

## SECTION 3

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### TIG & GAS RODS





## MILD STEEL WELDING RODS

### BOSS Black RG45

#### AWS A5.2 R45

This annealed rod gives free running properties & high ductility. Suitable for welding mild steel. Applications include gas welding of sheet metal & general steel repairs.

Size	Pkt	Part No.
1.6mm	5Kg	300044
2.4mm	5Kg	300045
3.2mm	5Kg	300046



### BOSS RG60

#### AWS A5.2 R60

Copper coated, low alloy steel gas rod containing balanced quantities of silicon & manganese produces welds of high strength & is suitable for welding many low alloy steels. Applications include pressure pipe lines.

Size	Pkt	Part No.
1.6mm	5Kg	300047
2.4mm	5Kg	300048



### BOSS CrMo1

#### AWS A5.28 ER80S-B2

Nominal 1.25% Cr, 0.5% Mo TIG welding filler rod used for welding Cr-Mo creep resistance steels where elevated temperatures are found in corrosive surface environments. Rod end is stamped with AWS class for easy identification.

Size	Pkt	Part No.
2.4mm	5Kg	300140
2.4mm	1Kg	300140H



### BOSS CrMo2

#### AWS A5.28 ER90S-B3

2.25% Cr, 1% Mo TIG welding filler rod used for welding of Cr-Mo & Cr-Mo-V creep resistant steels for elevated temperature & corrosive surface environments. All welding positions.

Size	Pkt	Part No.
2.4mm	5Kg	300142
2.4mm	1Kg	300142H



## MILD STEEL WELDING RODS

### BOSS 70S-2

#### AWS A5.18 ER70S-2

Copper coated low carbon steel filler rod for TIG welding. Triple deoxidised for superior weld deposit quality & resistance to porosity. Ideal for TIG welding rusty or mill scaled plates & pipes & the root pass welding of pipes, tanks & heavy walled joints. Excellent mechanical & toughness properties when in low temperature conditions.

Size	Pkt	Part No.
1.6mm	5Kg	300121
2.4mm	5Kg	300122
3.2mm	5Kg	300123



### BOSS 70S-4

#### AWS A5.18 ER70S-4

Copper coated carbon steel rod for use in the TIG welding process. Typical tensile strength 490MPa. Ideal for root pass welding of pipes. Suitable for tanks, boilers, steel structural works, earthworks & construction works.

Size	Pkt	Part No.
1.6mm	5Kg	300049
2.4mm	5Kg	300050



### BOSS 70S-6

#### AWS A5.18 ER70S-6

Low hydrogen, copper coated, low carbon steel rod for Gas TIG & Oxygen welding applications. Recommended for the welding of steel pipes, plates, tube sections, general steel repairs, construction, manufacturing & structural steel & castings with a tensile strength in the 500MPa class.

Size	Pkt	Part No.
1.6mm	5Kg	300124
2.4mm	5Kg	300125





## STAINLESS STEEL

### BOSS 308L

#### AWS A5.9 ER308L

For welding type 304L, 308L, 321 & 347. Little carbon precipitation & resistance to inter-crystalline corrosion due to low carbon content. Applications for low carbon stainless steel include chemical engineering plants, textile industries & generators.

Size	Pkt	Part No.
1.6mm	5Kg	300051
1.6mm	1Kg	300051H
2.4mm	5Kg	300052
2.4mm	1Kg	300052H
3.2mm	5Kg	300053
3.2mm	1Kg	300053H



### BOSS 309

#### AWS A5.9 ER309

For welding type 309 also for 304 clad stainless steel, stainless to mild steel & stainless steel overlay work. Deposited metal contains an adequate amount of ferrite & shows good resistance to heat cracking.

Size	Pkt	Part No.
1.6mm	5Kg	300054
1.6mm	1Kg	300054H
2.4mm	5Kg	300055
2.4mm	1Kg	300055H



### BOSS 316L

#### AWS A5.9 ER316L

316L offers excellent resistance to general corrosion from organic & inorganic acids. Metal deposits show good resistance to inter-crystalline corrosion & high temps due to low carbon content. Suitable for welding 302, 304/304L, 308, 318, 347, 410 & 430 grades of stainless steel.

Size	Pkt	Part No.
1.0mm	5Kg	300065
1.2mm	5Kg	300066
1.2mm	1Kg	300066H
1.6mm	5Kg	300067
1.6mm	1Kg	300067H
2.4mm	5Kg	300068
2.4mm	1Kg	300068H
3.2mm	5Kg	300069
3.2mm	1Kg	300069H



### BOSS 347

#### AWS A5.9 ER347

For welding corrosion resistant steels of the same type. Developed especially for welding of austenitic 18/8 weldable stainless steel, including 304L, 321, 347 & 348. Shows good resistance to inter-crystalline corrosion & high temperatures. Deposited metal contains niobium (Nb).

Size	Pkt	Part No.
1.6mm	5Kg	300071
1.6mm	1Kg	300071H
2.4mm	5Kg	300072
2.4mm	1Kg	300072H



## STAINLESS FLUX CORED

### Kobe TGX

TGX are stainless steel flux-cored rods for TIG welding without back shielding. Used for root pass to produce slag that protects reverse side bead from oxidation by the atmosphere. Using TGX flux-cored filler rods eliminates gas purging procedures.

Size	Pkt	Grade	Part No.
2.2mm	5Kg	308L	300074
2.2mm	1Kg	308L	300074H
2.2mm	5Kg	309L	300075
2.2mm	1Kg	309L	300075H
2.2mm	5Kg	316L	300076
2.2mm	1Kg	316L	300076H
2.2mm	5Kg	347	300077
2.2mm	1Kg	347	300077H



## ALUMINIUM ALLOY

### BOSS 4043

#### AWS A5.10 ER4043

5% silicon alloy TIG rod suitable for fusion welding of alloy castings, generally used in the repair of automotive parts such as cylinder heads, inlet manifolds & housings. Can also be used for defects & cast repairs.

Size	Pkt	Part No.
1.6mm	5Kg	300015
1.6mm	1Kg	300015H
2.4mm	5Kg	300016
2.4mm	1Kg	300016H
3.2mm	5Kg	300017
3.2mm	1Kg	300017H
4.8mm	5Kg	300019
4.8mm	1Kg	300019H



### BOSS 4047

#### AWS A5.10 ER4047

10% silicon content to produce higher weld shear strength & minimise hot cracking. The slightly lower melting point & higher fluidity of 4047 make it ideal for brazing operations.

Size	Pkt	Part No.
2.4mm	5Kg	300030
2.4mm	1Kg	300030H
3.2mm	5Kg	300031
3.2mm	1Kg	300031H
4.8mm	5Kg	300032
4.8mm	1Kg	300032H



### BOSS 5356

#### AWS A5.10 ER5356

5% magnesium alloy TIG rod suitable for fusion welding of 5 & 7 series alloys. Typical applications include marine, tubing, thin sheet, tanks, checker plate & general aluminium fabrication.

Size	Pkt	Part No.
1.6mm	5Kg	300008
1.6mm	1Kg	300008H
2.4mm	5Kg	300009
2.4mm	1Kg	300009H
3.2mm	5Kg	300010
3.2mm	1Kg	300010H





## COPPER & COPPER ALLOY

### BOSS Tobin Bronze Bare

**AWS A5.8 RBCuZn-A**

Low fuming rod suitable for fusion & braze welding of brass & bronzes. Also used for copper & copper alloys, & brazing to mild steel in low stress applications.

Size	Pkt	Part No.
1.6mm	5Kg	300082
1.6mm	1Kg	300082H
2.4mm	5Kg	300083
2.4mm	1Kg	300083H
3.2mm	5Kg	300084
3.2mm	1Kg	300084H



### BOSS Manganese Bronze Bare

**AWS A5.8 RBCuZn-C**

Low fuming general purpose bronze filler rod for braze welding of bronze, cast iron steel & malleable iron. Manganese bronze is the ideal maintenance rod.

Size	Pkt	Part No.
1.6mm	5Kg	300095
1.6mm	1Kg	300095H
2.4mm	5Kg	300096
2.4mm	1Kg	300096H
3.2mm	5Kg	300097
3.2mm	1Kg	300097H
5.0mm	5Kg	300098
5.0mm	1Kg	300098H



### BOSS Nickel Bronze Bare

**AWS A5.8 RBCuZn-D**

A premium quality bronze rod for maximum bond strength in braze welds on steel & cast iron & has excellent hardness & wear resisting properties. It is also excellent for fusion welding of copper-zinc alloys of similar composition & for brazing of nickel & nickel based alloys where high temperature is acceptable.

Size	Pkt	Part No.
1.6mm	5Kg	300089
1.6mm	1Kg	300089H
2.4mm	5Kg	300090
2.4mm	1Kg	300090H
3.2mm	5Kg	300091
3.2mm	1Kg	300091H



### BOSS Silicon Bronze

**AWS A5.7 RCuSi-A**

Premium quality silicon bronze filler rod gives excellent joints on copper to silicon & copper to zinc base metals & to steel. Also used in the hot water & marine industries due to its tensile strength & superior resistance to corrosion. (Cusilman 801).

Size	Pkt	Part No.
1.6mm	5Kg	300135
1.6mm	1Kg	300135H
2.4mm	5Kg	300136
2.4mm	1Kg	300136H



## COPPER & COPPER ALLOY

### BOSS Tobin Bronze Flux Coated

**AWS A5.8 RBCuZn-A**

Self fluxing filler rod. Suitable for the fusion welding of brass & bronze & braze welding of copper.

Size	Pkt	Part No.
2.4mm	5Kg	300102
2.4mm	1Kg	300102H
3.2mm	5Kg	300103
3.2mm	1Kg	300103H



### BOSS Manganese Bronze Flux Coated

**AWS A5.8 RBCuZn-C**

Low fuming self fluxing manganese bronze filler rod. Ideal for braze welding of malleable iron, steel & cast iron. Also used as a maintenance rod. Its high bond strength makes it suitable for use in a wide range of self-fluxing applications.

Size	Pkt	Part No.
2.4mm	5Kg	300112
2.4mm	1Kg	300112H
3.2mm	5Kg	300113
3.2mm	1Kg	300113H



### BOSS Nickel Bronze Flux Coated

**AWS A5.8 RBCuZn-D**

Pink self fluxing filler rod for high strength braze welding of steel & cast iron mild steel. Can also be used on build up of worn components, gear teeth, valve seats, bearings & shafts.

Size	Pkt	Part No.
2.4mm	5Kg	300108
2.4mm	1Kg	300108H
3.2mm	5Kg	300109
3.2mm	1Kg	300109H





## SILVER BRAZING ALLOYS

### 2% Silver Brazing Alloy

#### AWS A5.8-B CuP6

An alloy for brazing copper, as well as joining copper in low zinc brass with the aid of a silver flux. Extensively used in the manufacture of hot water tanks & the joining of copper tubing.

Size	Pkt	Part No.
2.4mm	1Kg	300201

### 15% Silver Brazing Alloy

#### AWS A5.8-B CuP5

A filler for brazing copper. Wide molting range for filling loose connections & to build up around finished joints. When heated above liquidus temperature will flow into tight connections. Extensively used on hot water tanks, copper tubing, plumbing or where a strong, ductile joint is required. Not recommended for brazing steel or other ferrous metals.

Size	Pkt	Part No.
1.6mm	1Kg	300204
2.0mm	1Kg	300205
2.4mm	1Kg	300206
2.4mm	6 Stk	300206H



### 5% Silver Brazing Alloy

#### AWS A5.8-B CuP3

This alloy is used for the brazing of non-ferrous metals giving a strong joint on copper, brass & bronze. Also used in the joining of copper & tubing on electrical work. Excellent capillary action.

Size	Pkt	Part No.
2.4mm	1Kg	300202
3.2mm	1Kg	300203

### 45% Silver Brazing Alloy

#### AWS A5.8 BAG-1

Good general purpose alloy with exceptional strength & narrow melting range making it ideal for production brazing & maintenance work because of its ease of application. Low melting point.

Size	Pkt	Part No.
1.6mm	1Kg	300207
1.6mm	6 Stk	300207H

### 45% Silver Brazing Alloy Flux Coated

#### AWS A5.8 BAG-1

Self fluxing very versatile having a low melting range. Ease of use due to the elimination of prefluxing joints. Ideal for joining steel, copper brass & nickel with exceptional strength.

Size	Pkt	Part No.
1.6mm	1Kg	300208
1.6mm	6 Stk	300208H



## FLUXES

### Universal Copper & Brass Flux

Universal fine granular flux that adheres well to the welding & brazing rod. For use in braze welding & brazing of copper & steel. Also used for braze welding on cast iron & fusion welding of copper, brass & bronze.

Pkt	Part No.
350g Jar	FLUX 303350
5Kg Bottle	FLUX 3035



### Silver Solder Flux

Fine paste with excellent suspension & easy to spread. For low temperature silver brazing, provides quality joints in stainless steel, copper, brass & bronzes.

Pkt	Part No.
250g Jar	FLUX 602250
500g Jar	FLUX 602500



### Soft Soldering Flux

Specially formulated for soldering stainless steel, monel & nickel & can also be used for copper, brass & tin. This flux can be used on most metals (excluding aluminium, magnesium & die cast). Commonly used in radiator repairs, plumbing & industry.

Pkt	Part No.
250g Jar	FLUX 801250





## GALVANISING ALLOY

### BOSS Galvanising Bar

A lead/tin/zinc alloy which, when applied to a heated base metal, will melt & produce a strong corrosion resistant alloy coating. Used after welding on galvanised material resulting in a zinc coating equivalent to hot dip galvanise.

Size	Pkt	Part No.
6.3mm	5Kg Pkt	300241
6.3mm	1Kg Pkt	300241H

7 Sticks per Kg.



## SOFT SOLDERS

### BOSS 50/50 Solder Sticks

Universal quality solder. Mostly used in plumbing, sheet metal, electrical & auto industries.

Size	Pkt	Part No.
8mm x 12mm	0.25Kg Stk	300249



## SOFT SOLDERS

### BOSS 50/50 Resin Core Solder

A high quality solder for general sheet metal & plumbing applications. Nominal composition: 50% tin 50% lead. Melting point 212 °C.

Size	Spl	Part No.
1.6mm	0.5Kg Spl	300247
2.4mm	0.5Kg Spl	300245
3.2mm	0.5Kg Spl	300248



### BOSS SealCore

A flux cored aluminium rod used with the gas flame process. For work on aluminium & its alloys with a silicon content less than 5%. Ideal for hobbyists, repairs & maintenance.

Size	Pkt	Part No.
3.2mm	1Kg	300035

