



TAURUS®



MIG



TIG



GAS



ARC



WELDING CONSUMABLES

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TAURUS ELECTRODE 6013



TAURUS E6013 is a rutile-cellulosic type stick electrode designed for a wide range of general fabrication applications for workshop and site conditions. Excellent operability in all positions including vertical down. Particularly suited where poor fit-up conditions prevail. Easy slag removal and low spatter loss. Weld bead appearance is smooth with a fine ripple formation.

WELDING POSITIONS

- Flat • Horizontal • Vertical up • Vertical down • Overhead

CLASSIFICATIONS

AWS A5.1 E 6013
DIN 1913 E 43 22 R(C)3

COMPOSITION	%
Carbon	0.06 %
Manganese	1.50 %
Silicon	0.30 %

MECHANICAL	AS WELDED
Yield strength	>430 N/mm ²
Tensile strength	520-560 N/mm ²
Elongation (5xd)	>25 %
Impact strength ISO-V@+20°C	100 Joule
Impact strength ISO-V@0°C	50 Joule

PRODUCT CODE	DESCRIPTION	SIZE (mm)	PACKAGE (kg)	BULK (kg)	TYPICAL CURRENT MIN/MAX
6013-2.00-1-E	TAURUS M/S ELECTRODE 6013-2.0MM-1KG PACK	2.0 x 300	1 or 20	1000	50 / 90
6013-2.60-1-E	TAURUS M/S ELECTRODE 6013-2.6MM-1KG PACK	2.6 x 300	1 or 20	1000	50 / 90
6013-2.60-5-E	TAURUS M/S ELECTRODE 6013-2.6MM-5KG PACK	2.6 x 300	5 or 20	1000	50 / 90
6013-3.20-1-E	TAURUS M/S ELECTRODE 6013-3.2MM-1KG PACK	3.2 x 350	1 or 20	1000	90 / 130
6013-3.20-5-E	TAURUS M/S ELECTRODE 6013-3.2MM-5KG PACK	3.2 x 350	5 or 20	1000	90 / 130
6013-4.00-5-E	TAURUS M/S ELECTRODE 6013-4.0MM-5KG PACK	4.0 x 400	5 or 20	1000	110 / 170

TAURUS ELECTRODE 7018-1



TAURUS 7018-1 is a basic-coated hydrogen-controlled electrode for high mechanical-property requirements and crack-resistance. Suitable for crack resistant joint welding on higher carbon steels. The double coating provides very stable arc characteristics with excellent all position weldability. Low spatter loss, ready slag detachment and regular bead appearance. COD tested for offshore applications.

WELDING POSITIONS

- Flat • Horizontal • Vertical up • Overhead

CLASSIFICATIONS

AWS A5.1 E 7018-1

ISO 2560 E 515 B 20

DIN 8529 E SY24 76 Mn B

COMPOSITION	%
Carbon	0.06 %
Manganese	1.50 %
Silicon	0.30 %

MECHANICAL	AS WELDED
Yield strength	>430 N/mm ²
Tensile strength	520-560 N/mm ²
Elongation (5xd)	>25 %
Impact strength ISO-V@+20°C	100 Joule
Impact strength ISO-V@0°C	50 Joule

PRODUCT CODE	DESCRIPTION	SIZE (mm)	PACKAGE (kg)	BULK (kg)	TYPICAL CURRENT MIN/MAX
7018-1-2.60-E	TAURUS LOW HYDROGEN ELECTRODE 7018-2.6MM	2.6 x 350	2 or 20	1000	60 / 100
7018-1-3.20-E	TAURUS LOW HYDROGEN ELECTRODE 7018-3.2MM	3.2 x 350	5 or 20	1000	90 / 140
7018-1-4.00-E	TAURUS LOW HYDROGEN ELECTRODE 7018-4.0MM	4.0 x 400	5 or 20	1000	140 / 190
7018-1-5.00-E	TAURUS LOW HYDROGEN ELECTRODE 7018-5.0MM	5.0 x 400	5 or 20	1000	180 / 240

TAURUS ELECTRODE 7024



TAURUS 7024 is a rutile, coated-iron, high-recovery electrode which deposits metal of good metallurgical properties quickly and economically. Designed for downhand and fillet welding. TAURUS 7024 has a recovery of approximately 160%. The arc is smooth and consistent with very little spatter. Striking and restriking qualities are excellent.

WELDING POSITIONS

- Flat • Horizontal

CLASSIFICATIONS

AWS A5.1 E 7024

ISO 2560 E 513 RR 160 32

DIN 1913 E 51 32 RR 11 160

COMPOSITION	%
Carbon	0.05 %
Manganese	0.80 %
Silicon	0.40 %

MECHANICAL	AS WELDED
Yield strength	>500 N/mm ²
Tensile strength	510-610 N/mm ²
Elongation (5xd)	>24 %
Impact strength ISO-V@ 0°C	60 Joule
Impact strength ISO-V@ -20°C	>60 Joule

PRODUCT CODE	DESCRIPTION	SIZE (mm)	PACKAGE (kg)	BULK (kg)	TYPICAL CURRENT MIN/MAX
7024-3.2-E	TAURUS IRON POWDER ELECTRODE 7024-3.2MM	3.2 x 350	5 or 20	1000	130 / 160
7024-4.00-E	TAURUS IRON POWDER ELECTRODE 7024-4.0MM	4.0 x 400	5 or 20	1000	180 / 220

TAURUS ELECTRODE 6010



TAURUS 6010 is a medium coated, DC, cellulosic electrode for welding vertical down in pipeline and storage tank construction. Recommended for root-filler layers in pipeline applications. An extremely fast deposition rate can be obtained applying a touch or short-arc technique. The electrode provides a very steady arc over a wide range of current values.

WELDING POSITIONS

- Vertical down

CLASSIFICATIONS

AWS A5.1 E 6010

ISO 2560 E 433 C 19

DIN 1913 E 43 32 C 4

COMPOSITION	VALUE
Carbon	0.07 %
Manganese	0.15 %
Silicon	0.02 %

MECHANICAL	AS WELDED
Yield strength	400 N/mm ²
Tensile strength	460 N/mm ²
Elongation (5xd)	24 %
Impact strength ISO-V@+20°C	90 Joule
Impact strength ISO-V@0°C	60 Joule
Impact strength ISO-V@-20°C	50 Joule

PRODUCT CODE	DESCRIPTION	SIZE (mm)	PACKAGE (kg)	BULK (kg)	TYPICAL CURRENT MIN/MAX
6010-2.60-E	TAURUS PIPE ELECTRODE 6010-2.6MM	2.6 x 350	2	20	50 / 65
6010-3.20-E	TAURUS PIPE ELECTRODE 6010-3.2MM	3.2 x 350	5	20	90 / 120
6010-4.00-E	TAURUS PIPE ELECTRODE 6010-4.0MM	4.0 x 400	5	20	110 / 140

TAURUS ELECTRODE 308L



TAURUS 308L is a general purpose, extra-low carbon, austenitic electrode with rutile coating for welding corrosion-resistant CRNI steels. Resistant to atmospheric grain disintegration at operating temperatures up to 350°C. Very smooth weld with clean weld edge. Low spatter loss and easy slag removal. Suitable for welding AISI 302, 304, 340L and 304LN.

WELDING POSITIONS

- Flat • Horizontal • Vertical up • Overhead

CLASSIFICATIONS

AWS A5.4 E 308L-16

ISO 3581 E 19 9 LR 26

DIN 8556 E 19 9 nC R 26

COMPOSITION	%
Carbon	0.04 %
Manganese	0.78 %
Silicon	0.72 %
Nickel	9.67 %
Chromium	19.29 %

MECHANICAL	AS WELDED
0.2% Proof stress	400 N/mm ²
Tensile strength	550 N/mm ²
Elongation (5xd)	35 %
Reduction of area	50 %
Impact strength ISO-V@0°C	60 Joule
Impact strength ISO-V@+20°C	80 Joule

PRODUCT CODE	DESCRIPTION	SIZE (mm)	PACKAGE (kg)	BULK (kg)	TYPICAL CURRENT MIN/MAX
308L-2.00-E	TAURUS S/S ELECTRODE 308L-2.0MM	2.0 x 300	1	20	30 / 50
308L-2.60-E	TAURUS S/S ELECTRODE 308L-2.6MM	2.6 x 300	1	20	50 / 75
308L-3.20-E	TAURUS S/S ELECTRODE 308L-3.2MM	3.2 x 350	1	20	75 / 110
308L-4.00-E	TAURUS S/S ELECTRODE 308L-4.0MM	4.0 x 350	1	20	110 / 150

TAURUS ELECTRODE 309L



TAURUS 309L is a rutile, extra-low carbon-resistant electrode for welding corrosion resistant and heat resistant CR and CrNi steels. The high level of alloying elements also makes this electrode suitable for welding Cr and CrNi steel to mild steel. Very smooth weld with clean edge, low spatter loss and excellent slag removability.

WELDING POSITIONS

- Flat • Horizontal • Vertical up • Overhead

CLASSIFICATIONS

AWS A5.4 E 309L-16

ISO 3581 E 23 12 LR 26

DIN 8556 E 23 12 nCR 26

COMPOSITION	%
Carbon	0.03 %
Manganese	1.20 %
Silicon	0.70 %
Nickel	13.00 %
Chromium	25.00 %

MECHANICAL	AS WELDED
0.2% Proof stress	480 N/mm ²
Tensile strength	600 N/mm ²
Elongation (5xd)	35 %
Reduction of area	40 %
Impact strength ISO-V@+20°C	60 Joule

PRODUCT CODE	DESCRIPTION	SIZE (mm)	PACKAGE (kg)	BULK (kg)	TYPICAL CURRENT MIN/MAX
309L-2.60-E	TAURUS S/S ELECTRODE 309L-2.6MM	2.6 x 300	1	20	40 / 70
309L-3.20-E	TAURUS S/S ELECTRODE 309L-3.2MM	3.2 x 350	1	20	70 / 100
309L-4.00-E	TAURUS S/S ELECTRODE 309L-4.0MM	4.0 x 350	1	20	110 / 140

TAURUS ELECTRODE 316L



TAURUS 316L is a rutile, high-alloy, extra-low carbon austenitic electrode for welding corrosion resistant CrNiMo steels resistant to atmospheric corrosion. Resistant to grain disintegration at operating temperatures up to 350°C. Very smooth weld with clean weld edge, low spatter loss and easy slag removal. Suitable for welding AISI/ASTM 316, 316L, 316LN, 316H and 316Ti.

WELDING POSITIONS

- Flat • Horizontal • Vertical up • Overhead

CLASSIFICATIONS

AWS A5.4 E 316L-16

ISO 3581 E 19 12 3 LR 26

DIN 8556 E 19 12 3 nC R 26

COMPOSITION	%
Carbon	0.03 %
Manganese	0.70 %
Silicon	0.70 %
Nickel	12.00 %
Chromium	19.00 %
Molybdenum	2.50 %

MECHANICAL	AS WELDED
0.2% Proof stress	400 N/mm ²
Tensile strength	550 N/mm ²
Elongation (5xd)	35 %
Reduction of area	50 %
Impact strength ISO-V@0°C	60 Joule
Impact strength ISO-V@+20°C	70 Joule

PRODUCT CODE	DESCRIPTION	SIZE (mm)	PACKAGE (kg)	BULK (kg)	TYPICAL CURRENT MIN/MAX
316L-2.00-E	TAURUS S/S ELECTRODE 316L-2.0MM	2.0 x 300	1	20	30 / 50
316L-2.60-E	TAURUS S/S ELECTRODE 316L-2.6MM	2.6 x 300	1	20	50 / 75
316L-3.20-E	TAURUS S/S ELECTRODE 316L-3.2MM	3.2 x 350	1	20	75 / 110
316L-4.00-E	TAURUS S/S ELECTRODE 316L-4.0MM	4.0 x 350	1	20	110 / 150

TAURUS ELECTRODE INOX 680



TAURUS INOX 680 is a rutile, austenitic-ferritic coated electrode with 25-30 % ferrite content. The weld metal is extremely crack resistant and lends itself admirably to the welding of dissimilar and difficult-to-weld steels. It can be used for the welding of high-nickel alloys without becoming fully austenitic due to nickel pickup.

WELDING POSITIONS

- Flat
- Horizontal
- Vertical up
- Overhead

CLASSIFICATIONS

AWS A5.4 E 312L-16
ISO 3581 E 29 9 R 26
DIN 8556 E 29 9 R 26

COMPOSITION	%
Carbon	0.10 %
Manganese	1.00 %
Silicon	0.90 %
Nickel	10.00 %
Chromium	29.00 %

MECHANICAL	AS WELDED
0.2% Proof stress	550 N/mm ²
Tensile strength	750 N/mm ²
Elongation (5xd)	23 %
Impact strength ISO-V@+20°C	70 Joule
Ferrite level	35 %

PRODUCT CODE	DESCRIPTION	SIZE (mm)	PACKAGE (kg)	BULK (kg)	TYPICAL CURRENT MIN/MAX
680-2.60-E	TAURUS S/S ELECTRODE INOX 680-2.6MM	2.6 x 300	1	20	50 / 75
680-3.20-E	TAURUS S/S ELECTRODE INOX 680-3.2MM	3.2 x 350	1	20	75 / 110
680-4.00-E	TAURUS S/S ELECTRODE INOX 680-4.0MM	4.0 x 350	1	20	110 / 150

TAURUS ELECTRODE Ni 55



TAURUS Ni 55 is an all positional electrode depositing a 55% Ni/45 % Fe weld metal designed specially for strength welding of grey cast iron and malleable cast iron with steel. Also designed to operate at low current which minimises heat input and thus facilitates the cold welding of cast iron. Weld induced stresses can be reduced by hammer peening. Stable arc with clean bead appearance. The weld metal is fully machinable.

WELDING POSITIONS

- Flat • Horizontal • Vertical up • Overhead

CLASSIFICATIONS

AWS A5.15 E NiFe-CI

ISO R 1071 E NiFe BG 22

DIN 8573 E NiFe BG 1

COMPOSITION	%
Carbon	0.40 %
Manganese	0.45 %
Silicon	0.20 %
Nickel	55.00 %

MECHANICAL	AS WELDED
Yield strength	310 N/mm ²
Tensile strength	450 N/mm ²
Victor hardness HV30	19 HB

PRODUCT CODE	DESCRIPTION	SIZE (mm)	PACKAGE (kg)	BULK (kg)	TYPICAL CURRENT MIN/MAX
NI55-2.6-E	TAURUS CI ELECTRODE NICKELCAST 55-2.6MM	2.6 x 300	1	20	50 / 80
NI55-3.2-E	TAURUS CI ELECTRODE NICKELCAST 55-3.2MM	3.2 x 350	1	20	80 / 110
NI55-4.00-E	TAURUS CI ELECTRODE NICKELCAST 55-4.0MM	4.0 x 350	1	20	120 / 170

TAURUS ELECTRODE Ni 98



TAURUS Ni 98 is a pure nickel electrode which is universally used for welding all types of cast iron. Specially designed to operate at low currents which minimises heat input and thus facilitates the cold welding of cast iron. Weld-induced stresses can be reduced by hammer peening. Stable arc with clean bead appearance. The weld metal is fully machinable.

WELDING POSITIONS

- Flat • Horizontal • Vertical up • Overhead

CLASSIFICATIONS

AWS A5.15 E Ni-CI
DIN 8573 E Ni BG 1

COMPOSITION	%
Carbon	0.30 %
Manganese	0.20 %
Nickel	97.00 %

MECHANICAL	AS WELDED
Yield strength	219 N/mm ²
Tensile strength	304 N/mm ²
Victor hardness HV30	160 HV

PRODUCT CODE	DESCRIPTION	SIZE (mm)	PACKAGE (kg)	BULK (kg)	TYPICAL CURRENT MIN/MAX
NI98-2.60-E	TAURUS CI ELECTRODE NICKELCAST 98-2.6MM	2.6 x 300	1	20	50 / 80
NI98-3.2-E	TAURUS CI ELECTRODE NICKELCAST 98-3.2MM	3.2 x 350	1	20	80 / 110
NI98-4.0-E	TAURUS CI ELECTRODE NICKELCAST 98-4.0MM	4.0 x 350	1	20	110 / 150

TAURUS ELECTRODE H600R



TAURUS H600R is a rutile-coated, hard-facing electrode for surfacing worn parts of civil engineering, construction and mining machinery to be used without machining. Deposited metal of approximately 600 HV provides high toughness in spite of high hardness and excellent abrasion resistance to medium impact.

WELDING POSITIONS

- Flat • Horizontal • Vertical up

CLASSIFICATIONS

DIN 8555 E 2-UM-55

COMPOSITION	%
Carbon	0.55 %
Manganese	1.00 %
Silicon	0.80 %
Chromium	7.00 %

MECHANICAL	AS WELDED
Single layer	550 HV
Multiple layer	600 HV

PRODUCT CODE	DESCRIPTION	SIZE (mm)	PACKAGE (kg)	BULK (kg)	TYPICAL CURRENT MIN/MAX
H600R-3.20-E	TAURUS HARD FACING ELECTRODE H600R-3.2MM	3.2 x 350	1	20	85 / 140
H600R-4.00-E	TAURUS HARD FACING ELECTRODE H600R-4.0MM	4.0 x 400	1	20	100 / 170



The TAURUS ER70S-6 MIG wire is produced from high quality de-oxidised rod. The products are copper coated for increased shelf life, which facilitates good electrical conductivity with reduced friction during high speed welding. The TAURUS ER70S-6 MIG wire is a premium quality wire which is precision layer-wound to produce positive, uninterrupted feeding in semi-automatic and automated systems.

WELDING PROCEDURE

The TAURUS ER70S-6 MIG wire is suitable for dip (short arc), spray arc and pulsed-arc transfer welding using CO₂ and Argon based shielding gases.

WELDING POSITIONS

- Downhand • Horizontal flat • Horizontal vertical
- Vertical up • Overhead

CLASSIFICATIONS

AWS A5.18 ER 70s-6

SABS 145 Grade A

EN ISO 14341 G42 2 C G4Si1

EN ISO 636-A W 42 3 W4Si1

EN ISO 636-B W 49 3 W4Si1

APPROVALS

- Lloyds register of shipping grade DXVud, BF, 2S, 2YS, H15
- American Bureau of shipping grade 2SA TUV

COMPOSITION	VALUE
Carbon	0.07 - 0.15 %
Manganese	1.4 - 1.85 %
Silicon	0.8 - 1.15 %
Sulphur	0.035 % Max
Phosphorous	0.03 % Max
Copper	Typical 0.18 % 0.4 % Max

MECHANICAL (with CO ₂)	AS WELDED
0.2% Proof stress	430 MPa min
Tensile strength	510 - 570 MPa
Elongation on 50mm	26 min
Charpy V-Notch at +20°C	110 J min
Charpy V-Notch at 0°C	80 J min
Charpy V-Notch at -20°C	47 J min

PRODUCT CODE	DESCRIPTION	SIZE	PACKAGE	BULK
0.6-5KG-M	TAURUS MIG WIRE 70S-6-0.6MM-SMALL SPOOL	0.6	5	-
0.8-5KG-M	TAURUS MIG WIRE 70S-6-0.8MM-SMALL SPOOL	0.8	5	-
0.8-M	TAURUS MIG WIRE 70S-6-0.8MM	0.8	15	1080
0.9-M	TAURUS MIG WIRE 70S-6-0.9MM	0.9	15	1080
1.0-M	TAURUS MIG WIRE 70S-6-1.0MM	1	15	1080
1.2-M	TAURUS MIG WIRE 70S-6-1.2MM	1.2	15	1080
1.6-M	TAURUS MIG WIRE 70S-6-1.6MM	1.6	15	1080



TAURUS MIG WIRE ER100S-G is a low-alloy steel welding wire containing nickel, molybdenum and vanadium. The wire, which is copper coated, is suitable for use in all positions. TAURUS MIG WIRE ER100S-G is recommended for welding a range of fine grained structural steels and low-alloy quenched and tempered steels having an ultimate tensile strength of up to 930 MPa. Argon based shielding gases are recommended.

WELDING POSITIONS

- Downhand • Horizontal flat • Horizontal vertical
- Vertical up • Overhead

CLASSIFICATIONS

CLASSIFICATIONS

AWS A5.28 ER100S-G

EN ISO 16834-A W 69 4M3Ni1 CrMo

EN ISO 16834-B W 76 A 4M N4M2 (nearest)

COMPOSITION	%
Carbon	0.08 - 0.1
Manganese	1.6 - 1.8
Silicon	0.5 - 0.7
Sulphur	0.018 Max
Phosphorous	0.15 Max
Chromium	0.3 - 0.4
Nickel	1.4 - 1.6
Molybdenum	0.25 - 0.3
Copper	0.35 Max
Vanadium	0.09 - 1.11

MECHANICAL	AS WELDED
Tensile strength	> 690 MPa
0.2% Proof stress	> 770 MPa
% Elongation on 50 mm	>17
Charpy V-Notch at -40°C	> 47 J

PRODUCT CODE	DESCRIPTION	SIZE	PACKAGE	BULK
ER100S-G-1.2-M	TAURUS MIG ER100S-G-1.2MM HIGH TENSILE	1.2	15	1080



TAURUS E71T-1 is a rutile type CO₂ shielded flux-cored wire for welding carbon-manganese steels. It is recommended for the all positional welding of mild and low-alloy steels with a tensile strength of up to 620 MPa for general purpose fabrication. This wire provides increased toughness at sub zero temperatures.

WELDING POSITIONS

- Downhand • Horizontal flat • Horizontal vertical
- Vertical up • Vertical down • Overhead

CLASSIFICATIONS

AWS A5.20 E71T-1

APPROVALS

- Det Norske Veritas
- Bureau Veritas

COMPOSITION	%
Carbon	0.04
Manganese	1.32
Silicon	0.42
Sulphur	0.01
Phosphorous	0.02

MECHANICAL	AS WELDED
Yield strength	540 MPa
Tensile strength	580 MPa
Elongation on 5d	28
Charpy V-Notch at -18°C	65 J

PRODUCT CODE	DESCRIPTION	SIZE (mm)	PACKAGE (kg)	BULK (kg)
E71T1C-1.2-FCW	TAURUS FCW E71T-1-1.2MM - CO ₂ GAS	1.2	15	1080
E71T1C-1.6-FCW	TAURUS FCW E71T-1-1.6MM - CO ₂ GAS	1.6	15	1080



TAURUS E71T is a rutile-type, mixed gas(75% argon / 25% CO₂) shielded flux-cored wire for welding carbon manganese steels. It is recommended for the all positional welding of mild and low-alloy steels with a tensile strength of up to 620 MPa for general purpose fabrication. This wire provides increased toughness at sub zero temperatures. It has low spatter levels and the slag is easily removable.

WELDING POSITIONS

- Downhand • Horizontal flat • Horizontal vertical
- Vertical up • Vertical down • Overhead

CLASSIFICATIONS

AWS A5.20 E71T-1M

COMPOSITION	%
Carbon	0.022
Manganese	1.6
Silicon	0.82
Sulphur	0.01
Phosphorous	0.014

MECHANICAL	AS WELDED
Yield strength	592 MPa
Tensile strength	662 MPa
Elongation on 5d	26
Charpy V-Notch at -18°C	80 J
Charpy V-Notch at -29°C	68 J

PRODUCT CODE	DESCRIPTION	SIZE (mm)	PACKAGE (kg)	BULK (kg)
E71T1M-1.2-FCW	TAURUS FCW E71T-1-1.2MM - MIXED GAS	1.2	15	1080



TAURUS E71T-11 is an easy-to-use open-arc, wire (no shielding gas required). It is recommended for use with smaller MIG machines or in areas where the provision of gas cylinders is not practical. TAURUS E71T-11 is well suited for butt, fillet and lap joints on steel thicknesses of 1.6 mm to 10 mm. It is not recommended for welding steel thicknesses greater than 12 mm.

WELDING POSITIONS

- Downhand • Horizontal flat

CLASSIFICATIONS

AWS A5.20 E71T-11

EN 17632-A T 42 Z W N 1 H10

COMPOSITION	%
Carbon	0.18
Manganese	1.0
Silicon	0.25
Sulphur	0.012
Phosphorous	0.012
Aluminium	0.8

MECHANICAL	AS WELDED
Yield strength	430 MPa
Tensile strength	520 MPa
Elongation on 5d	23

PRODUCT CODE	DESCRIPTION	SIZE (mm)	PACKAGE (kg)	BULK (kg)
E71T11-0.9S-FCW	TAURUS GASLESS FCW E71T-11-0.9MM-SM	0.9	5	-
E71T11-1.2S-FCW	TAURUS GASLESS FCW E71T-11-1.2MM-SM	1.2	5	-
E71T11-1.2-FCW	TAURUS GASLESS FCW E71T-11-1.2MM	1.2	15	1080



TAURUS MIG 308LSi is used to weld 18/8 stainless steels including 301, 302, 303, nitrogen bearing 304LN and similar. Service temperatures are typically -100°C to about 400°C. Applications can be found in brewery, food, architectural and general fabrication industries.

WELDING POSITIONS

- Downhand • Horizontal flat • Horizontal vertical
- Vertical up • Overhead

CLASSIFICATIONS

AWS A5.9 ER308LSi
EN 14343-A G/W 19 9 Lsi
EN 14343-B SS 308LSi

COMPOSITION	%
Carbon	0.01
Manganese	1.7
Silicon	0.8
Phosphorous	0.015
Sulphur	0.01
Chromium	20
Nickel	10
Molybdenum	0.1
Copper	0.15
Ferrite number	10

MECHANICAL	AS WELDED
Tensile strength	570 MPa
0.2% Proof stress	435 MPa
Elongation on 4d	42%
Impact energy @ -20°C	30 - 60 J

PRODUCT CODE	DESCRIPTION	SIZE (mm)	PACKAGE (kg)	BULK (kg)
308LSI-0.8-SM-M	TAURUS S/S MIG WIRE 308LSI-0.8-SMALL	0.8	5	-
308LSI-0.8-M	TAURUS S/S MIG WIRE 308LSI-0.8MM	0.8	15	-
308LSI-0.9-M	TAURUS S/S MIG WIRE 308LSI-0.9MM	0.9	15	-
308LSI-1.0-M	TAURUS S/S MIG WIRE 308LSI-1.0MM	1.0	15	-
308LSI-1.2-M	TAURUS S/S MIG WIRE 308LSI-1.2MM	1.2	15	-



TAURUS MIG 309LSi is mainly used under high dilution conditions, particularly dissimilar welds between stainless and manganese steels. There are three main areas of application: buffer layers and clad steels, dissimilar joints and similar metal joints.

WELDING POSITIONS

- Downhand • Horizontal flat • Horizontal vertical
- Vertical up • Overhead

CLASSIFICATIONS

AWS A5.9 ER309LSi
 EN ISO 14343-A 23 12 L Si
 EN ISO 14343-B 309L Si

COMPOSITION	%
Carbon	0.015
Manganese	1.7
Silicon	0.8
Phosphorous	0.015
Sulphur	0.005
Chromium	23.5
Nickel	13
Molybdenum	0.1
Copper	1.15
Ferrite number	12

MECHANICAL	AS WELDED
Tensile strength	560 MPa
0.2% Proof stress	430 MPa
Elongation on 4d	42%
Elongation on 5d	39 %
Impact energy @ -20°C	80 J
Impact energy @ +20°C	100 J

PRODUCT CODE	DESCRIPTION	SIZE (mm)	PACKAGE (kg)	BULK (kg)
309LSi-0.8-M	TAURUS S/S MIG WIRE 309LSi-0.8MM	0.8	15	-
309LSi-0.9-M	TAURUS S/S MIG WIRE 309LSi-0.9MM	0.8	15	-
309LSi-1.0-M	TAURUS S/S MIG WIRE 309LSi-1.0MM	0.9	15	-
309LSi-1.2-M	TAURUS S/S MIG WIRE 309LSi-1.2MM	1.0	15	-



TAURUS MIG 316LSi is used for molybdenum-bearing austenitic stainless steels with 1.5 - 3 % molybdenum. Type 316/316L steels are widely used for their good resistance to pitting, many acids and general corrosion.

WELDING POSITIONS

- Downhand • Horizontal flat • Horizontal vertical
- Vertical up • Overhead

CLASSIFICATIONS

AWS A5.9 ER316LSi
 EN ISO 14343-A G/W 19 12 3 LSi
 EN ISO 14343-B 316L Si

COMPOSITION	%
Carbon	0.01
Manganese	1.7
Silicon	0.8
Phosphorous	0.015
Sulphur	0.01
Chromium	18.5
Nickel	12.8
Molybdenum	2.6
Copper	0.15
Ferrite number	6

MECHANICAL	AS WELDED
Tensile strength	570 MPa
0.2% Proof stress	435 MPa
Elongation on 4d	42%
Elongation on 5d	40 %
Impact energy @ -130°C	< 70 J
Impact energy @ -196°C	30 - 60 J

PRODUCT CODE	DESCRIPTION	SIZE (mm)	PACKAGE (kg)	BULK (kg)
316LSi-0.8-SM-M	TAURUS S/S MIG WIRE 316LSi-0.8MM-SMALL	0.8	5	-
316LSi-0.8-M	TAURUS S/S MIG WIRE 316LSi-0.8MM	0.8	15	-
316LSi-0.9-M	TAURUS S/S MIG WIRE 316LSi-0.9MM	0.9	15	-
316LSi-1.0-M	TAURUS S/S MIG WIRE 316LSi-1.0MM	1.0	15	-
316LSi-1.2-M	TAURUS S/S MIG WIRE 316LSi-1.2MM	1.2	15	-



The TAURUS 2209 is used for welding duplex stainless steels such as 2205 and 2304. It can also be used for welding duplex stainless steels to carbon steel. It is used for MIG/MAG welding.

WELDING POSITIONS

- Downhand • Horizontal flat • Horizontal vertical
- Vertical up • Overhead

CLASSIFICATIONS

AWS A5.9 ER2209
EN ISO 14343-A G 22 9 3 N L
EN ISO 14343-B 2209

COMPOSITION	%
Carbon	0.012
Manganese	1.5
Silicon	0.5
Phosphorous	0.017
Sulphur	0.0007
Chromium	23
Nickel	8.6
Molybdenum	3.2
Copper	0.09
Ferrite number	55

MECHANICAL	AS WELDED
Tensile strength	770 MPa
Yield strength	550 MPa
Elongation	30 %

PRODUCT CODE	DESCRIPTION	SIZE (mm)	PACKAGE (kg)	BULK (kg)
2209-1.2-M	TAURUS S/S MIG WIRE 2209-1.2MM	1.2	15	-



TAURUS ALUMINIUM MIG 4043 is a 95% aluminium, 5% silicon wire suitable for welding heat treatable base alloys, and more specifically, the 6XXX series. It has a lower melting point and more fluidity than the 5XXX series filler alloys and is preferred by welders because of its favourable operating characteristics. The ER4043 wires are also less sensitive to weld cracking with the 6XXX series base alloys. TAURUS ALUMINIUM MIG 4043 is suitable for spray-arc and pulsed-arc transfer.

APPLICATIONS

Applications in the construction and automotive industry.

MATERIALS TO BE WELDED

TAURUS ALUMINIUM MIG 4043 wire is used to weld most aluminium alloys containing up to 7% silicon and can be used for welding wrought to cast aluminium materials.

WELDING POSITIONS

- Downhand • Horizontal flat • Horizontal vertical
- Vertical up • Overhead

CLASSIFICATIONS

AWS A5.10 ER4043

EN ISO 18273 Al4043 (AlSi5)

COMPOSITION	%
Silicon	4.5 - 5.5
Iron	0.4 Max
Copper	0.05 Max
Manganese	0.05 Max
Magnesium	0.05 Max
Zinc	0.1 Max
Titanium	0.15 Max
Beryllium	0.0008 Max
Aluminium	Balance

MECHANICAL	AS WELDED
Tensile strength	120 MPa
0.2% Proof stress	40 MPa
Elongation on 5d	8

PRODUCT CODE	DESCRIPTION	SIZE (mm)	PACKAGE (kg)	BULK (kg)
4043-1.0-M	TAURUS ALUMINIUM MIG WIRE 4043-1.0MM	1.0	7	-
4043-1.2-M	TAURUS ALUMINIUM MIG WIRE 4043-1.2MM	1.2	7	-
4043-1.6-M	TAURUS ALUMINIUM MIG WIRE 4043-1.6MM	1.6	7	-



TAURUS ALUMINIUM MIG 5356 is a 95% aluminium, 5% magnesium wire for general purpose welding of the 5XXX series alloys when 40 000 psi tensile strength is not required. TAURUS ALUMINIUM MIG 5356 is suitable for spray-arc and pulsed-arc transfer.

APPLICATIONS

Applications found in the construction of ships, bulk container, railway and the automotive industries.

WELDING POSITIONS

- Downhand • Horizontal flat • Horizontal vertical
- Vertical up • Overhead

CLASSIFICATIONS

AWS A5.10 ER5356

EN ISO 18273 Al5356 (AlMg5Cr)

COMPOSITION	%
Silicon	0.25 Max
Iron	0.4 Max
Copper	0.05 Max
Manganese	0.1 - 0.2
Magnesium	4.5 - 5.6
Zinc	0.1 Max
Titanium	0.07 - 0.15
Beryllium	0.0008 Max
Chromium	0.1 - 0.3
Aluminium	Balance

MECHANICAL	AS WELDED
Tensile strength	125 MPa
0.2% Proof stress	240 MPa
Elongation on 5d	17

PRODUCT CODE	DESCRIPTION	SIZE (mm)	PACKAGE (kg)	BULK (kg)
5356-1.0-M	TAURUS ALUMINIUM MIG WIRE 5356-1.0MM	1.0	7	-
5356-1.2-M	TAURUS ALUMINIUM MIG WIRE 5356-1.2MM	1.2	7	-

TAURUS MIG SILICON BRONZE



TAURUS MIG SILICON BRONZE is a pure copper filler wire deoxidised with 3% silicon for welding a wide range of copper alloys including overlaying of steels and cast irons. The wire is optimised for laser brazing.

APPLICATIONS

Applications include plate for chemical plant and moulds, stills and calorifiers, rods and wires for electrical components and tubes for heat exchangers. Also excellent for MIG brazing and laser brazing onto galvanised steel for automotive body panels.

MATERIALS TO BE WELDED

General purpose including phosphorous deoxidised copper, silicon bronze, nickel silver and some brasses.

WELDING POSITIONS

- Downhand • Horizontal flat • Horizontal vertical
- Vertical up • Overhead

CLASSIFICATIONS

AWS A5.7 ERCuSi-A
DIN 1733 SG-CuSi3 (2, 1461)
BS 2901Pt3 C9
EN 24343 Cu6560 CuSi3Mn1

COMPOSITION	%
Silicon	4.5 - 5.5
Iron	0.4 Max
Manganese	0.75 - 1.5
Phosphorous	0.02 Max
Zinc	0.02 Max
Tin	0.2 Max
Lead	0.02 Max
Aluminium	0.01 Max
Iron	0.3 Max
Copper	Balance

MECHANICAL PROPERTIES	AS WELDED
Tensile strength	330 - 370 MPa
Elongation on 5d	40 Max
Hardness	80 - 90 HB

PRODUCT CODE	DESCRIPTION	SIZE (mm)	PACKAGE (kg)	BULK (kg)
ERCUSI-0.8-M	TAURUS SILICON BRONZE MIG WIRE-0.8MM-SM	0.8	5	-
ERCUSI-1.0-M	TAURUS SILICON BRONZE MIG WIRE-1.0MM-SM	1.0	5	-
ERCUSI-1.2-M	TAURUS SILICON BRONZE MIG WIRE 1.2MM	1.2	12.5	-



TAURUS MIG HRC58 is a shielded flux-cored wire for the hard-facing of parts subjected to extreme wear such as excavator parts, scraper blades, dipper teeth, worm conveyors, beaters, crusher jaws, crusher cones, subjected to heavy wear. The weld metal is tough, free of cracks and therefore resistant to shock and impact. Machining is only possible by grinding.

WELDING POSITIONS

- Downhand • Horizontal flat

CLASSIFICATIONS

EN 14700 T Fe8

COMPOSITION	%
Carbon	0.35 - 0.45
Manganese	1.50 - 2.50
Silicon	0.30 - 0.70
Phosphorous	≤ 0.030
Sulphur	≤ 0.030
Chromium	5.0 - 6.0
Molybdenum	1.4 - 1.6
Vanadium	0.4 - 0.5

MECHANICAL PROPERTIES	AS WELDED
Hardness	57 - 62 HRC

PRODUCT CODE	DESCRIPTION	SIZE (mm)	PACKAGE (kg)	BULK (kg)
HRC58-1.2-M	TAURUS FCW HRC58-1.2MM	1.2	15	1080

TAURUS MIG HRC360



TAURUS MIG HRC360 is gas-shielded, high-alloyed, flux-cored wire designed for hard-facing deposit with high hardness. Especially developed for hard-facing of parts subjected to high metal to metal wear and moderate impact. Weld metal can retain its hardness at high temperatures up to 600°C. Weld metal can be grinded and machined by diamond tools. Weld metal is resistant to cracking and must not be welded more than 3 pass. If the base metal has a high carbon content and a low weldability, a tough buffer layer with FCW 30 is recommended before hard-facing. Heat treatment after hard-facing will decrease its welded hardness.

TYPICAL APPLICATIONS

Hard-facing of hot cut-offs, shear blades, dies for pressure casting, scraper blades, conveyors, rollers, crusher rolls and worn parts in agricultural equipment.

WELDING POSITIONS

- Downhand
- Horizontal flat

CLASSIFICATIONS

EN 14700 T Fe8

TS EN 14700 T Fe8

DIN 8555 MF 6 GF 60 GP

COMPOSITION	%
Carbon	0.60
Manganese	0.20
Silicon	0.50
Chromium	5.6
Molybdenum	0.25
Vanadium	0.20
Iron	Balance

MECHANICAL PROPERTIES	AS WELDED
Protection gas	CO2
Wear Index	70.2
Hardness	59 HRC

PRODUCT CODE	DESCRIPTION	SIZE (mm)	PACKAGE (kg)	BULK (kg)
HRC360-1.2-M	TAURUS FCW HRC360-1.2MM	1.2	15	1080



TAURUS TIG 70S-6 rod is produced from high quality deoxidised rod. The products are copper coated for increased shelf life.

WELDING PROCEDURE

TAURUS TIG 70S-6 rod should be used with a 2% thoriated (red colour tip) tungsten electrode with pure argon as a shielding gas at flow rates of 10 - 15 l/min.

WELDING POSITIONS

- Down hand • Horizontal flat • Horizontal vertical
- Vertical up • Overhead

CLASSIFICATIONS

AWS A5.18 ER 70s-6

SABS 145 Grade A

EN ISO 14341 G42 2 C G4Si1

EN ISO 636-A W 42 3 W4Si1

EN ISO 636-B W 49 3 W4Si1

COMPOSITION	VALUE
Carbon	0.07 - 0.15 %
Manganese	1.4 - 1.85 %
Silicon	0.8 - 1.15 %
Sulphur	0.035 % Max
Phosphorous	0.03 % Max
Copper	Typical 0.18 % 0.4 % Max

MECHANICAL PROPERTIES	AS WELDED
0.2% Proof stress	420 MPa min
Tensile strength	510 - 570 MPa
Elongation on 50mm	26 min
Charpy V-Notch at +20°C	110 J min
Charpy V-Notch at -29°C	50 J min
Charpy V-Notch at -46°C	27 J min

PRODUCT CODE	DESCRIPTION	SIZE (mm)	PACKAGE (kg)	BULK (kg)
ER70S-6-1.6-T	TAURUS MILD STEEL TIG ROD 70S-6-1.6MM	1.6 x 1000	5	20
ER70S-6-2.0-T	TAURUS MILD STEEL TIG ROD 70S-6-2.0MM	2.0 x 1000	5	20
ER70S-6-2.4-T	TAURUS MILD STEEL TIG ROD 70S-6-2.4MM	2.4 x 1000	5	20
ER70S-6-3.2-T	TAURUS MILD STEEL TIG ROD 70S-6-3.2MM	3.2 x 1000	5	20



TAURUS TIG 308L rod is used for welding 18/8 stainless steels including 301, 302, 303, nitrogen-bearing 304LN and similar. Service temperatures are typically -100°C to approximately 400°C.

APPLICATIONS

Applications can be found in the brewery, food, architectural and general fabrication industries.

WELDING POSITIONS

- Down hand • Horizontal flat • Horizontal vertical
- Vertical up • Overhead

CLASSIFICATIONS

AWS A5.9 ER308L
 EN ISO 14343-A G/W 19 9 L
 EN ISO 14343-B SS 308L

COMPOSITION	%
Carbon	0.03 Max
Manganese	1.0 - 2.5
Silicon	0.3 - 0.65
Sulphur	0.03 Max
Phosphorous	0.03 Max
Chromium	19.5 - 22.0
Nickel	9 - 11
Ferrite Number	10

MECHANICAL PROPERTIES	AS WELDED
Tensile strength	605 MPa
0.2% Proof stress	465 MPa
Elongation on 4d	35 %
Impact energy at -196°C	80 J
Hardness	200 - 220 HV

PRODUCT CODE	DESCRIPTION	SIZE (mm)	PACKAGE (kg)	BULK (kg)
308L-1.6-T	TAURUS S/S TIG ROD 308L-1.6MM	1.6 x 1000	5	20
308L-2.0-T	TAURUS S/S TIG ROD 308L-2.0MM	2.0 x 1000	5	20
308L-2.4-T	TAURUS S/S TIG ROD 308L-2.4MM	2.4 x 1000	5	20
308L-3.2-T	TAURUS S/S TIG ROD 308L-3.2MM	3.2 x 1000	5	20

TAURUS TIG 309L



TAURUS TIG 309L rod is mainly used under high dilution conditions, particularly dissimilar welds between stainless and CMn steels. There are three main areas of application: buffer layers and clad steels, dissimilar joints and similar metal joints.

WELDING POSITIONS

- Down hand • Horizontal flat • Horizontal vertical
- Vertical up • Overhead

CLASSIFICATIONS

AWS A5.9 ER309L

EN ISO 14343-A G/W 23 12 L

EN ISO 14343-B SS 309L

COMPOSITION	%
Carbon	0.03 Max
Manganese	1.0 - 2.5
Silicon	0.3 - 0.65
Sulphur	0.02 Max
Phosphorous	0.02 Max
Chromium	12 - 14
Nickel	23 - 25
Ferrite Number	6 - 12

MECHANICAL PROPERTIES	AS WELDED
Tensile strength	590 MPa
0.2% Proof stress	450 MPa
Elongation on 4d	43 %
Elongation on 5d	41 %
Impact energy at +20°C	>200 J
Hardness	205 - 250 HV

PRODUCT CODE	DESCRIPTION	SIZE (mm)	PACKAGE (kg)	BULK (kg)
309L-1.6-T	TAURUS S/S TIG ROD 309L-1.6MM	1.6 x 1000	5	20
309L-2.0-T	TAURUS S/S TIG ROD 309L-2.0MM	2.0 x 1000	5	20
309L-2.4-T	TAURUS S/S TIG ROD 309L-2.4MM	2.4 x 1000	5	20



TAURUS TIG 312 rod has good oxidation resistance at high temperatures due to its high content of Chromium. The alloy is widely used for joining dissimilar steels, especially if one of the components is fully austenitic, and for steels that are difficult to weld, like for example machine components, tools and austenitic manganese steels.

WELDING POSITIONS

- Down hand • Horizontal flat • Horizontal vertical
- Vertical up • Overhead

CLASSIFICATIONS

AWS A5.9 ER312
EN ISO 14343-A W 29 9

COMPOSITION	%
Carbon	0.10
Manganese	1.60
Silicon	0.4
Sulphur	-
Phosphorous	-
Chromium	30.7
Nickel	8.8
Molybdenum	0.20
Copper	0.14

MECHANICAL PROPERTIES	AS WELDED
Tensile strength	770 MPa
Yield strength	610 MPa
Elongation	20%

PRODUCT CODE	DESCRIPTION	SIZE (mm)	PACKAGE (kg)	BULK (kg)
312-1.60-T	TAURUS S/S TIG ROD 312-1.6MM	1.6 x 1000	5	20
312-2.40-T	TAURUS S/S TIG ROD 312-2.4MM	2.4 x 1000	5	20

TAURUS TIG 316L



TAURUS TIG 316L rod is used for molybdenum-bearing austenitic stainless steels with 1.5- 3 % molybdenum. Type 316/316L steels are widely used for its good resistance to pitting, many acids and general corrosion.

WELDING POSITIONS

- Down hand • Horizontal flat • Horizontal vertical
- Vertical up • Overhead

CLASSIFICATIONS

AWS A5.9 ER316L

EN ISO 14343-A G/W 19 12 3 L

EN ISO 14343-B SS 316L

COMPOSITION	%
Carbon	0.03 Max
Manganese	1.0 - 2.5
Silicon	0.3 - 0.65
Sulphur	0.03 Max
Phosphorous	0.03 Max
Chromium	18 - 20
Nickel	11 - 14
Molybdenum	2 - 3
Ferrite number	3 - 10

MECHANICAL PROPERTIES	AS WELDED
Tensile strength	605 MPa
0.2% Proof stress	465 MPa
Elongation on 4d	35 %
Impact energy at -130°C	> 100 J
Impact energy at -196°C	> 60 J

PRODUCT CODE	DESCRIPTION	SIZE (mm)	PACKAGE (kg)	BULK (kg)
316L-1.0-T	TAURUS S/S TIG ROD 316L-1.0MM	1.0 x 1000	5	20
316L-1.2-T	TAURUS S/S TIG ROD 316L-1.2MM	1.2 x 1000	5	20
316L-1.6-T	TAURUS S/S TIG ROD 316L-1.6MM	1.6 x 1000	5	20
316L-2.0-T	TAURUS S/S TIG ROD 316L-2.0MM	2.0 x 1000	5	20
316L-2.4-T	TAURUS S/S TIG ROD 316L-2.4MM	2.4 x 1000	5	20
316L-3.2-T	TAURUS S/S TIG ROD 316L-3.2MM	3.2 x 1000	5	20



TAURUS TIG 4043 is a 95% aluminium, 5% silicon rod suitable for welding heat treatable base alloys. It has a lower melting point and more fluidity and is preferred by welders because of its favourable operating characteristics. The ER4043 rod is also less sensitive to weld cracking. TAURUS TIG 4043 should be used with a zirconated tungsten electrode with pure argon or an argon-helium mixture for thick sections, at a flow rates of 10 - 15 l/min. For oxygen and acetylene gas welding, a neutral flame should be used with aluminium welding flux.

APPLICATIONS

Applications in the construction and automotive industry.

MATERIALS TO BE WELDED

TAURUS TIG 4043 rod is used to weld most aluminium alloys containing up to 7% silicon and can be used for welding wrought to cast aluminium materials such as: BS 1470-1475 HE19, HE15, HE20 and HE30 material BS 1490 LM2 and LM6 castings aluminium alloys (AAA). 6061, 6062, 05052, 5154, 3003, 2024, 1050 and 1100 (after anodising, welding will be of a dark grey colour).

WELDING POSITIONS

- Downhand • Horizontal flat • Horizontal vertical
- Vertical up • Overhead

CLASSIFICATIONS

AWS A5.10 ER4043
 EN ISO 18273 Al4043 (AlSi5)
 EN ISO 14343-B SS 316L

COMPOSITION	%
Silicon	4.5 - 5.5
Iron	0.4 Max
Copper	0.05 Max
Manganese	0.05 Max
Magnesium	0.05 Max
Zinc	0.1 Max
Titanium	0.15 Max
Beryllium	0.0008 Max
Aluminium	Balance

MECHANICAL PROPERTIES	AS WELDED
Tensile strength	40 MPa
0.2% Proof stress	120 MPa
Elongation on 5d	8 %

PRODUCT CODE	DESCRIPTION	SIZE (mm)	PACKAGE (kg)	BULK (kg)
4043-1.6-T	TAURUS ALUMINIUM TIG ROD 4043-1.6MM	1.6 x 1000	5	20
4043-2.4-T	TAURUS ALUMINIUM TIG ROD 4043-2.4MM	2.4 x 1000	5	20
4043-3.2-T	TAURUS ALUMINIUM TIG ROD 4043-3.2MM	3.2 x 1000	5	20



TAURUS TIG 5356 is a 95% aluminium, 5% magnesium rod for general purpose welding when 40 000 psi tensile strength is not required. TAURUS TIG 5356 should be used with a zirconated tungsten electrode with pure argon or an argon-helium mixture for thick sections, at a flow rates of 10 - 15 l/min. For oxy-acetylene gas welding, a neutral flame should be used with aluminium welding flux.

APPLICATIONS

Applications in the construction of ships, bulk container, railway and the automotive industries.

WELDING POSITIONS

- Downhand • Horizontal flat • Horizontal vertical
- Vertical up • Overhead

CLASSIFICATIONS

AWS A5.10 ER5356

EN ISO 18273 Al5356 (AlMg5)

COMPOSITION	%
Silicon	0.25 Max
Iron	0.4 Max
Copper	0.05 Max
Manganese	0.1 - 0.2
Magnesium	4.5 - 5.6
Zinc	0.1 Max
Titanium	0.07 - 0.15
Beryllium	0.0008
Chromium	0.1 - 0.3
Aluminium	Balance

MECHANICAL PROPERTIES	AS WELDED
Tensile strength	240 MPa
0.2% Proof stress	125 MPa
Elongation on 5d	17 %

PRODUCT CODE	DESCRIPTION	SIZE (mm)	PACKAGE (kg)	BULK (kg)
5356-1.6-T	TAURUS ALUMINIUM TIG ROD 5356-1.6MM	1.6 x 1000	5	20
5356-2.4-T	TAURUS ALUMINIUM TIG ROD 5356-2.4MM	2.4 x 1000	5	20
5356-3.2-T	TAURUS ALUMINIUM TIG ROD 5356-3.2MM	3.2 x 1000	5	20

TAURUS TIG SILICON BRONZE



TAURUS TIG SILICON BRONZE is pure copper filler rod deoxidised with 3% silicon for welding a wider range of copper alloys including overlaying of steels and cast irons. TAURUS TIG SILICON BRONZE should be shielded with pure argon but pure helium provides deeper penetration, higher travel speeds and allows reduced pre-heating.

APPLICATIONS

Applications include plate for chemical plant and moulds, stills and calorifiers, rods and wires for electrical components and tubes for heat exchangers.

MATERIALS TO BE WELDED

General purpose including phosphorous deoxidised copper, silicon bronze, nickel silver and some brasses.

WELDING POSITIONS

- Downhand • Horizontal flat • Horizontal vertical
- Vertical up • Overhead

CLASSIFICATIONS

AWS A5.7 ERCuSi-A
DIN 1733 SG-CuSi3 (2, 1461)
BS 2901Pt3 C9
EN 24373 CU6560 CuSiMn1



COMPOSITION	%
Silicon	2.8 - 4.0
Iron	0.3 Max
Manganese	0.75 - 1.5
Phosphorous	0.02 Max
Zinc	0.02 Max
Tin	0.2 Max
Lead	0.02 Max
Aluminium	0.01 Max
Other totals	0.4 Max
Copper	Balance

MECHANICAL PROPERTIES	AS WELDED
Tensile strength	330 - 370 MPa
Elongation on 5d	40 % Max
Hardness	80 - 90 HB

PRODUCT CODE	DESCRIPTION	SIZE (mm)	PACKAGE (kg)	BULK (kg)
ERCUSI-2.4-T	TAURUS SILICON BRONZE TIG ROD 2.4MM	2.4 x 1000	5	20

TAURUS THORIATED TIG TUNGSTEN



The Taurus thoriated tungsten electrodes provide excellent resistance against weld pool contamination while at the same time offer the welder easier arc starting capabilities and a more stable arc. Thoriated tungsten electrodes are the most commonly used tungsten material.

APPLICATION

Thoriated tungsten electrodes are generally used in DC electrode negative or straight polarity applications such as carbon and stainless steels, nickel alloys and titanium, since they operate well even under amperage overloaded.

CLASSIFICATIONS

AWS EWTh-2

TYPICAL ELECTRODE CURRENT GUIDELINE

TUNGSTEN SIZE	DC -
1.6 mm	70 - 150 A
2.4 mm	150 - 250 A
3.2 mm	250 - 400A

MATERIAL WELDED	CURRENT
Carbon steel	DC
Copper	DC
Nickel Alloys	DC
Stainless Steel	DC
Titanium	DC

PRODUCT CODE	DESCRIPTION	SIZE (mm)	PACKAGE (UNITS)	BULK (UNITS)
TEL.16.TH	TAURUS THORIATED TUNGSTEN-1.6MM-RED	1.6 x 150	10	100
TEL.24.TH	TAURUS THORIATED TUNGSTEN-2.4MM-RED	2.4 x 150	10	100
TEL.32.TH	TAURUS THORIATED TUNGSTEN-3.2MM-RED	3.2 x 150	10	100



ZIRCONIATED tungsten electrodes exhibit good performance characteristics in AC welding, especially under high-load current. These electrodes can retain a balled end when welding, which results in less tungsten permeation and good corrosion resistance. It balls up well in AC welding and has a more stable arc than pure tungsten. Displays excellent performance in high load AC welding. Not replaceable by any other electrodes. Resists contamination well in AC welding.

APPLICATION

ZIRCONIATED tungsten is most commonly used for AC welding of aluminium and magnesium alloys. Preferred when tungsten contamination of weld is intolerable.

CLASSIFICATIONS

AWS EWZr-1

TYPICAL ELECTRODE CURRENT GUIDELINE

TUNGSTEN SIZE	AC
1.6 mm	60 - 150 A
2.4 mm	100 - 225 A
3.2 mm	160 - 325A

MATERIAL WELDED	CURRENT
Aluminium	AC
Magnesium	AC

PRODUCT CODE	DESCRIPTION	SIZE (mm)	PACKAGE (UNITS)	BULK (UNITS)
TEL.16.ZC	TAURUS ZIRCONIATED TUNGSTEN-1.6MM-WHITE	1.6 x 150	10	100
TEL.24.ZC	TAURUS ZIRCONIATED TUNGSTEN-2.4MM-WHITE	2.4 x 150	10	100
TEL.32.ZC	TAURUS ZIRCONIATED TUNGSTEN-3.2MM-WHITE	3.2 x 150	10	100

TAURUS COPPER COATED ROD (CCR)



TAURUS Copper Coated Rod (CCR) is a general purpose low carbon steel gas-welding rod which is copper coated to reduce corrosion. It is recommended for oxygen-acetylene welding of mild steel and is widely used in sheet metal work, the heating and ventilation industries, car body repairs, welder training schools and for low pressure piping and plumbing.

COMPOSITION	%
Carbon	0.04 - 0.15
Manganese	0.35 - 0.60
Silicon	0.03 Max
Sulphur	0.035 Max
Phosphorous	0.04
Copper	0.35 Max

MECHANICAL PROPERTIES	AS WELDED
Melting Range	1490 °C
Tensile strength	± 386 MPa
Hardness	± 120 HB
BRAZING / WELDING PARAMETERS	
Process	Oxygen - Acetylene
Flame setting	Neutral
Flux required	None

PRODUCT CODE	DESCRIPTION	SIZE (mm)	PACKAGE (kg)	BULK (kg)
CCR16	TAURUS CCR 1.6MM	1.6 x 750	4	20
CCR24	TAURUS CCR 2.4MM	2.4 x 750	4	20
CCR32	TAURUS CCR 3.2MM	3.2 x 750	4	20

TAURUS BRONZE BRAZING ROD (BBR)



TAURUS Bronze Brazing Rod (BBR) is a widely used brazing and bronze welding rod depositing metal which has good tensile strength. This versatile brazing rod is ideally suited for sheet metal work such as vehicle bodies, tubular and galvanised iron fabrication as well as for copper and for brazing cast iron, and heavy steel sections.

The flux coated bronze brazing rod doesn't require any extra flux. The bare bronze brazing rod will required M15 flux.

CLASSIFICATIONS

AWS A5.27 R CuZn-C

EN 24373 Cu4700 CuZn405n

COMPOSITION	%
Copper	56 - 60
Manganese	0.01 - 0.5
Silicon	0.04 - 0.15 Max
Iron	0.25 - 1.2
Tin	0.8 - 1.1
Zinc	Balance

MECHANICAL PROPERTIES	AS WELDED
Melting Range	860 °C
Tensile strength	± 440 MPa
Hardness	± 120 HB
BRAZING / WELDING PARAMETERS	
Process	Oxygen - Acetylene
Flame setting	Base metal depended

PRODUCT CODE	DESCRIPTION	SIZE (mm)	PACKAGE (kg)	BULK (kg)
	FLUX COATED			
BBRFC2.0MM	TAURUS FLUX COATED BRAZING ROD 2.0MM	2.0 x 500	1	-
BBRFC3.0MM	TAURUS FLUX COATED BRAZING ROD 3.0MM	3.0 x 500	1	-
	BARE			
BBR-1.6	TAURUS BRONZE BRAZING ROD 1.6MM	1.6 x 1000	5	-
BBR-2.0	TAURUS BRONZE BRAZING ROD 2.0MM	2.4 x 1000	5	-
BBR-3.0	TAURUS BRONZE BRAZING ROD 3.0MM	3.2 x 1000	5	-

TAURUS SILVER SOLDER 20%



Our TAURUS SILVER SOLDER 20% which is cadmium free and is suitable for use on all ferrous and non-ferrous metals, except aluminium. It can be used with a range of heat sources and is available in bare and flux coated and in various percentages of silver. Our flux coated silver solder has a special fast-flow flux which improves base metal cleansing action.

The flux coated silver solder doesn't require any extra flux. The bare silver solder will require silver solder flux.

CLASSIFICATIONS

AWS A5.8
 EN 1044 AG 206
 DIN 8513 L-Ag 20
 EN 17672

COMPOSITION	%
Silver	20
Copper	44
Zinc	36
Cadmium	0
Others	0.2% Si

MECHANICAL PROPERTIES	
Melting Range	690 - 810 °C
Working temperature	800 °C
Density	8.7 g/cm ³
Tensile strength	330 MPa

PRODUCT CODE	DESCRIPTION	SIZE (mm)	PACKAGE (kg)	BULK (kg)
	FLUX COATED			
SISIL20FX-100G	SILVER SOLDER-20% AG FX 1.5MM (WHITE)	1.5 x 500	0.1	-
SISILVER20FX1.5	SILVER SOLDER-20% AG FX 1.5MM (WHITE)	1.5 x 500	1	-
	BARE			
SISIL20B15-100G	SILVER SOLDER-20% AG BARE 1.5MM	1.5 x 500	0.1	-
SISILVER20B-1.5	SILVER SOLDER-20% AG BARE 1.5MM	1.5 x 500	1	-

TAURUS SILVER SOLDER 30%



Our TAURUS SILVER SOLDER 30% which is cadmium free and is suitable for use on all ferrous and non-ferrous metals, except aluminium. It can be used with a range of heat sources and is available in bare and flux coated and in various percentages of silver. Our flux coated silver solder has a special fast-flow flux which improves base metal cleansing action.

The flux coated silver solder doesn't require any extra flux. The bare silver solder will require silver solder flux.

CLASSIFICATIONS

AWS A5.8

EN 1044 AG 107

DIN 8513 L-Ag 30 Sn

EN 17672 Ag 130

COMPOSITION	%
Silver	30
Copper	36
Zinc	32
Tin	2
Cadmium	0

MECHANICAL PROPERTIES	
Melting Range	680 - 765 °C
Working temperature	750 °C
Density	8.9 g/cm ³
Tensile strength	460 MPa

PRODUCT CODE	DESCRIPTION	SIZE (mm)	PACKAGE (kg)	BULK (kg)
	FLUX COATED			
SISIL30FX-100G	SILVER SOLDER-30% AG FX 1.5MM (BLUE)	1.5 x 500	0.1	-
SISILVER30FX1.5	SILVER SOLDER-30% AG FX 1.5MM (BLUE)	1.5 x 500	1	-
	BARE			
SISIL30B15-100G	SILVER SOLDER-30% AG BARE 1.5MM	1.5 x 500	0.1	-
SISILVER30B-1.5	SILVER SOLDER-30% AG BARE 1.5MM	1.5 x 500	1	-

TAURUS SILVER SOLDER 40%



Our TAURUS SILVER SOLDER 40% which is cadmium free and is suitable for use on all ferrous and non-ferrous metals, except aluminium. It can be used with a range of heat sources and is available in bare and flux coated and in various percentages of silver. Our flux coated silver solder has a special fast flow-flux which improves base metal cleansing action.

The flux coated silver solder doesn't require any extra flux. The bare silver solder will require silver solder flux.

CLASSIFICATIONS

AWS A5.8 B Ag 28
EN 1044 AG 105
DIN 8513 L-Ag 40 Sn
EN 17672 Ag 140

COMPOSITION	%
Silver	40
Copper	30
Zinc	28
Tin	2
Cadmium	0

MECHANICAL PROPERTIES	
Melting Range	640 - 700 °C
Working temperature	690 °C
Density	9.1 g/cm ³
Tensile strength	430 MPa

PRODUCT CODE	DESCRIPTION	SIZE (mm)	PACKAGE (kg)	BULK (kg)
	FLUX COATED			
SISIL40FX-100G	SILVER SOLDER-40% AG FX 1.5MM (YELLOW)	1.5 x 500	0.1	-
SISILVER40FX1.5	SILVER SOLDER-40% AG FX 1.5MM (YELLOW)	1.5 x 500	1	-
	BARE			
SISIL40B15-100G	SILVER SOLDER-40% AG BARE 1.5MM	1.5 x 500	0.1	-
SISILVER40B-1.5	SILVER SOLDER-40% AG BARE 1.5MM	1.5 x 500	1	-

TAURUS COPPER BRAZE



Our TAURUS COPPER BRAZE is a copper based filler metal that is self-fluxing on copper by virtue of its phosphorous content. Because of its self-fluxing nature, time and money is saved as a result of the elimination of necessary steps to flux a joint before brazing. However, copper alloys such as brass and bronze should be fluxed with our Taurus Flux to assure a sound braze joint. While this filler metal is widely used in the air conditioning and plumbing industries, it is not recommended for ferrous or nickel-based materials because the joint will become brittle and may fail. The copper phosphor alloys vary in silver content from 18% to 2% and the percentage of silver and phosphorous does change the melt and flow characteristics of the filler metal.

SPECIFICATION	COPPER BRAZE 5 5% SILVER	COPPER BRAZE 2 2% SILVER	COPPER BRAZE 6 0% SILVER	COPPER BRAZE 7 0% SILVER
Silver	5	2	-	-
Copper	89	91.7	93.8	93
Phosphorus	6	6.3	6.2	7
Melting range	645 - 815 °C	645 - 825 °C	710 - 890 °C	710 - 820 °C
Working temperature	710 °C	740 °C	760 °C	730 °C
CLASSIFICATION	AWS A5.8M / A5.8 BbUP-3 EN 1044 CP 104 DIN 8513 L-Ag5P ISO 17672 CuP 281	AWS A5.8M / A5.8 EN 1044 CP 105 DIN 8513 L-Ag2P ISO 17672 CuP 279	AWS A5.8M / A5.8 EN 1044 CP 203 DIN 8513 L-CuP6 ISO 17672 CuP 179	AWS A5.8M / A5.8 EN 1044 CP 202 DIN 8513 L-Cu ISO 17672 CuP 180

PRODUCT CODE	DESCRIPTION	SIZE	PACKAGE	BULK
	0% SILVER			
FOSOP7-2.0	COPPERBRAZE-0% AG 2.0MM-SQUARE	2.0 x 500	1	-
FOSOP6-2.0-100G	COPPERBRAZE-0% AG 2.0MM-SQUARE	2.0 x 500	0.1	-
FOSOP6-2.0	COPPERBRAZE-0% AG 2.0MM-SQUARE	2.0 x 500	1	-
FOSOP6-3.0-100G	COPPERBRAZE-0% AG 3.0MM-SQUARE	3.0 x 500	0.1	-
FOSOP6-3.0	COPPERBRAZE-0% AG 3.0MM-SQUARE	3.0 x 500	1	-
	2% SILVER			
FOSILVER5-2.0	COPPERBRAZE-5% AG 2.0MM-SQUARE	2.0 x 500	1	-
FOSILVER5-3.0	COPPERBRAZE-5% AG 3.0MM-SQUARE	3.0 x 500	1	-
	5% SILVER			
FOSILVER2-2.0	COPPERBRAZE-2% AG 2.0MM-SQUARE	2.0 x 500	1	-
FOSILVER2-3.0	COPPERBRAZE-2% AG 3.0MM-SQUARE	3.0 x 500	1	-



M15

TAURUS M15 Brazing Flux is a white powdered flux with a melting point of 800°C. It is recommended for use when brazing or bronze welding mild steel, copper, brass, cast iron, and galvanised iron. For galvanised work, mix powder with water to form a paste and paint onto both sides of joint to protect heated zinc from both the flame and the atmosphere.

ALUMINIUM FLUX

TAURUS ALUMINIUM FLUX is a white powdered flux with a melting point of 570°C for use with filler rods containing 5% magnesium (5356), 5% silicon (4043) and 99% aluminium (1050). Remove all traces of the flux after welding to prevent corrosion. This flux may be mixed with water to form a paste.

SILVER SOLDER

TAURUS SILVER SOLDER FLUX is a general purpose flux used with most silver brazing alloys. The flux has an operational temperature range of 600°C to 800°C.

PRODUCT CODE	DESCRIPTION	WEIGHT	PACKAGE (UNIT)	BULK (UNIT)
FLUX002T-BR	TAURUS BRAZING FLUX M15 (500G)	500g	1	-
FLUX004T-AL	TAURUS ALUMINIUM BRAZING FLUX (250G)	250g	1	-
FLUX003T-SS	TAURUS SILVER SOLDER FLUX (250G)	250g	1	-

WELDING CONSUMABLES

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