic tanks
- Bicycle frames
- Railway Industry

CLASSIFICATION

AWS A5.10	R5183
EN ISO 18273-A	S Al 5183 (AlMg4.5Mn0.7(A))

SHIELDING GASES (ACC. EN ISO 14175)

I1	Inert gas Ar (100%)
I3	Inert gas Ar+ 0.5-95% He
Flow rate	14.2-23.6 l/min

APPROVALS

TÜV	DB	CE
+	+	+

CHEMICAL COMPOSITION (WEIGHT %), TYPICAL

Al	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Be
bal.	0.03	0.13	0.001	0.65	4.99	0.10	0.02	0.07	0.0002

MECHANICAL PROPERTIES, TYPICAL, ALL WELD METAL

	Shielding gas	Condition*	Yield strength (MPa)	Tensile strength (MPa)	Elongation (%)
Typical values	I1	AW	125-165	270-290	16-25

* AW = As welded

PACKAGING AND AVAILABLE SIZES

Diameter x Length (mm)	Packaging	Weight (kg)	Item number
1.6	CARTON BOX	5.0	ED701963
2.0	CARTON BOX	5.0	ED702566
2.4	CARTON BOX	4.5	ED034193
	CARTON BOX	5.0	ED701965
3.2	CARTON BOX	5.0	ED701964, ED703829
4.0	CARTON BOX	5.0	ED702517, ED703866

SuperGlaze® TIG 5356

TOP FEATURES

- Aluminium-magnesium alloy for use on many weldable cast and wrought aluminium alloys
- Excellent for color matching after anodizing
- Alloy embossed on each rod for easy identification
- General purpose filler alloy for 5XXX and 6XXX series alloys
- High strength filler metal

CLASSIFICATION

AWS A5.10	R5356
EN ISO 18273-A	S Al 5356 (AlMg5Cr(A))

SHIELDING GASES (ACC. EN ISO 14175)

I1	Inert gas Ar (100%)
I3	Inert gas Ar+ 0.5-95% He
Flow rate	14.2-23.6 l/min

TYPICAL APPLICATIONS

- Architectural structures
- Armoured vehicles
- Gun mount bases

APPROVALS

TÜV	DB	CE
+	+	+

CHEMICAL COMPOSITION (WEIGHT %), TYPICAL

Al	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Be
bal.	0.06	0.09	0.02	0.12	4.84	0.12	0.001	0.09	0.0002

Notes: Unspecified elements should not exceed a total of 0.15%

MECHANICAL PROPERTIES, TYPICAL, ALL WELD METAL

	Shielding gas	Condition*	Yield strength (MPa)	Tensile strength (MPa)	Elongation (%)
Typical values	I1	AW	110-120	240-296	17-26

* AW = As welded

PACKAGING AND AVAILABLE SIZES

Diameter x Length (mm)	Packaging	Weight (kg)	Item number
1.6	CARTON BOX	4.5	ED031108
	CARTON BOX	5.0	ED701966
2.0	CARTON BOX	5.0	ED702518
2.4	CARTON BOX	5.0	ED702387
3.2	CARTON BOX	4.5	ED031110
	CARTON BOX	5.0	ED701967

SuperGlaze® TIG 5754

TOP FEATURES

- Magnesium alloyed aluminium for welding of alloys with a maximum of 3.5% Mg
- Good corrosion resistance and excellent colour match after anodizing
- Suitable for a wide range of applications in general construction and structural industry

TYPICAL APPLICATIONS

- General Construction
- Structural Industry

CLASSIFICATION

AWS A5.10	R5754
EN ISO 18273-A	S Al 5754 (AlMg3)

SHIELDING GASES (ACC. EN ISO 14175)

I1	Inert gas Ar (100%)
I3	Inert gas Ar+ 0.5-95% He
Flow rate	14.2-23.6 l/min

APPROVALS

TÜV	CE
+	+

CHEMICAL COMPOSITION (WEIGHT %), TYPICAL

Al	Si	Fe	Cu	Mn	Mg	Cr	Ti	Be
bal.	0.07	0.13	0.01	0.29	3.0	0.06	0.05	0.0004

Notes: Unspecified elements should not exceed a total of 0.15%

MECHANICAL PROPERTIES, TYPICAL, ALL WELD METAL

	Shielding gas	Condition*	Yield strength (MPa)	Tensile strength (MPa)	Elongation (%)
Typical values	I1	AW	70-80	180-200	15-20

* AW = As welded

PACKAGING AND AVAILABLE SIZES

Diameter x Length (mm)	Packaging	Weight (kg)	Item number
1.6	CARTON BOX	5.0	ED703743