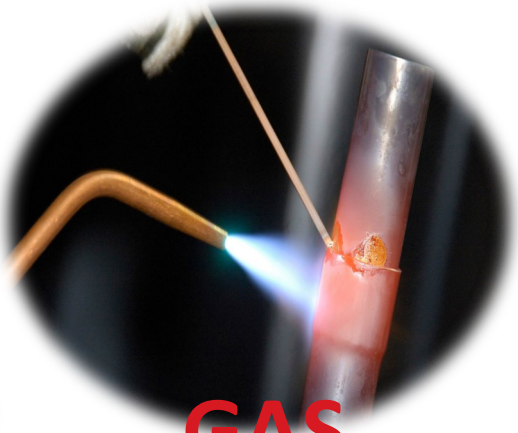
TAURUS®

MIG

TIG



GAS

ARC

WELDING CONSUMABLES

INDEX

TAURUS PRO ELECTRODE 6013

TAURUS PRO 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.

SOME FEATURES AND BENEFITS

- Excellent weldability in all positions.
- Excellent strike and restrike characteristics.
- Easy slag removal.
- Low spatter.
- Smooth weld bead appearance and 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/mm²
Tensile strength	520-560 N/mm²
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 PRO M/S ELECTRODE 6013-2.0MM-1KG PACK	2.0 x 300	1 or 20	1000	50 / 90
6013-2.60-1-E	TAURUS PRO M/S ELECTRODE 6013-2.6MM-1KG PACK	2.6 x 300	1 or 20	1000	50 / 90
6013-2.60-5-E	TAURUS PRO M/S ELECTRODE 6013-2.6MM-5KG PACK	2.6 x 300	5 or 20	1000	50 / 90
6013-3.20-1-E	TAURUS PRO M/S ELECTRODE 6013-3.2MM-1KG PACK	3.2 x 350	1 or 20	1000	90 / 130
6013-3.20-5-E	TAURUS PRO M/S ELECTRODE 6013-3.2MM-5KG PACK	3.2 x 350	5 or 20	1000	90 / 130
6013-4.00-5-E	TAURUS PRO M/S ELECTRODE 6013-4.0MM-5KG PACK	4.0 x 400	5 or 20	1000	110 / 170

TAURUS PRO ELECTRODE 7018-1 VACUUM PACKED ALUMINIUM CAN

TAURUS PRO 7018-1 are stored in a hermetically sealed vacuum packed aluminum container to keep the electrodes dry. It 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.

SOME FEATURES AND BENEFITS

- Hermetically sealed vacuum packed.
- High mechanical properties and crack resistance.
- Double coating provides very stable arc characteristics.
- Excellent weldability in all positions.
- Ready slag detachment.
- Regular weld bead appearance.

WELDING POSITIONS

• Flat • Horizontal • Vertical up • Overhead

CLASSIFICATIONS

AWS A5.1 E 7018-1 H4R
EN ISO 2560-A-E 46 4 B 12 H5

APPROVALS

Lloyd's Register

COMPOSITION	%
Carbon	0.06 %
Manganese	1.50 %
Silicon	0.30 %

MECHANICAL	AS WELDED
Yield strength	>430 N/mm²
Tensile strength	520-560 N/mm²
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)	TYPICAL CURRENT MIN/MAX
7018-1-2.60-E	TAURUS PRO LOW HYDROGEN ELECTRODE 7018-1 H4R 2.6MM (VP ALUMINIUM CAN)	2.6 x 350	2 or 20	60 / 100
7018-1-3.20-E	TAURUS PRO LOW HYDROGEN ELECTRODE 7018-1 H4R 3.2MM (VP ALUMINIUM CAN)	3.2 x 350	5 or 20	90 / 140
7018-1-4.00-E	TAURUS PRO LOW HYDROGEN ELECTRODE 7018-1 H4R 4.0MM (VP ALUMINIUM CAN)	4.0 x 400	5 or 20	140 / 190

TAURUS PRO ELECTRODE 7024

TAURUS PRO 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.

SOME FEATURES AND BENEFITS

- High recovery of approximately 160%.
- Good metallurgical properties.
- Smooth arc and consistent with very little spatter.
- Excellent strike and restriking characteristics.

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/mm²
Tensile strength	510-610 N/mm²
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
7024-3.20-E	TAURUS PRO IRON POWDER ELECTRODE 7024-3.2MM	3.2 x 350	5 or 20	1000	130 / 160
7024-4.00-E	TAURUS PRO IRON POWDER ELECTRODE 7024-4.0MM	4.0 x 400	5 or 20	1000	180 / 220

TAURUS PRO ELECTRODE 6010

TAURUS PRO 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.

SOME FEATURES AND BENEFITS

- Root-filler layers in pipeline applications.
- Extremely fast deposition rate.
- 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/mm²
Tensile strength	460 N/mm²
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 PRO PIPE ELECTRODE 6010-2.6MM	2.6 x 350	2	20	50 / 65
6010-3.20-E	TAURUS PRO PIPE ELECTRODE 6010-3.2MM	3.2 x 350	5	20	90 / 120
6010-4.00-E	TAURUS PRO PIPE ELECTRODE 6010-4.0MM	4.0 x 400	5	20	110 / 140

TAURUS PRO ELECTRODE 308L

TAURUS PRO 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.

SOME FEATURES AND BENEFITS

- Extra-low carbon, austenitic electrode .
- Welding corrosion-resistant CRNi steels.
- Resistant to atmospheric grain disintegration.
- Low spatter and smooth welding with clean weld edges.
- 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/mm²
Tensile strength	550 N/mm²
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 PRO S/S ELECTRODE 308L-2.0MM	2.0 x 300	1	20	30 / 50
308L-2.60-E	TAURUS PRO S/S ELECTRODE 308L-2.6MM	2.6 x 300	1	20	50 / 75
308L-3.20-E	TAURUS PRO S/S ELECTRODE 308L-3.2MM	3.2 x 350	1	20	75 / 110
308L-4.00-E	TAURUS PRO S/S ELECTRODE 308L-4.0MM	4.0 x 350	1	20	110 / 150

TAURUS PRO ELECTRODE 309L

TAURUS PRO 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.

SOME FEATURES AND BENEFITS

- Extra-low carbon-resistant electrode.
- Welding corrosion-resistant and heat-resistant steels.
- Suitable for welding Cr and CrNi steel to mild steel.
- Low spatter and smooth welding with clean weld edges.
- Easy slag removal.

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 nC R 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/mm²
Tensile strength	600 N/mm²
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 PRO S/S ELECTRODE 309L-2.6MM	2.6 x 300	1	20	40 / 70
309L-3.20-E	TAURUS PRO S/S ELECTRODE 309L-3.2MM	3.2 x 350	1	20	70 / 100
309L-4.00-E	TAURUS PRO S/S ELECTRODE 309L-4.0MM	4.0 x 350	1	20	110 / 140

TAURUS PRO ELECTRODE 316L

TAURUS PRO 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.

SOME FEATURES AND BENEFITS

- Extra-low carbon austenitic electrode.
- Welding corrosion resistant CrNiMo steels.
- Resistant to grain disintegration.
- Low spatter and smooth welding with clean weld edges.
- 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/mm²
Tensile strength	550 N/mm²
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 PRO S/S ELECTRODE 316L-2.0MM	2.0 x 300	1	20	30 / 50
316L-2.60-E	TAURUS PRO S/S ELECTRODE 316L-2.6MM	2.6 x 300	1	20	50 / 75
316L-3.20-E	TAURUS PRO S/S ELECTRODE 316L-3.2MM	3.2 x 350	1	20	75 / 110
316L-4.00-E	TAURUS PRO S/S ELECTRODE 316L-4.0MM	4.0 x 350	1	20	110 / 150

TAURUS PRO ELECTRODE INOX 680 (E312)

TAURUS PRO 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.

SOME FEATURES AND BENEFITS

- 25-30 % ferrite content.
- Welded metal is extremely crack resistant.
- Welding of dissimilar and difficult-to-weld steels.
- Welding of high-nickel alloys without becoming fully austenitic.

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/mm²
Tensile strength	750 N/mm²
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 PRO S/S ELECTRODE INOX 680-2.6MM (312)	2.6 x 300	1	20	50 / 75
680-3.20-E	TAURUS PRO S/S ELECTRODE INOX 680-3.2MM (312)	3.2 x 350	1	20	75 / 110
680-4.00-E	TAURUS PRO S/S ELECTRODE INOX 680-4.0MM (312)	4.0 x 350	1	20	110 / 150

TAURUS PRO ELECTRODE Ni 55

TAURUS PRO 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.

SOME FEATURES AND BENEFITS

- Designed specially for strength welding cast iron.
- Operates at low current thus facilitates cold welding.
- 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/mm²
Tensile strength	450 N/mm²
Victor hardness HV30	19 HB

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

TAURUS PRO ELECTRODE Ni 98

TAURUS PRO 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.

SOME FEATURES AND BENEFITS

- Universally used for welding all types of cast iron.
- Operates at low current thus facilitates cold welding.
- 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/mm²
Tensile strength	304 N/mm²
Victor hardness HV30	160 HV

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

TAURUS PRO ELECTRODE H600R

TAURUS PRO 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.

SOME FEATURES AND BENEFITS

- Deposited metal of approximately 55 HRc.
- 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 PRO HARD FACING ELECTRODE H600R(HRC55)-3.2MM	3.2 x 350	1	20	85 / 140
H600R-4.00-E	TAURUS PRO HARD FACING ELECTRODE H600R(HRC55)-4.0MM	4.0 x 400	1	20	100 / 170

TAURUS ELECTRODE 4043

TAURUS 4043 contains approximately 5% silicon making it an ideal general purpose aluminum electrode for arc welding aluminum alloys. The arc is stable and operates at low temperatures with minimum spatter and fuming. The welds are strong, dense, and without porosity. It is suited for production as well as maintenance applications. The TAURUS 4043 electrode is an excellent choice for welding heat-treated aluminium parts. Typical applications are arc welding aluminium alloyed with copper, silicon and manganese and is especially suited for joining dissimilar grades of aluminium. These electrodes can also be used for brazing applications and are safely packaged in tin cans.

POLARITY
- DCEP (DC Electrode Positive)

WELDING POSITIONS
- All welding positions.

SOME KEY FEATURES
- All welding positions.
- Welding aluminum and aluminum alloys.
- Operates at low temperatures with a stable arc.
- Minimal spatter and fuming.
- Can be used as torch-brazing alloy.

CLASSIFICATIONS
- AWS A5.3/A5.3M:1999 (R2007)

TYPICAL COMPOSITION	%
Silicon	4.5 - 6.0
Iron	0.8
Copper	0.3
Manganese	0.05
Magnesium	0.05

TYPICAL COMPOSITION	%
Zinc	0.1
Titanium	0.2
Beryllium	0.0008
Aluminium	Balance

PRODUCT CODE	DESCRIPTION	SIZE (MM)	PACKAGE (KG)	TYPICAL CURRENT MIN/MAX
4043-3.20-1-E	TAURUS ALUMINIUM ELECTRODE 4043-3.2MM-1KG TIN	3.2mm	1	50 / 80
4043-4.00-1-E	TAURUS ALUMINIUM ELECTRODE 4043-3.2MM-1KG TIN	4.0mm	1	70 / 120

TAURUS ELECTRODE E4047

The TAURUS 4047 aluminum welding electrode contains approximately 12% silicon making it a popular choice for welding aluminum alloys, particularly those with high silicon content.

It is known for its good fluidity and crack resistance, making it suitable for various applications in industries such as automotive, aerospace, and marine.

The TAURUS 4047 welding rod is typically used for welding aluminum to aluminum, as well as for repairing aluminium-silicon and aluminium-magnesium-silicon cast parts.

For optimum performance, during he welding process the electrode should be used perpendicular to the workpiece with a short arc length. When the workpiece thickness exceeds 10m, preheating between 150°C and 250°C should be applied.

Slag residues cause corrosion and must therefore be removed completely from the weld bead.

The Taurus 4047 electrodes are supplied in a vacuum packed tin and must be stored in a dry location. Electrodes can be redried if required before use.

SOME FEATURES AND BENEFITS

- Supplied in a vacuum packed tin.
- Approximately 12% silicon.
- Good fluidity and crack resistance.

POLARITY

• DCEP (DC Electrode Positive)

WELDING POSITIONS

• Flat • Horizontal • Vertical up

CLASSIFICATIONS

• AWS/ASME SFA-5.3:E4047
• EN ISO 18273:E Al 4047 (AlSi 12)

TYPICAL WELD DEPOSIT VALUES	%
Silicon	12%
Aluminium	87.7%
Copper	0.20 %
Chromium	0.30 %

TYPICAL MECHANICAL VALUES	AS WELDED
Yield strength (N/mm²)	80
Tensile strength (N/mm²)	200
Elongation A5(%)	8

PRODUCT CODE	DESCRIPTION	SIZE (mm)	PACKAGE (kg)	BULK (kg)	TYPICAL CURRENT MIN/MAX
4047-2.50-2-E	TAURUS ALUMINIUM ELECTRODE 4047-2.5MM-2KG TIN	2.50 x 350	2	-	50 / 80
4047-3.25-2-E	TAURUS ALUMINIUM ELECTRODE 4047-2.5MM-2KG TIN	3.25 x 350	2	-	70 / 120

TAURUS GOUGING CARBON

TAURUS gouging carbon, also known as air-carbon arc cutting, is a metal removal process utilising the heat generated by an arc between a carbon electrode and the workpiece. Compressed air, directed through outlets on the torch, lifts molten metal away from the arc, preventing it from solidifying and consequently facilitating metal removal smoothly. Common applications are for weld-metal removal, back-gouging and reshaping torn metal.

SOME FEATURES AND BENEFITS

- Cost effective.
- Safe to use.
- Provides a clean cut.

REQUIRED EQUIPMENT

- Carbon electrodes.
- Gouging torch.
- MMA welder.
- Compressed air.

PRODUCT CODE	DESCRIPTION	SIZE (mm)	PACKAGE (PCS)	TYPICAL CURRENT MIN/MAX (A)
GC-6.5-E	TAURUS GOUGING CARBON 6.5 X 305MM (NON-JOINT)	6.5 x 305	50	300 - 400
GC-8.0-E	TAURUS GOUGING CARBON 8.0 X 305MM (NON-JOINT)	8.0 x 305	50	350 - 450
GC-9.5-E	TAURUS GOUGING CARBON 9.5 X 305MM (NON-JOINT)	9.5 x 305	50	450 - 600

TAURUS MIG ER70S-6 BULK DRUM & CONE

The Taurus MIG wire drum contains premium quality solid welding wire that is pre-tensioned, resulting in little to no cast and helix when exiting. The straightness of the wire provides more accurate and consistent welds as well as tracking during welding, which is ideal for automated applications.

SOME BENEFITS AND FEATURES

- Stable arc and minimal friction with smooth wire feeding.
- Anti-tangling and anti-twist design
- Wire wound under tension allowing it to be extracted out the drum without the need to rotate it.
- Improved productivity by reduced downtime between wire changes.

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

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 (mm)	PACKAGE (kg)	BULK (kg)
1.0-M-BD-250	TAURUS BULK MIG WIRE 70S-6-1.0MM PER KG/250 KG DRUM	1.0	250	-
1.2-M-BD-250	TAURUS BULK MIG WIRE 70S-6-1.2MM PER KG/250 KG DRUM	1.2	250	-
D-CONE-250	TAURUS BULK DRUM CONE & CONNECTOR PIPE	-	-	-

TAURUS MIG ER70S-6

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.

SOME FEATURES AND BENEFITS

- Good electrical conductivity.
- Precision layer-wound premium quality wire.
- Lloyds register of shipping grade DXVud, BF, 2S, 2YS, H15.

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	-
0.9-1KG-M	TAURUS MIG WIRE 70S-6-0.9MM-1KG	0.9	1	-
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 ER70S-6 COPPER FREE BULK DRUM & CONE

The Taurus MIG wire drum contains premium quality solid welding wire that is pre-tensioned, resulting in little to no cast and helix when exiting. The straightness of the wire provides more accurate and consistent welds as well as tracking during welding, which is ideal for automated applications.

THE BENEFITS OF COPPER FREE MIG WIRE

- Less spatter.
- Less welding dust (reduced harmful fumes).
- Good arc and feed performance.
- Better strength and forming quality.
- Extended liner and contact tip life.

WELDING POSITIONS

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

CLASSIFICATIONS

AWS A5.18 ER 70s-6
EN ISO 14341 G42 2 C 1 4Si1

COMPOSITION	VALUE
Carbon	0.07 - 0.15 %
Manganese	1.4 - 1.85 %
Silicon	0.8 - 1.15 %

MECHANICAL (with CO_2)	AS WELDED
Yield strength	470 Mpa
Tensile strength	575 MPa
Elongation	29 %

PRODUCT CODE	DESCRIPTION	SIZE (mm)	PACKAGE (kg)	BULK (kg)
1.0-M-BD-250-CF	TAURUS BULK MIG WIRE 70S-6-1.0MM-250KG DRUM (COPPER FREE)	1.0	250	-
1.2-M-BD-250-CF	TAURUS BULK MIG WIRE 70S-6-1.2MM-250KG DRUM (COPPER FREE)	1.2	250	-
D-CONE-250	TAURUS BULK DRUM CONE & CONNECTOR PIPE	-	-	-

TAURUS MIG ER70S-6 - COPPER FREE

TAURUS ER70S-6 copper-free, mild steel is a premium quality MIG wire produced from high-quality de-oxidised rod. It features good feed ability, extended torch-tip life for improved productivity and good electrical conductivity and reduced friction during high-speed welding. Suitable for butt and fillet welding in all positions.

THE BENEFITS OF COPPER FREE MIG WIRE

- Less spatter.
- Less welding dust (reduced harmful fumes).
- Good arc and feed performance.
- Better strength and forming quality.
- Extended liner and contact tip life.

WELDING POSITIONS

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

CLASSIFICATIONS

AWS A5.18 ER 70s-6
EN ISO 14341 G42 2 C 1 4Si1

COMPOSITION	VALUE
Carbon	0.07 - 0.15 %
Manganese	1.4 - 1.85 %
Silicon	0.8 - 1.15 %

MECHANICAL (with CO_2)	AS WELDED
Yield strength	470 Mpa
Tensile strength	575 MPa
Elongation	29 %

PRODUCT CODE	DESCRIPTION	SIZE (mm)	PACKAGE (kg)	BULK (kg)
1.0-M-CF	TAURUS MIG WIRE 70S-6-1.0MM (COPPER FREE)	1.0	15	1080
1.2-M-CF	TAURUS MIG WIRE 70S-6-1.2MM (COPPER FREE)	1.2	15	1080

TAURUS MIG ER100S-G

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.

SOME FEATURES AND BENEFITS

- Designed specifically for low temperature, high strength applications up to 930 MPa.
- Crack Resistant.
- Excellent welding characteristics and all position welding.

WELDING POSITIONS

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

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 (mm)	PACKAGE (kg)	BULK (kg)
ER100S-G-1.0-M	TAURUS MIG ER100S-G-1.0MM HIGH TENSILE - MINERAL COATED	1.0	15	1080
ER100S-G-1.2-M	TAURUS MIG ER100S-G-1.2MM HIGH TENSILE	1.2	15	1080
ER100S-G-1.6-M	TAURUS MIG ER100S-G-1.6MM HIGH TENSILE	1.6	15	1080

TAURUS FCW13 - FLUX-CORED

The TAURUS FCW13 is a rutile type flux-cored wire suitable for use with M21 mixed gas or CO_2 shielding gas in steel construction, pipe welding, machine fabrication and ship-building. Especially when using mixed gas, welding in all positions with a wide parameter range is facilitated by the ease of controlling the weld pool and by the fast freezing of slag. It has good gap-bridging properties and low spatter and allows easy slag removal even in narrow grooves. The final result is a ripped, pore-free weld blending into the base metal without undercut.

SOME FEATURES AND BENEFITS

- Use with M21 mixed gas or CO_2.
- Easy slag removal and low spatter.
- Good gap-bridging properties.
- All position welding.

WELDING POSITIONS

• All positions

CLASSIFICATIONS

• AWS A5.20: E71T1C
• AWS A5.20: E71T1M

APPROVALS

• Det Norske Veritas
• Bureau Veritas

COMPOSITION	C1 %	M21 %
Carbon	0.06	0.06
Manganese	1.15	1.40
Silicon	0.5	0.6

MECHANICAL	AS WELDED	AS WELDED
Yield strength (N/mm²)	470	530
Tensile strength (N/mm²)	540	620
Elongation A5 (%)	28	25
Charpy V-notch Properties (J)	-20° C -100 -30° C -50	-20° C -100 -30° C -80

PRODUCT CODE	DESCRIPTION	SIZE (mm)	PACKAGE (kg)	BULK (kg)
E71T-13-1.2-FCW	TAURUS FCW 13-1.20MM	1.2	15	-

TAURUS MIG E71T-1C - FLUX-CORED

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.

SOME FEATURES AND BENEFITS

- Use with CO_2 gas.
- Increased toughness at sub zero temperatures.
- All position welding of mild and low-alloy steels .

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 - CO2 GAS	1.2	15	1080
E71T1C-1.6-FCW	TAURUS FCW E71T-1-1.6MM - CO2 GAS	1.6	15	1080

TAURUS MIG E71T-1M

TAURUS E71T is a rutile-type, mixed gas(75% argon / 25% CO_2) 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.

SOME FEATURES AND BENEFITS

- Use with mixed gas(75% argon / 25% CO_2).
- Increased toughness at sub zero temperatures.
- All position welding of mild and low-alloy steels.
- Low spatter levels and easy slag 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 MIG E71T-H4

The Taurus FCW E71T-1-1.2MM -H4 is a high-quality, high-deposition rutile flux-cored wire with an enhanced degree of fill for Argon/CO_2 gas mixtures. It is ideal for welding 355-460Mpa steels and thick steel components. The diffusible hydrogen level is consistently below 4ml/100g in deposited weld metal and since the seam of the wire is laser welded, there is no moisture pick-up. The wire is not copper coated and therefore there can be no contamination of feed liners, torches or contact tips resulting from copper flakes. It is designed for welding medium-strength steels (420MPa,61psi yield strength) using either 100% CO_2 shielding or Argon/CO_2 shielding gas mixture (15 - 25% CO_2 and balance Argon).

SOME KEY FEATURES AND BENNEFITS

- All positional welding capabilities with outstanding performance in vertical-up welding of fillet and butt welds.
- Coefficient of flux fill and current capacity designed to deliver all positional weldability.
- Savings in welding cost resulting from easy slag removal and lack of spatters. Ideal for applications in shipbuilding and steel construction.
- Designed for mixed gas and the use of 100% CO_2 is possible.

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

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

CLASSIFICATIONS

AWS A5.20: E71T-1 H4 / E71T-1M H4
EN 758: T 46 2 P C 1 H5 / T 46 2 P M 1 H5

COMPOSITION	%
Carbon	0.05
Manganese	1.2
Silicon	0.55
Sulphur	-
Phosphorous	-

MECHANICAL	AS WELDED
Yield strength (N/mm²)	≥460
Tensile strength (N/mm²)	550-650
Elongation A5 (%)	≥22
Impact Energy ISO - V (J) - 20°C	≥ 80

PRODUCT CODE	DESCRIPTION	SIZE (mm)	PACKAGE (kg)	BULK (kg)
E71T1C-1.2-FCW-H4	TAURUS FCW E71T-1-1.2MM - H4 SPEC - CO2 GAS	1.2	15	1080
E71T1C-1.6-FCW-H4	TAURUS FCW E71T-1-1.6MM - H4 SPEC - CO2 GAS	1.6	15	1080

TAURUS MIG E71T-11

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.

SOME FEATURES AND BENEFITS

- Use shielding gas required.
- Suited for butt, fillet and lap joints.
- 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	PACKAGE	BULK
E71T11-0.9-1-FCW	TAURUS GASLESS FCW E71T-11-0.9MM-1KG SPOOL	0.9	1	-
E71T11-0.9-5-FCW	TAURUS GASLESS FCW E71T-11-0.9MM-5KG SPOOL	0.9	5	-
E71T11-1.2-5-FCW	TAURUS GASLESS FCW E71T-11-1.2MM-5KG SPOOL	1.2	5	-
E71T11-1.2-FCW	TAURUS GASLESS FCW E71T-11-1.2MM	1.2	15	1080

TAURUS MIG E70C-6M

TAURUS MIG 70C-6M metal-cored wire combines the efficiency characteristics of solid wires with the advantages of high-productivity rates of flux-cored wires including low-fume generation rates, high efficiency, no slag cleaning or removal, pure-spray achievement when using 75-80% argon/balance carbon dioxide gas mixture and faster travel speeds for a given fillet size. It is well suited for applications where higher manganese and silicon levels are essential particularly in the presence of heavy mill scale, mild contaminants or when improved wetting of the weld bead is desired. Taurus E70C-6M wire excels in general purpose welding but is equally superior in higher-demanding situations such as in heavier sheet-metal fabrication, structural work, pipe welding and welding on hot-water heaters.

SOME FEATURES AND BENEFITS

- Low-fume generation, high efficiency, no slag cleaning.
- Pure-spray welding and faster travel speeds.
- Improved wetting of the weld bead.

WELDING POSITIONS

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

CLASSIFICATIONS

AWS A5.18 E70C-6M

COMPOSITION	%
Carbon	0.12
Manganese	1.75
Silicon	0.9
Sulphur	0.03
Phosphorous	0.03
Chromium	0.2
Nickel	0.5
Molybdenum	0.30
Copper	0.5

MECHANICAL PROPERTIES	AS WELDED
Tensile strength	480 MPa
Yield strength	400 MPa
Elongation	22%

PRODUCT CODE	DESCRIPTION	SIZE (mm)	PACKAGE (kg)	BULK (kg)
E70C-6M-1.2-M	TAURUS E70C-6M - METAL CORE MIG WIRE - 1.2MM	1.2	15	-

TAURUS MIG 308LSi

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.

SOME FEATURES AND BENEFITS

- Welding of stainless steels such as 301, 302, 303, 304LN.
- Good corrosion resistance.
- Improved wetting of the weld pool.

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-0.8MM-SMALL PER KG/5 KG SPOOL	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

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.

SOME FEATURES AND BENEFITS

- Welding dissimilar metals between stainless and manganese steels.
- Good corrosion resistance.
- Smooth bead appearance.
- Good welding stability.

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-0.9-SM-M	TAURUS S/S MIG WIRE 309LSI-0.9MM-SMALL PER KG/5 KG SPOOL	0.9	5	-
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 310

TAURUS MIG 310 wire has good oxidation resistance at high temperatures due to its high content of Chromium. The alloy is widely used for welding heat resistant austenitic steels of the 25% Chromium and 20% Nickel types and therefore sensitive to hot cracking. Common applications are industrial furnaces and boiler parts as well as heat exchangers.

SOME FEATURES AND BENEFITS

- Good oxidation resistance at high temperatures.
- Used for welding heat resistant austenitic steels.

WELDING POSITIONS

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

CLASSIFICATIONS

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

COMPOSITION	%
Carbon	0.10
Manganese	1.60
Silicon	0.4
Chromium	25.8
Nickel	20.7

MECHANICAL PROPERTIES	AS WELDED
Tensile strength	590 MPa
Yield strength	390 MPa
Elongation	43%

PRODUCT CODE	DESCRIPTION	SIZE	PACKAGE	BULK
310-1.2-M	TAURUS S/S MIG WIRE 310-1.2MM	1.2mm	15	-

TAURUS MIG 312

TAURUS MIG 312 wire 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.

SOME FEATURES AND BENEFITS

- Good oxidation resistance at high temperatures.
- Widely used for joining dissimilar steels.

WELDING POSITIONS

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

CLASSIFICATIONS

AWS A5.9 ER312
EN ISO 14343-A : G 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	PACKAGE	BULK
312-1.2-M	TAURUS S/S MIG WIRE 312-1.2MM	1.2mm	15	-

TAURUS MIG 316LSi

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.

SOME FEATURES AND BENEFITS

- Good resistance to pitting, acids and general corrosion.
- Improved fluidity and smooth bead appearance.

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 PER KG/5 KG SPOOL	0.8	5	-
316LSI-0.9-1KG-M	TAURUS S/S MIG WIRE 316LSI-0.9MM-1KG SPOOL	0.9	1	
316LSI-1.0-SM-M	TAURUS S/S MIG WIRE 316LSI-1.0MM-SMALL	1.0	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	-
316LSI-1.6-M	TAURUS S/S MIG WIRE 316LSI-1.6MM	1.6	15	-

TAURUS MIG 316L-T1 - FLUX-CORED WIRE

TAURUS 316L-T1 FLUX CORE STAINLESS STEEL MIG WIRE has excellent properties including good levels of strength and corrosion resistance. This makes this wire ideal for applications in industries such as food and beverages, power plant, chemical and marine/shipbuilding. Moreover, it produces beads with an attractive, polished appearance obviating the need to apply extensive post-weld brushing. Due to its low carbon content, TAURUS 316L-T1 wire offer good resistance to inter-granular corrosion.

Overall this wire has the capacity to withstand the harshest environments without compromising its weld integrity and corrosive resistance. It offers enhanced performance, results in improved productivity and gives the assurance that industry standards for quality and durability productivity are met. By following proper welding procedures and guidelines, welders can harness the advantages of the TAURUS 316L-T1 flux-core wire to achieve reliable and effective welds in various industrial sectors.

SOME KEY FEATURES

- All welding positions.
- Excellent resistance to the effects of pitting and corrosion.
- Excellent arc stability.
- Wire spatter reduced to a minimum.
- Easy flux removal and low post weld brushing.
- Polished weld-bead appearance.
- High deposition rate and welding speed.

WELDING POSITIONS

- All welding positions

CLASSIFICATIONS

AWS A5.22 E316LT1-1

TYPICAL COMPOSITION	%
Carbon	0.03
Manganese	1.4
Silicon	0.8
Chromium	19
Nickel	12
Molybdenum	2.9
Sulfur	0.008
Phosphorus	0.02

MECHANICAL PROPERTIES	AS WELDED
Tensile strength	600 Mpa
Yield strength	490 Mpa
Elongation	35%
Impact Strength	50 J
Test Temperature	-60°C

PRODUCT CODE	DESCRIPTION	SIZE (MM)	PACKAGE (KG)	BULK (KG)
316LT1-0.9-1KG-FCW-M	TAURUS S/S MIG WIRE 316LT1-0.9MM-FCW GASLESS - 1KG SPOOL	0.9mm	1	-

TAURUS MIG 316L-T0-3 - FLUX-CORED WIRE

TAURUS 316L-T0-3 FLUX CORE STAINLESS STEEL MIG WIRE has excellent properties including good levels of strength and corrosion resistance. This makes this wire ideal for applications in industries such as food and beverages, power plant, chemical and marine/shipbuilding. Moreover, it produces beads with an attractive, polished appearance obviating the need to apply extensive post-weld brushing. Due to its low carbon content, TAURUS 316L-T0-3 wire offer good resistance to inter-granular corrosion.

Overall this wire has the capacity to withstand the harshest environments without compromising its weld integrity and corrosive resistance. It offers enhanced performance, results in improved productivity and gives the assurance that industry standards for quality and durability productivity are met. By following proper welding procedures and guidelines, welders can harness the advantages of the TAURUS 316L-T0-3 flux-core wire to achieve reliable and effective welds in various industrial sectors.

SOME KEY FEATURES

- Suited for flat and horizontal welding positions.
- Excellent resistance to the effects of pitting and corrosion.
- Excellent arc stability.
- Wire spatter loss kept to a minimum.
- Easy flux removal.
- Polished weld bead appearance.
- Low post weld brushing.
- High deposition rate and welding speed.

WELDING POSITIONS

- All welding positions

CLASSIFICATIONS

AWS A5.22 E316LT0-3

TYPICAL COMPOSITION	%
Carbon	0.03
Manganese	1.4
Silicon	0.8
Chromium	19
Nickel	12
Molybdenum	2.8
Sulfur	0.008
Phosphorus	0.02

MECHANICAL PROPERTIES	AS WELDED
Tensile strength	560 Mpa
Yield strength	420 Mpa
Elongation	37%
Impact Strength	40 J
Test Temperature	-60°C

PRODUCT CODE	DESCRIPTION	SIZE (MM)	PACKAGE (KG)	BULK (KG)
316LTO-3-0.9-1KG-FCW	TAURUS GASLESS FCW S/S MIG WIRE E316LTO-3 - 0.9MM 1KG SPOOL	0.9mm	1	-
316LTO-3-0.9-5KG-FCW	TAURUS GASLESS FCW S/S MIG WIRE 316L-0.9MM 5KG SPOOL E316LTO-3	0.9mm	5	-

TAURUS MIG 2209

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.

SOME FEATURES AND BENEFITS

- Welding duplex stainless steels such as 2205 and 2304.
- Welding duplex stainless steels to carbon steel.

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 MIG 4043

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.

SOME FEATURES AND BENEFITS

- The silicon content gives improved wetting action .
- Lowers crack sensitivity.
- Used for welding and brazing alloys .

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)
4043-0.9-0.5KG-M	TAURUS ALUMINIUM MIG WIRE 4043-0.9MM-0.5KG	0.9	0.5	-
4043-0.9-2KG-M	TAURUS ALUMINIUM MIG WIRE 4043-0.9MM-2KG	0.9	2	-
4043-0.9-M	TAURUS ALUMINIUM MIG WIRE 4043-0.9MM	0.9	7	-
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	-
4043-2.4-M	TAURUS ALUMINIUM MIG WIRE 4043-2.4MM	2.4	7	-

TAURUS MIG 4047

The Taurus MIG 4047F is an aluminium alloy wire with a high silicon content of approximately 12%. The high silicon content ensures a low melting point and excellent fluidity which is ideal for brazing.

SOME FEATURES AND BENEFITS

- The Low melting point and a very narrow melting range, which is critical for brazing.
- Excellent fluidity and wettability allow the filler metal to flow easily into tight capillary joints.
- High crack resistance compared to other aluminum filler metals like 4043

APPLICATIONS

Commonly used in HVAC (Heating, Ventilation and Air Conditioning) as well as Automotive Industries.

CLASSIFICATIONS

AWS A5.10 ER4047

COMPOSITION	%
Iron	0 - 0.8
Copper	0 - 0.3
Manganese	0 - 0.15
Magnesium	0 - 0.05
Silicon	11 - 13
Zinc	0 - 0.2
Chromium	0 - 0.01

MECHANICAL PROPERTIES	VALUES
Metal melting temperature	573 - 585°C
Brazing flux melting temperature	420 - 470°C
Brazing flux mass percentage	20 - 25%

PRODUCT CODE	DESCRIPTION	SIZE (MM)	PACKAGE (KG)
4047F-0.9-FCW-0.5KG	TAURUS GASLESS FCW 4047-0.9MM-0.5KG SPOOL	0.9	0.5
4047F-1.2-FCW-0.5KG	TAURUS GASLESS FCW 4047-1.2MM-0.5KG SPOOL	1.2	0.5

TAURUS MIG 5356

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.

SOME FEATURES AND BENEFITS

- Excellent resistance to corrosion,.
- High shear strength.
- Smooth feeding and minimal spatter .

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	PACKAGE	BULK
5356-0.9-M	TAURUS ALUMINIUM MIG WIRE 5356-0.9MM	0.9	7	-
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 ALUMINIUM BRONZE

Taurus aluminium-bronze MIG wire is an intermediate-strength alloy with improved resistance to wear and brazing. It is used for aluminium-bronze plate fabrications and for dissimilar metals such as cast iron, carbon steels, copper as well as copper-nickel materials.

SOME FEATURES AND BENEFITS

- Joining dissimilar metals.
- Improved resistance to wear and brazing.

APPLICATIONS

Applications include wear-surface reconstruction, casting repair(s), general maintenance and galvanized sheet-metal fabrication when high-strength welds are required.

WELDING POSITIONS

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

CLASSIFICATIONS

AWS A5.7 ERCuAl-A2
EN ISO 24373 Cu6180 CuAl10Fe

COMPOSITION	%
Copper	Balance
Aluminium	8.5 - 11.0
Iron	0.5 - 1.5
Lead	0.02 max
Silicon	0.10 max
Zinc	0.02 max

MECHANICAL	AS WELDED
Solids-temperature	1030°C
Density	7.6kg/dm³
Elongation	0.35
Liquids-temperature	1040°C - 1090°C
Tensile strength	390-500N/mm²
Brinell hardness	140HB

PRODUCT CODE	DESCRIPTION	SIZE	PACKAGE	BULK
ERCUAL-1.2-M	TAURUS ALUMINIUM BRONZE MIG WIRE-1.2MM	1.2	15	1080

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.

SOME FEATURES AND BENEFITS

- Welding a wide range of copper alloys.
- 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	PACKAGE	BULK
ERCUSI-0.8-5KG-M	TAURUS SILICON BRONZE MIG WIRE-0.8MM-5KG SPOOL	0.8	5	-
ERCUSI-1.0-5KG-M	TAURUS SILICON BRONZE MIG WIRE-1.0MM-5KG SPOOL	1.0	5	-
ERCUSI-1.2-5KG-M	TAURUS SILICON BRONZE MIG WIRE 1.2MM-5KG SPOOL	1.2	5	-
ERCUSI-0.8-M	TAURUS SILICON BRONZE MIG WIRE-0.8MM	0.8	15	-
ERCUSI-1.0-M	TAURUS SILICON BRONZE MIG WIRE-1.0MM	1.0	15	-
ERCUSI-1.2-M	TAURUS SILICON BRONZE MIG WIRE 1.2MM	1.2	15	-

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.

SOME FEATURES AND BENEFITS

- Hard-facing deposit with high hardness of HRc 59.
- Weld metal is resistant to cracking.

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(HRC59)-1.2MM	1.2	15	1080

TAURUS MIG HRC58

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.

SOME FEATURES AND BENEFITS

- Hard-facing deposit with high hardness of HRc 58.
- Weld metal is resistant to cracking, shock and impact.

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 PRO MIG NI99

The TAURUS PRO MIG Ni99 wire is a nickel-based welding wire extensively employed to repair grey iron castings as well as for joining cast irons to mild steels and stainless steels. It can also be used for overlay and buildup. A preheat and inter-pass temperature of 175°C minimum is recommended during welding. It offers good weldability, strong, dense weld deposits and is fully machinable. Mixed shielding gas required is 75% argon/25% helium.

SOME FEATURES AND BENEFITS

- Designed to repair grey iron castings.
- Joining cast irons to mild steels and stainless steels.
- Good weldability, strong, dense weld deposits and fully machinable.

WELDING POSITIONS

• All positions

CLASSIFICATIONS

AWS A5.15 ERNi-CI

TYPICAL COMPOSITION	%
Carbon	0.038
Manganese	0.24
Silicon	0.44
Sulphur	0.009
Iron	0.010
Copper	0.02
Nickel	Balance

MECHANICAL PROPERTIES	AS WELDED
Tensile strength	530 Mpa (max)
Yield strength	344 Mpa (max)
Elongation in 2"	6 - 12%

PRODUCT CODE	DESCRIPTION	SIZE (mm)	PACKAGE (kg)	BULK (kg)
NI99-1.2-M	TAURUS PRO NICKELCAST MIG WIRE 99-1.2MM	1.2	15	-

TAURUS TIG ER70S-6

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

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	PACKAGE	BULK
308L-1.6-T	TAURUS S/S TIG ROD 308L-1.6MM	1.6 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	PACKAGE	BULK
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
309L-3.2-T	TAURUS S/S TIG ROD 309L-3.2MM	3.2 x 1000	5	20

TAURUS TIG 312L

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	PACKAGE	BULK
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 2209

The TAURUS TIG 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 TIG welding.

WELDING POSITIONS
• Downhand • Horizontal flat • Horizontal vertical
• Vertical up • Overhead

CLASSIFICATIONS
AWS A5.9 ER2209
EN ISO 14343-A : W 22 9 3 N L

COMPOSITION	%
Carbon	0.01
Manganese	1.5
Silicon	0.5
Nitrogen	0.17
Chromium	22.7
Nickel	8.5
Molybdenum	3.2
Ferrite number	55

MECHANICAL	AS WELDED
Tensile strength	765 MPa
Yield strength	600 MPa
Elongation	28 %

PRODUCT CODE	DESCRIPTION	SIZE (mm)	PACKAGE (kg)	BULK (kg)
2209-1.6-T	TAURUS S/S TIG ROD 2209-1.6MM	1.6	5	20
2209-2.4-T	TAURUS S/S TIG ROD 2209-2.4MM	2.4	5	20

TAURUS TIG 4043

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

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 deoxodised 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 preheating.

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	PACKAGE	BULK
ERCUSI-2.4-T	TAURUS SILICON BRONZE TIG ROD 2.4MM	2.4 x 1000	10	-
ERCUSI-3.2-T	TAURUS SILICON BRONZE TIG ROD 3.2MM	3.2 x 1000	10	-

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

TAURUS ZIRCONIATED TIG TUNGSTEN

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 LANTHANATED TIG TUNGSTEN

The Taurus lanthanated tungsten electrode has an excellent arc-starting characteristic, a low burn-off rate, good arc stability and excellent re-ignition characteristics and is best applied at medium to high-amperage range. These electrodes have characteristics similar to the EWCe-2 product, contain lanthanum oxide (lanthana) and are non-radioactive and therefore safe to use in almost all normal conditions and environments. However, precautions must be taken when grinding or machining electrode tips containing thorium oxide. Dust particles from such operations need to be contained in order to avoid inhalation.

APPLICATION

Lanthanated tungsten electrodes perform exceptionally well in both AC and DC current and have a low erosion rate. The electrodes are effective for welding aluminium, magnesium, copper and titanium alloys as well as low allowed steels, stainless steel and non-corroding steels.

CLASSIFICATIONS

AWS EWLa-1.5 (GOLD)
AWS EWLa-2 (BLUE)

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

MATERIAL WELDED	CURRENT
Carbon steel	DCEN
Copper	DCEN
Nickel alloys	DCEN
Stainless steel	DCEN
Titanium	DCEN
Aluminium	AC
Magnesium	AC

PRODUCT CODE	DESCRIPTION	SIZE (mm)	PACKAGE (UNITS)	BULK (UNITS)
TEL.16.LA	TAURUS LANTHANATED TUNGSTEN-1.6MM-GOLD	1.6 x 150	10	100
TEL.24.LA	TAURUS LANTHANATED TUNGSTEN-2.4MM-GOLD	2.4 x 150	10	100
TEL.32.LA	TAURUS LANTHANATED TUNGSTEN-3.2MM-GOLD	3.2 x 150	10	100
TEL.24.LB	TAURUS LANTHANATED TUNGSTEN-2.4MM-BLUE	2.4 x 150	10	100

TAURUS RARE EARTH TIG TUNGSTEN

Compound tungsten electrode is also known as three elements of rare earth, is used in a variety of applications, including welding of non-ferrous metals, stainless steel, and other alloys. Its rapid arcing and high percentage arc striking rate makes it ideal for use in welding applications where precision and efficiency are essential.

It is a non-radiation material and is good to balance the electron mobility and evaporation rates, making the tungsten electrodes to maximize its life cycle and their performance.

The multi-composite Taurus rare earth tungsten electrode offers several features that make it stand out from other welding electrodes. It is designed to complement the properties of tungsten base and rare earth oxides, resulting in excellent welding performance. It has been subjected to strict production processes and formula screening to ensure its high performance.

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

DESCRIPTION	VALUE
Model	WR
Oxide addictive content (%)	1.0 - 4.0
Impurities content (%)	< 0.20
Tungsten content	Remainder
Electric discharged power	2.45 - 3.1

PRODUCT CODE	DESCRIPTION	SIZE (mm)	PACKAGE (UNITS)	BULK (UNITS)
TEL.24.WR	TAURUS RARE EARTH TUNGSTEN-2.4MM-TURQUOISE	2.4 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 LOW TEMPERATURE FLUXCORED ALUMINIUM BRAZING

The Taurus ZN-AL02 is a flux cored zinc-aluminum brazing alloy that has a low brazing temperature with a good welding effect. It is used for brazing aluminum to aluminum, aluminum to copper and aluminum to stainless steel. The low brazing temperature makes brazing thinner material easier. Due to the flux-core there is no need for extra flux when brazing. Its main usages are in the field of heat-exchangers ,air conditioners and condensers and automotive refrigeration systems.

COMPOSITION	VALUE
Aluminium	56 - 60
Zinc	0.01 - 0.5
Flux-core content	ALCsF4

MATERIAL PROPERTIES	AS WELDED
Melting range	430 °C - 460 °C
Brazing temperature	480 °C
Tensile strength (N/MM²)	130 - 160
Elongation(%)	60
Density (g/cm³)	6.9

PRODUCT CODE	DESCRIPTION	SIZE (mm)	PACKAGE (kg)	BULK (kg)
ZNAL02-2.0	TAURUS LOW TEMP FLUXCORED ALUMINIUM BRAZING ROD 2.0MM	2.0 x 1000	5	20

TAURUS HIGH TEMPERATURE FLUXCORED ALUMINIUM BRAZING

The Taurus ZN-AL12 is a silicon-aluminum flux cored brazing alloy. It's used for brazing aluminum to aluminum, aluminum to stainless steel. This new developed brazing material can be used instead of ER4047 welding rod. Due to the fluxcore there is no need for extra flux when brazing which also reduces the need for cleaning the brazing line which can make it better for your aluminum product. Its main usages are in the field of heat-exchangers, air conditioners and condensers and automotive refrigeration systems.

CLASSIFICATIONS
AWS A5.8 BAlSi-4
EN1044 AL104
DIN 8513 L-AlSi12

CHEMICAL COMPOSITION	VALUE
Aluminium	88%
Silicon	12%
Flux-core content	K3AlF6-KAlF4

MATERIAL PROPERTIES	AS WELDED
Melting range	577°C - 582 °C
Brazing temperature	605 °C

PRODUCT CODE	DESCRIPTION	SIZE (mm)	PACKAGE (kg)	BULK (kg)
ZNAL12-2.0	TAURUS HIGH TEMP FLUXCORED ALUMINIUM BRAZING ROD 2.0MM	2.0 x 1000	5	20

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 required 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/cm³
Tensile strength	330 MPa

PRODUCT CODE	DESCRIPTION	SIZE (mm)	PACKAGE	BULK (kg)
	FLUX COATED			
SISIL20FX-6	TAURUS SILVER SOLDER-20% AG FX 1.5MM (WHITE) - 6 PIECE	1.5 x 500	6 PCS	-
SISILVER20FX1.5	TAURUS SILVER SOLDER-20% AG FX 1.5MM (WHITE)	1.5 x 500	1	-
	BARE			
SISIL20B15-6	TAURUS SILVER SOLDER-20% AG BARE 1.5MM - 6 PIECE	1.5 x 500	6 PCS	-
SISILVER20B-1.5	TAURUS 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 required 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/cm³
Tensile strength	460 MPa

PRODUCT CODE	DESCRIPTION	SIZE (mm)	PACKAGE	BULK (kg)
	FLUX COATED			
SISIL30FX-6	TAURUS SILVER SOLDER-30% AG FX 1.5MM (BLUE) - 6 PIECE	1.5 x 500	6 PCS	-
SISILVER30FX1.5	TAURUS SILVER SOLDER-30% AG FX 1.5MM (BLUE)	1.5 x 500	1	-
	BARE			
SISIL30B15-6	TAURUS SILVER SOLDER-30% AG BARE 1.5MM - 6 PIECE	1.5 x 500	6 PCS	-
SISILVER30B-1.5	TAURUS 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 required 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/cm³
Tensile strength	430 MPa

PRODUCT CODE	DESCRIPTION	SIZE (mm)	PACKAGE	BULK (kg)
	FLUX COATED			
SISIL40FX-6	TAURUS SILVER SOLDER-40% AG FX 1.5MM (YELLOW) - 6 PIECE	1.5 x 500	6 PCS	-
SISILVER40FX1.5	TAURUS SILVER SOLDER-40% AG FX 1.5MM (YELLOW)	1.5 x 500	1	-
	BARE			
SISIL40B15-6	TAURUS SILVER SOLDER-40% AG BARE 1.5MM - 6 PIECE	1.5 x 500	6 PCS	-
SISILVER40B-1.5	TAURUS 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 (mm)	PACKAGE (kg)
	0% SILVER		
FOSOP7-2.0	TAURUS COPPERBRAZE-0% AG 2.0MM-SQUARE	2.0 x 500	1
FOSOP6-2.0-100G	TAURUS COPPERBRAZE-0% AG 2.0MM-SQUARE	2.0 x 500	0.1
FOSOP6-2.0	TAURUS COPPERBRAZE-0% AG 2.0MM-SQUARE	2.0 x 500	1
FOSOP6-3.0-100G	TAURUS COPPERBRAZE-0% AG 3.0MM-SQUARE	3.0 x 500	0.1
FOSOP6-3.0	TAURUS COPPERBRAZE-0% AG 3.0MM-SQUARE	3.0 x 500	1
	2% SILVER		
FOSILVER2-2.0	TAURUS COPPERBRAZE-2% AG 2.0MM-SQUARE	2.0 x 500	1
FOSILVER2-3.0	TAURUS COPPERBRAZE-2% AG 3.0MM-SQUARE	3.0 x 500	1
	5% SILVER		
FOSILVER5-2.0	TAURUS COPPERBRAZE-5% AG 2.0MM-SQUARE	2.0 x 500	1
FOSILVER5-3.0	TAURUS COPPERBRAZE-5% AG 3.0MM-SQUARE	3.0 x 500	1

TAURUS FLUX

M15
TAURUS M15 Brazing Flux is a white powdered flux with a melting point of 800ºC. 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 570ºC 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	BULK
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

BROCHURES AVAILABLE

SAFETY EQUIPMENT FOR PPE & ONSITE

WELDING EQUIPMENT & ACCESSORIES

GAS EQUIPMENT & ACCESSORIES

PLASMA TORCH & ACCESSORIES

WELDING & PLASMA MACHINES

MIG TORCH & ACCESSORIES

TIG TORCH & ACCESSORIES

WELDING CONSUMABLES