

**Stainless Steel TIG
Welding Wires**





AMA 30-11T

Standards: AWS/ASME SFA-5.9

ER 308 L

Application/ Properties: Austenitic stainless wire electrode in extra low carbon quantity for TIG welding of unstabilized corrosion resistant Cr Ni steels. Resistant to intergranular corrosion up to 350 °C, non-scaling up to 800 °C if subjected to air oxidizing combustion gases.

Analysis of Wire electrode% (Typical value):

C	Si	Cr	Mn	Ni
≤ 0.03	0.3-0.65	19.5-22	1-2.5	9-11

Shielding gas: 100% Ar.)

Mechanical properties of all-weld metal :

Tensile Strength (N/mm ²)	0.2%Proof Stress (N/mm ²)	Elongation A4 %	Impact energy (Joule) ISO - V 25 °C
>520	>320	>35	>80

Material:

Up to 350C steels of material numbers:

1.4301-X 5 Cr Ni 18 10

1.4303-X 5 Cr Ni 18 12

1.4306-X 2 Cr Ni 19 11

also steels of material numbers:

1.4541-X 6 Cr Ni Ti 18 10

1.4543-X 5 Cr Ni Nb 18 9

1.4550-X 6 Cr Ni Nb 18 10

Delivery: welding rods

weight :5 kg.

diameter : 1-4 mm.

Length: 1000mm.

Note: other weight & sizes are produced upon customers request.





AMA 30-12T

Standards: AWS/ASME SFA-5.9

ER 308 LSi

Application/ Properties: Austenitic stainless wire electrode in extra low carbon quantity for TIG welding of unstabilized corrosion resistant Cr Ni steels. Resistant to intergranular corrosion up to 350 °C, non-scaling up to 800 °C if subjected to air oxidizing combustion gases.

Analysis of Wire electrode% (Typical value):

C	Si	Cr	Mn	Ni
≤ 0.03	0.65-1	19.5-22	1-2.5	9-11

Shielding gas: 100% Ar.)

Mechanical properties of all-weld metal :

Tensile Strength (N/mm ²)	0.2%Proof Stress (N/mm ²)	Elongation A4 %	Impact energy (Joule) ISO - V 25 °C
>520	>320	>35	>80

Material:

Up to 350C steels of material numbers:

1.4301-X 5 Cr Ni 18 10

1.4303-X 5 Cr Ni 18 12

1.4306-X 2 Cr Ni 19 11

also steels of material numbers:

1.4541-X 6 Cr Ni Ti 18 10

1.4543-X 5 Cr Ni Nb 18 9

1.4550-X 6 Cr Ni Nb 18 10

Delivery: welding rods

weight :5 kg.

diameter : 1-4 mm.

Length: 1000mm.

Note: other weight & sizes are produced upon customers request.





AMA 30-13T

Standards: AWS/ASM E SFA-5.9

ER 316 L

Application/ Properties: Austenitic stainless wire electrode in extra low carbon quantity for TiG welding of unstabilized corrosion resistant Cr Ni Mo steels. Resistant to intergranular corrosion up to 400 °C.

Analysis of Wire electrode% (Typical value):

C	Si	Cr	Mn	Ni	Mo
≤ 0.03	0.3-0.65	18-20	1-2.5	11-4	2-3

Shielding gas: 100% Ar.)

Mechanical properties of all-weld metal :

Tensile Strength (N/mm ²)	0.2%Proof Stress (N/mm ²)	Elongation A4 %	Impact energy (Joule) ISO - V 25 °C
>520	>320	>30	>80

Material:

Steels of material numbers:
1.4401-X 5 Cr Ni Mo 17 12 2
1.4404-X 2 Cr Ni Mo 17 13 2
1.4435-X 2 Cr Ni Mo 18 14 3
1.4436-X 5 Cr Ni Mo 17 13 3
AISO Steels of material numbers:
1.4571-X 6 Cr Ni Mo Ti 17 12 2
1.4573-X 10 Cr Ni Mo Ti 18 12
1.4580-X 10 Cr Ni Mo Nb 18 10
1.4583-X 10 Cr Ni Mo Nb 18 12

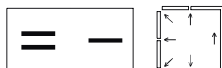
Delivery: welding rods

weight :5 kg.

diameter : 1-4 mm.

Length: 1000mm.

Note: other weight & sizes are produced upon customers request.





AMA 30-14T

Standards: AWS/ASM E SFA-5.9

ER 316 LSi

Application/ Properties: Austenitic stainless wire electrode in extra low carbon quantity for TiG welding of unstabilized corrosion resistant Cr Ni Mo steels. Resistant to intergranular corrosion up to 400 °C.

Analysis of Wire electrode% (Typical value):

C	Si	Cr	Mn	Ni	Mo
≤ 0.03	0.65-1	18-20	1-2.5	11-4	2-3

Shielding gas: 100% Ar.)

Mechanical properties of all-weld metal :

Tensile Strength (N/mm ²)	0.2%Proof Stress (N/mm ²)	Elongation A4 %	Impact energy (Joule) ISO - V 25 °C
>520	>320	>30	>80

Material:

Steels of material numbers:
1.4401-X 5 Cr Ni Mo 17 12 2
1.4404-X 2 Cr Ni Mo 17 13 2
1.4435-X 2 Cr Ni Mo 18 14 3
1.4436-X 5 Cr Ni Mo 17 13 3
AISO Steels of material numbers:
1.4571-X 6 Cr Ni Mo Ti 17 12 2
1.4573-X 10 Cr Ni Mo Ti 18 12
1.4580-X 10 Cr Ni Mo Nb 18 10
1.4583-X 10 Cr Ni Mo Nb 18 12

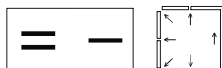
Delivery: welding rods

weight :5 kg.

diameter : 1-4 mm.

Length: 1000mm.

Note: other weight & sizes are produced upon customers request.





AMA 30-15T

Standards: AWS/ASME SFA-5.9

ER 347

Application/ Properties: stabilized austenitic stainless steels wire electrode for TIG welding of unstabilized and stabilized corrosion resistant Cr Ni steels. Resistant to intergranular corrosion up to 400 °C, non-scaling up to 800 °C if subjected to air or oxidizing combustion gases.

Analysis of Wire electrode% (Typical value):

C	Si	Cr	Ni	Nb
≤0.03	0.3-0.65	19-21.5	9-11	≥ 10× C

Shielding gas: 100% Ar.)

Mechanical properties of all-weld metal :

Tensile Strength (N/mm ²)	0.2%Proof Stress (N/mm ²)	Elongation A4 %	Impact energy (Joule) ISO - V 25 °C
>520	>350	>30	>65

Material:

Steels of material numbers:
1.4541-X 6 Cr Ni Ti 18 10
1.4543-X 5 Cr Ni Nb 18 9
1.4550-X 6 Cr Ni Nb 18 10
1.4878-X 12 Cr Ni Ti 18 9
ALSO Steels of material numbers:
1.4301-X 5 Cr Ni 18 10
1.4303-X 5 Cr Ni 18 12
1.4306-X 2 Cr Ni 19 11

Delivery: welding rods

weight :5 kg.

diameter : 1-4 mm.

Length: 1000mm.

Note: other weight & sizes are produced upon customers request.





AMA 30-16T

Standards: AWS/ASME SFA-5.9

ER 347 Si

Application/ Properties: stabilized austenitic stainless steels wire electrode for TIG welding of unstabilized and stabilized corrosion resistant Cr Ni steels. Resistant to intergranular corrosion up to 400 °C, non-scaling up to 800 °C if subjected to air or oxidizing combustion gases.

Analysis of Wire electrode% (Typical value):

C	Si	Cr	Ni	Nb
≤0.03	0.65-1	19-21.5	9-11	≥10 × C

Shielding gas: 100% Ar.)

Mechanical properties of all-weld metal :

Tensile Strength (N/mm ²)	0.2%Proof Stress (N/mm ²)	Elongation A4 %	Impact energy (Joule) ISO - V 25 °C
>520	>350	>30	>65

Material:

Steels of material numbers:
1.4541-X 6 Cr Ni Ti 18 10
1.4543-X 5 Cr Ni Nb 18 9
1.4550-X 6 Cr Ni Nb 18 10
1.4878-X 12 Cr Ni Ti 18 9
ALSO Steels of material numbers:
1.4301-X 5 Cr Ni 18 10
1.4303-X 5 Cr Ni 18 12
1.4306-X 2 Cr Ni 19 11

Delivery: welding rods

weight :5 kg.

diameter : 1-4 mm.

Length: 1000mm.

Note: other weight & sizes are produced upon customers request.





AMA 30-17T

Standards: AWS/ASME SFA-5.9

ER 309 L

Application/ Properties: Austenitic – ferritic wire electrode for TIG welding of high alloy steels to unalloyed or low alloy steels. Highest operating temperature is 300 °C.

Analysis of Wire electrode% (Typical value):

C	Si	Cr	Mn	Ni
≤ 0.03	0.3-0.65	23-25	1-2.5	12-14

Shielding gas: 100% Ar.)

Mechanical properties of all-weld metal :

Tensile Strength (N/mm ²)	0.2%Proof Stress (N/mm ²)	Elongation A 4 %	Impact energy (Joule) ISO - V 25 °C
>520	>400	>30	>47

Material:

HI/ H11m StE 255, StE 355, 17Mn4, 15Mo3 joint to:
1.4301, 1.4306, 1.4541, 1.4550, 1.4401, 1.4435
1.4571, 1.4583 and similar cast steels grades

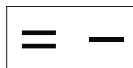
Delivery: welding rods

weight :5 kg.

diameter : 1-4 mm.

Length: 1000mm.

Note: other weight & sizes are produced upon customers request.





AMA 30-18T

Standards: AWS/ASME SFA-5.9

ER 309 LSi

Application/ Properties: Austenitic – ferritic wire electrode for TIG welding of high alloy steels to unalloyed or low alloy steels. Highest operating temperature is 300 °C.

Analysis of Wire electrode% (Typical value):

C	Si	Cr	Mn	Ni
≤ 0.03	0.65-1	23-25	1-2.5	12-14

Shielding gas: 100% Ar.)

Mechanical properties of all-weld metal :

Tensile Strength (N/mm ²)	0.2%Proof Stress (N/mm ²)	Elongation A 4 %	Impact energy (Joule) ISO - V 25 °C
>520	>400	>30	>47

Material:

HI/ H11m StE 255, StE 355, 17Mn4, 15Mo3 joint to:
1.4301, 1.4306, 1.4541, 1.4550, 1.4401, 1.4435
1.4571, 1.4583 and similar cast steels grades

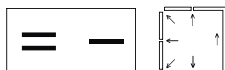
Delivery: welding rods

weight :5 kg.

diameter : 1-4 mm.

Length: 1000mm.

Note: other weight & sizes are produced upon customers request.





AMA 30-19T

Standards: AWS/ASME SFA-5.9

ER 310

Application/ Properties: Fully austenitic stainless wire electrode for TIG welding of heat resistant steels, containing 25% Cr and 20% Ni. Likewise suited for welding heat and scaling resistant ferritic chromium steels unless corrosion attack by reducing sulphur-bearing combustion gases is to be expected. Non-scaling up to 1200 °C. Weld metal exhibits good toughness down to -196°C.

Analysis of Wire electrode% (Typical value):

C	Si	Cr	Mn	Ni
0.08-0.15	0.3-0.65	25-28	1-2.5	20-22.5

Shielding gas: 100% Ar.)

Mechanical properties of all-weld metal :

Tensile Strength (N/mm ²)	0.2%Proof Stress (N/mm ²)	Elongation A 4 %	Impact energy (Joule) ISO - V 25 °C
≥550	>300	>30	>70

Material:

Steels of material numbers:
1.4828-X 15 Cr Ni Si 20 12
1.4840-G-X 15 Cr Ni Si 25 20
1.4841-X 15 Cr Ni Si 25 20
1.4825-X 15 Cr Ni 25 21
1.4846-X 40 Cr Ni 25 21

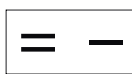
Delivery: welding rods

weight :5 kg.

diameter : 1-4 mm.

Length: 1000mm.

Note: other weight & sizes are produced upon customers request.





AMA 30-21T

Standards: AWS/ASME SFA-5.9

ER 318

Application/ Properties: Stabilized austenitic stainless wire electrode for TIG welding of stabilized or unstabilized corrosion resistant Cr Ni Mo steels. Resistant to intergranular corrosion up to 400 °C.

Analysis of Wire electrode% (Typical value):

C	Cr	Si	Ni	Mo	Nb
≤ 0.08	18-20	0.3-0.65	11-14	2-3	≥ 8× C

Shielding gas: 100% Ar.)

Mechanical properties of all-weld metal :

Tensile Strength (N/mm ²)	0.2%Proof Stress (N/mm ²)	Elongation A4 %	Impact energy (Joule) ISO - V 25 °C
≥ 550	>350	>25	>75

Material:

Steels of material numbers:
1.4541-X 6 Cr Ni Mo Ti 17 12 2
1.4573-X 10 Cr Ni Mo Ti 18 12
1.4580-X 10 Cr Ni Mo Nb 18 10
1.4583-X 10 Cr Ni Mo Nb 18 12
ALSO Steels of material numbers:
1.4401-X 5 Cr Ni Mo 17 12 2
1.4404-X 2 Cr Ni Mo 17 13 2
1.4435-X 2 Cr Ni Mo 18 14 3
1.4436-X 2 Cr Ni Mo 17 13 3

Delivery: welding rods

weight :5 kg.

diameter : 1-4 mm.

Length: 1000mm.

Note: other weight & sizes are produced upon customers request.

