



Consumables

1



The extensive range of Super 6 consumables for welding and brazing covers products for joining large fabrications through to DIY use. SWP supply high quality products from manufacturers who have been validated at source and Test Certificates can be found on our website. The Super 6 range is made up of six product groups:

Aluminium

The Aluminum products are supplied for both MIG and TIG in all grades – 4043 and 5356 being the most popular.

Copper

A large range of products for use across many industries and for general repair and maintenance work.

Stainless Steel

Stainless Steel is a generic term for a range of steels that contain a minimum of 12% Chromium. Nickel and Molybdenum are added to improve corrosion resistance.

Steel

This section offers a large range of products including solid and flux cored wires as well as gasless cored wire for the DIY market.


Electrodes

The electrodes range offer two brands: Super 6 and Super Optimal. Super Optimal are manufactured by our trading partner Superon.

Gas Welding & Brazing

Our copper coated mild steel rod is suitable for all types of mild steel welding and is particularly suited to welding mild steel sheet.

ZERTIFIKAT ◆ CERTIFICATE ◆ CERTIFICADO ◆ CERTIFICAT ◆ CERTIFIKAT ◆ 認証証書 ◆ CERTIFICATE ◆ ZERTIFIKAT


Industrie Service

Certificate of conformity of the factory production control

0036 - CPR - S 128.2020.001

In compliance with Regulation 305/2011/EU of the European Parliament and of the Council of March 09th, 2011 (Construction Products Regulation - CPR), this certificate applies to the construction product

Welding consumables acc. to EN ISO 14341, EN ISO 14343, EN ISO 18273 and EN ISO 17632
for the use in metallic structures or in composite metal and concrete structures.

Produced by or for

Specialised Welding Products Ltd
Unit 1 Withins Point
Haydock WA11 9UD, UK

This certificate attests that all provisions concerning the assessment and verification of constancy of performance described in annex ZA of the harmonised standard

EN 13479:2017

under system 2+ are applied and


the factory production control fulfils all the prescribed requirements set out above.


This certificate was first issued on 07.12.2020 and will remain valid as long as the test methods and/or factory production control requirements included in the harmonised standard, used to assess the performance of the declared characteristics, do not change, and the product, and the manufacturing conditions in the plant are not modified significantly and latest on 07.12.2020.


Further information about the product parameters and description of the products are included in the annex 1 to this certificate.

Munich, December 7, 2020

Notified Body, No. 0036
(D. Zellmer)
(Leader of the Certification Body)


Deutsche
Akreditierungsstelle
D-ZU-14153-00-00


TUV SUD Industrie Service GmbH
Notified Body


EQ3056245

TUV SUD Industrie Service GmbH, Westendstr. 199, 80686 Munich, Germany

Contents

Aluminium

Mig 4043	4
Mig 4047	4
Mig 5183	5
Mig 5356	5
Tig 1050	6
Tig 4043	6
Tig 4047	7
Tig 5356	7
Tig 5183	8
Tig 5556	8

Copper

Mig C7	9
Mig C9	9
Mig C11	10
Tig C7	10
Tig C9	11
Tig C11	11

Stainless Steel

Mig 347	12
Mig 308 LSI	12
Mig 309 LSI	13
Mig 310	13
Mig 312	14
Mig 316 LSI	14
Tig 347	15
Tig 308L	15
Tig 309 L	16
Tig 310	16
Tig 312	17
Tig 316L	17

Steel

Mig SG2	18
Mig SG2 – Superpak	18
Mig SG3	19
Mig A32	19
Mig E71T-1	20
Mig Gasless Flux Cored Wire	20
Mig 600S	21
Tig A15	21
Tig A17	22
Tig A18	22
Tig A31	23
Tig A32	23

Electrodes

Tungsten Electrodes	24
E6013	25
E7018	25

Super Optimal E6013*	26
Super Optimal E7018 S*	26
Super Optimal E6010*	27
Super Optimal E7016*	27
Super Optimal E7024*	28
Cutting/Gouging*	28
Superhard 650*	29
Supercast Ultima*	29
Supercast NiFe*	30
Super Optimal E308L-17*	30
Super Optimal E309L-17*	31
Super Optimal E309 MOL-17*	31
Super Optimal E316-17*	32
Super Optimal E312-17*	32

* Superon premium products are manufactured exclusively for industrial use and are vacuum packed to deliver a moisture-free electrode.

Gas Welding & Brazing

C C M S	33
Silicon Bronze C2	33
Flux Coated Bronze C2FC	34
Bronze C2 K (Flux Impregnated)	34
Bronze MN	35
Bronze C5	35
CP C5 FC	36
CP2	36
CP3	37
CP4	37
Silver AG28	38
Silver AG14	38
Silver AG14 FC	39

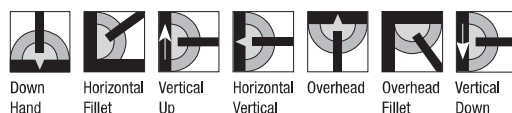
Chemicals

Pickling Pastes & Brushes	40
Polinox-P Pickling Paste	40
Flux Powder	40
Anti-Spatter Sprays	41
Water Based Anti-Spatter	41
Crack Detector/Metal Working Sprays	41
Tip Dip Anti-Spatter Paste	41

Special Alloys

In this Section

Guide to Symbols



4043

Features and Applications

- Aluminium alloy containing 5% silicon, for welding duraluminium, cast and wrought alloys
NB: Weld will discolour if anodised
- General fabrication and construction, shipbuilding, automotive industry, repair and maintenance

Standards

AWS : A5.10 ER 4043
EN ISO 18273-S AL4043 (AL SI 5)
BS 2901 4043A, (NG21)

Mechanical Properties

Melting Point °C	630
UTS N/mm ²	120
Hardness BHN	45

Chemical Composition

Al	Si
95.0	5.00

Welding Positions



Current Type

DC+

Shielding Gas

Pure Argon

Manufacturer's Approvals

Approvals on request

Product Information

0.5kg Spool		2.0kg Spool		6.0kg Spool	
Pt No.	Diameter	Pt No.	Diameter	Pt No.	Diameter
7004	0.8mm	7008	0.8mm	7012	0.8mm
7005	1.0mm	7009	1.0mm	7013	1.0mm
7006	1.2mm	7010	1.2mm	7014	1.2mm
				7015	1.6mm

4047

Features and Applications

- Excellent corrosion resistance and a low melting point which allows thin Aluminium sheet to be successfully MIG welded
NB: Weld will discolour if anodised
- Automotive, ship building and offshore, repair and maintenance
- Aluminium alloy containing 12% Silicon

Standards

AWS : A5.10 ER 4047
EN ISO 18273 S AL 4047A (AL SI 12)
BS : 2901 4047A (NG2)

Mechanical Properties

Melting Point °C	580
UTS N/mm ²	130
Hardness BHN	50

Chemical Composition

Al	Si
88.0	12.00

Welding Positions



Current Type

DC+

Shielding Gas

Pure Argon

Manufacturer's Approvals

Approvals on request

Product Information

6.0kg Spool	
Pt No.	Diameter
7018	0.8mm
7019	1.0mm
7020	1.2mm

5183

Features and Applications

- Special Aluminium alloy giving improved strength, used when high seawater corrosion resistance is required
- Shipbuilding and offshore, cryogenic plants, power generation and railway industry

Standards

AWS : A5.10 ER 5183
 EN ISO 18273 S AL 5183 (AL Mg 4.5 Mn 0.7)
 BS : 2901 5183

Mechanical Properties

Melting Point °C	640
UTS N/mm ²	270
Hardness BHN	65

Chemical Composition

Al	Mg	Mn
94.0	5.00	0.75

Welding Positions



Current Type

DC+

Shielding Gas

Pure Argon

Manufacturer's Approvals

Approvals on request

Product Information

6.0kg Spool

Pt No.	Diameter
7040	1.0mm
7041	1.2mm

5356

Features and Applications

- A general purpose Aluminium wire containing 5% magnesium, giving excellent corrosion resistance and high joint strength
- Shipbuilding and offshore, power generation, repair and maintenance and railway industry

Standards

AWS : A5.10 ER 5356
 EN ISO 18273 S AL5356 (AL Mg 5)
 BS : 2901 5356 (NG 6)

Mechanical Properties

Melting Point °C	635
UTS N/mm ²	250
Hardness BHN	65

Chemical Composition

Al	Mg
95.0	5.00

Welding Positions



Current Type

DC+

Shielding Gas

Pure Argon

Manufacturer's Approvals

Approvals on request

Product Information

0.5kg Spool		2.0kg Spool		6.0kg Spool	
Pt No.	Diameter	Pt No.	Diameter	Pt No.	Diameter
7023	0.8mm	7030	0.8mm	7034	0.8mm
7024	1.0mm	7031	1.0mm	7035	1.0mm
7025	1.2mm	7032	1.2mm	7036	1.2mm

1050

Features and Applications

- A pure Aluminium (99.5%) rod producing a ductile weld that can be stretched, drawn or hammered without fracture
- Chemical, food and electronics industries, repair and general maintenance

Standards

AWS : A5.10 ER 1100
EN ISO 18273-S AL 1070 (Al 99.7)
BS 2901 1050A (GIB)

Mechanical Properties

Melting Point °C	650
UTS N/mm ²	90
Hardness BHN	15

Chemical Composition

Al	Fe	Cu
99.5	0.40	0.10

Welding Positions



Current Type

AC

Shielding Gas

Pure Argon

Manufacturer's Approvals

Approvals on request

Product Information

2.5kg Tube

Pt No.	Diameter
7047	1.6mm
7048	2.4mm
7049	3.2mm

4043

Features and Applications

- Aluminium alloy with 5% silicon gives excellent flow and penetration. Suitable for joining duraluminium, cast and wrought alloys. NB: Weld will discolour if anodised
- Ship building, automotive and food industries, repair and maintenance

Standards

AWS : A5.10 ER 4043
EN ISO 18273 S Al 4043A (Al Si 5)
BS 2901 4043A (NG 21)

Mechanical Properties

Melting Point °C	630
UTS N/mm ²	120
Hardness BHN	45

Chemical Composition

Al	Si
95.0	5.00

Welding Positions



Current Type

AC

Shielding Gas

Pure Argon

Manufacturer's Approvals

Approvals on request

Product Information

2.5kg Tube

Pt No.	Diameter
7050	1.6mm
7051	2.4mm
7052	3.2mm

4047

Features and Applications

- Excellent corrosion resistance and low melting point
NB: Weld will discolour if anodised
- Melts at 80 °C lower than pure Aluminium, can be used as a gas brazing rod
- Automotive, shipbuilding, offshore, repair and maintenance

Standards

AWS : A5.10 ER 4047
EN ISO 18273 S AL 4047A (AL SI 12)
BS 2901 4047A (NG2)

Mechanical Properties

Melting Point °C	580
UTS N/mm ²	130
Hardness BHN	50

Chemical Composition

Al	Si
88.0	12.0

Welding Positions



Current Type

AC

Shielding Gas

Pure Argon

Manufacturer's Approvals

Approvals on request

Product Information

2.5kg Tube

Pt No.	Diameter
7054	1.6mm
7055	2.4mm
7056	3.2mm

5356

Features and Applications

- A general purpose Aluminium rod containing 5% magnesium, giving excellent corrosion resistance and high joint strength
- Shipbuilding, offshore, power generation and railway industries, repair and maintenance

Standards

AWS : A5.10 ER 5356
EN ISO 18273 S AL 5356 (AL Mg 5)
BS 2901 5356 (NG6)

Mechanical Properties

Melting Point °C	635
UTS N/mm ²	250
Hardness BHN	65

Chemical Composition

Al	Mg
95.0	5.00

Welding Positions



Current Type

AC

Shielding Gas

Pure Argon

Manufacturer's Approvals

Approvals on request

Product Information

2.5kg Tube

Pt No.	Diameter
7057	1.6mm
7058	2.4mm
7059	3.2mm

5183

Features and Applications

- Special Aluminium alloy giving improved strength
- Used when high seawater corrosion resistance is required
- Shipbuilding, offshore, power generation, cryogenic plants and railway industries

Standards

AWS : A5.10 ER 5183
EN ISO 18273 AL 5183 (AL Mg 4.5 Mn 0.7)
BS 2901 5183

Mechanical Properties

Melting Point °C	640
UTS N/mm ²	300
Hardness BHN	65

Chemical Composition

Al	Mg	Mn
94.0	5.00	0.75

Welding Positions



Current Type

AC

Shielding Gas

Pure Argon

Manufacturer's Approvals

Approvals on request

Product Information

2.5kg Tube

Pt No.	Diameter
7060	1.6mm
7061	2.4mm
7062	3.2mm

5556

Features and Applications

- Aluminium alloy containing 5.3% Magnesium
- All elements closely controlled for optimum weld strength
- Military industry, power generation, railway industry, shipbuilding and offshore

Standards

AWS : A5.10 ER 5556
EN ISO 18273 S AL 5556A (Al Mg5 Mn)
BS 2901 5556

Mechanical Properties

Melting Point °C	640
UTS N/mm ²	300
Hardness BHN	70

Chemical Composition

Al	Mg	Mn	Cr	Ti
93.0	5.30	0.80	0.10	0.01

Welding Positions



Current Type

AC

Shielding Gas

Pure Argon

Manufacturer's Approvals

Approvals on request

Product Information

2.5kg Tube

Pt No.	Diameter
7063	1.6mm
7064	2.4mm
7065	3.2mm

C7

Features and Applications

- High quality wire containing a minimum of 98.5% copper with deoxidizing elements suitable for joining oxygen free copper and copper materials subject to high strain
- Copper boilers, brewing industry, power generation

Standards

AWS : A5.7 ER Cu
EN 24373 Cu1898 (Cu Sn1)
BS 2901 C7

Mechanical Properties

Melting Point °C	1050
UTS N/mm ²	220
Hardness BHN	70

Chemical Composition

Cu	Mn	Si
99.5	0.25	0.25

Welding Positions



Current Type

DC+

Shielding Gas

Pure Argon

Manufacturer's Approvals

Approvals on request

Product Information

12.5kg Spool

Pt No.	Diameter
7120	0.8mm
7121	1.0mm
7122	1.2mm

C9

Features and Applications

- Ideal for fusion welding materials of similar composition eg copper alloy (brass). Frequently used in artistic foundries where good colour match is required, also for MIG brazing zinc coated steel sheets in the automotive industry
- Zinc coated steel sheets in the automotive industry (Boron steel)

Standards

AWS : A5.7 ER Cu Si - A
EN 24373 Cu 6560 (Cu Si3 Mn1)
BS 2901 C9

Mechanical Properties

Melting Point °C	980
UTS N/mm ²	350
Hardness BHN	90

Chemical Composition

Cu	Mn	Si
96.0	1.00	3.00

Welding Positions



Current Type

DC+

Shielding Gas

Pure Argon

Manufacturer's Approvals

Approvals on request

Product Information

4.0kg Spool		12.5kg Spool	
Pt No.	Diameter	Pt No.	Diameter
7126	0.8mm	7129	0.8mm
7127	1.0mm	7130	1.0mm
7128	1.2mm	7131	1.2mm

C11

Features and Applications

- A phosphor bronze wire containing 7% tin suitable for fusion welding, bronze castings, cast iron and copper alloys. Also recommended for brazing ferrous and dissimilar metal joints
- Ship building, process industry, repair and maintenance and artistic foundries

Standards

AWS : A5.7 ER Cu Sn – C
EN 24373 Cu5180 (Cu Sn 6P)
BS 2901 C11

Mechanical Properties

Melting Point °C	930
UTS N/mm ²	260
Hardness BHN	80

Chemical Composition

Cu	Sn
93.0	7.00

Welding Positions



Current Type

DC+

Shielding Gas

Pure Argon

Manufacturer's Approvals

Approvals on request

Product Information

4.0kg Spool	12.5kg Spool		
Pt No.	Diameter	Pt No.	Diameter
7104	1.0mm	7106	0.8mm
7105	1.2mm	7107	1.0mm
		7108	1.2mm

C7

Features and Applications

- High quality rod containing a minimum of 98.5% copper with deoxidizing elements suitable for joining oxygen free copper and copper materials subject to high strain
- Copper boilers, brewing industry and power generation

Standards

AWS : A5.7 ER Cu
EN 24373 Cu 1898 (Cu Sn1)
BS 2901 C7

Mechanical Properties

Melting Point °C	1025
UTS N/mm ²	220
Hardness BHN	70

Chemical Composition

Cu	Si	Mn
99.5	0.25	0.25

Welding Positions



Current Type

DC-

Shielding Gas

Pure Argon

Manufacturer's Approvals

Approvals on request

Product Information

5.0kg Tube	
Pt No.	Diameter
7158	1.6mm
7159	2.4mm
7160	3.2mm

C9

Features and Applications

- Ideal for fusion welding materials of similar composition eg copper alloy (brass). Frequently used in artistic foundries where good colour match is required, also TIG brazing ferrous and dissimilar materials
- Artistic foundries, automotive industry, repair and maintenance

Standards

AWS : A5.7 ER Cu Si - A
 EN 24373 Cu 6560 (Cu Si 3 Mn 1)
 BS 2901 C9

Mechanical Properties

Melting Point °C	980
UTS N/mm ²	350
Hardness BHN	90

Chemical Composition

Cu	Si	Mn
96.0	3.00	1.00

Welding Positions



Current Type

DC-

Shielding Gas

Pure Argon

Manufacturer's Approvals

Approvals on request

Product Information

5.0kg Tube

Pt No.	Diameter
7154	1.6mm
7155	2.4mm
7156	3.2mm

C11

Features and Applications

- Phosphor bronze rod containing 7% tin, produced for fusion welding phosphor bronze castings where a good colour match is required and for building up worn bearing surfaces. Also ideal for TIG brazing and welding dissimilar joints
- Shipbuilding, processing industry, artistic foundries

Standards

AWS : A5.7 ER Cu Sn - C
 EN 24373 Cu5180 (Cu Sn 6P)
 BS 2901 C11

Mechanical Properties

Melting Point °C	930
UTS N/mm ²	260
Hardness BHN	80

Chemical Composition

Cu	Sn
93.0	7.00

Welding Positions



Current Type

DC-

Shielding Gas

Pure Argon

Manufacturer's Approvals

Approvals on request

Product Information

5.0kg Tube

Pt No.	Diameter
7140	1.6mm
7141	2.4mm
7142	3.2mm

347

Features and Applications

- Niobium stabilized stainless steel wire prevents weld decay and offers excellent corrosion resistance. Suitable for use on 18/8 type stainless steel and where the weld is subjected to temperatures above 400 °C
- Chemical, food and power generation industries

Standards

AWS : 5.9 ER 347
EN ISO 14343 : 19 9NbSi
BS 2901 347 S96

Mechanical Properties

Melting Point °C	1440
UTS N/mm ²	650
Hardness BHN	180

Chemical Composition

C	Si	Mn	Ni	Cr	Nb
0.04	0.80	1.50	10.0	20.0	0.60

Welding Positions



Current Type

DC+

Shielding Gas

Pure Argon

Manufacturer's Approvals

Approvals on request

Product Information

15.0kg Spool

Pt No.	Diameter
7180	0.8mm
7181	1.0mm

308 LSI

Features and Applications

- For welding 18/8 (304) austenitic stainless steels providing good corrosion and wear resistance
- Chemical, food and power generation industries

Standards

AWS : 5.9 ER 308 LSI
EN ISO 14343 : 19 9 LSI
BS 2901 308 S 93

Mechanical Properties

Melting Point °C	1440
UTS N/mm ²	640
Hardness BHN	180

Chemical Composition

C	Si	Mn	Ni	Cr
0.02	0.80	1.50	10.0	21.0

Welding Positions



Current Type

DC+

Shielding Gas

Pure Argon

Manufacturer's Approvals

Approvals on request

Product Information

0.7kg Spool		5.0kg Spool		15.0kg Spool	
Pt No.	Diameter	Pt No.	Diameter	Pt No.	Diameter
7183	0.6mm	7186	0.6mm	7190	0.8mm
7184	0.8mm	7187	0.8mm	7191	1.0mm
7185	1.0mm	7188	1.0mm	7192	1.2mm
		7189	1.2mm		

309 LSI

Features and Applications

- Stainless steel wire ideal for joining material of similar composition and also dissimilar stainless steel
- Chemical, power generation, repair and maintenance

Standards

AWS : 5.9 ER 309LSI
EN ISO 14343 : 23 12 LSI
BS 2901 309 S93

Mechanical Properties

Melting Point °C	1440
UTS N/mm ²	650
Hardness BHN	180

Chemical Composition

C	Si	Mn	Ni	Cr
0.10	0.40	1.50	13.0	26.0

Welding Positions



Current Type

DC+

Shielding Gas

Pure Argon

Manufacturer's Approvals

Approvals on request

Product Information

5.0kg Spool		15.0kg Spool	
Pt No.	Diameter	Pt No.	Diameter
7193	0.8mm	7195	0.8mm
7194	1.0mm	7196	1.0mm
		7197	1.2mm

310

Features and Applications

- Chromium/Nickel welding wire for welding heat-resistant austenitic steels of the 25Cr/20Ni type
- Chemical industry, power generation

Standards

AWS : A5.9 ER 310
EN ISO 14343 : A 25 20

Mechanical Properties

Melting Point °C	1440
UTS N/mm ²	590
Hardness BHN	200

Chemical Composition

C	Mn	Ni	Cr
0.01	1.80	21.0	26.0

Welding Positions



Current Type

DC+

Shielding Gas

Pure Argon

Manufacturer's Approvals

Approvals on request

Product Information

15.0kg Spool	
Pt No.	Diameter
7175	0.8mm
7176	1.0mm
7177	1.2mm

312

Features and Applications

- A 29 – 9 stainless steel suitable for joining difficult to weld steels such as tool and spring steel. Also for dissimilar materials and has a high resistance to weld metal cracking
- Repairs to tool/spring/manganese/high speed and cast steels Recommended for repairs to dies and moulds

Standards

AWS : 5.9 ER 312
EN ISO 14343 : 29 9
BS 2901 312 S94

Mechanical Properties

Melting Point °C	1440
UTS N/mm ²	750
Hardness BHN	200

Chemical Composition

C	Si	Mn	Ni	Cr	Mo
0.10	0.40	1.70	9.00	30.0	0.10

Welding Positions



Current Type

DC+

Shielding Gas

Pure Argon

Manufacturer's Approvals

Approvals on request

Product Information

5.0kg Spool	15.0kg Spool
Pt No. Diameter	Pt No. Diameter
7208 0.8mm	7210 0.8mm
7209 1.0mm	7211 1.0mm

316 LSI

Features and Applications

- A molybdenum bearing stainless steel with low carbon content. It is corrosion resistant for welding molybdenum bearing austenitic stainless steel
- Power generation, chemical, food industries

Standards

AWS : 5.9 ER 316 LSI
EN ISO 14343 : 19 12 3 LSI
BS 2901 316 S93

Mechanical Properties

Melting Point °C	1440
UTS N/mm ²	650
Hardness BHN	180

Chemical Composition

C	Si	Mn	Ni	Cr	Mo
0.02	0.80	1.50	12.0	19.0	2.00

Welding Positions



Current Type

DC+

Shielding Gas

Pure Argon

Manufacturer's Approvals

Approvals on request

Product Information

0.7kg Spool	5.0kg Spool	15.0kg Spool
Pt No. Diameter	Pt No. Diameter	Pt No. Diameter
7198 0.6mm	7201 0.6mm	7204 0.6mm*
7199 0.8mm	7202 0.8mm	7205 0.8mm
7200 1.0mm	7203 1.0mm	7206 1.0mm
		7207 1.2mm

*Supplied on 12.5kg spool

347

Features and Applications

- Niobium stabilised stainless steel rod prevents weld decay and offers excellent corrosion resistance. Suitable for use on 18/8 type stainless steel and where the weld is subjected to temperatures above 400°C
- Chemical, food and power generation industries

Standards

AWS : 5.9 ER 347
EN ISO 14343 : 19 9 Nb
BS 2901 347 S96

Mechanical Properties

Melting Point °C	1440
UTS N/mm ²	650
Hardness BHN	180

Chemical Composition

C	Si	Mn	Ni	Cr	Nb
0.04	0.40	1.50	10.0	20.0	0.60

Welding Positions



Current Type

DC-

Shielding Gas

Pure Argon

Manufacturer's Approvals

Approvals on request

Product Information

5.0kg Tube

Pt No.	Diameter
7213	1.2mm
7214	1.6mm
7215	2.4mm

308 L

Features and Applications

- Suitable for joining 18/8 (304) austenitic stainless steels providing good corrosion and wear resistance
- Chemical, food and power generation industries

Standards

AWS : 5.9 308L
EN ISO 14343 :19 9L
BS 2901 308 S92

Mechanical Properties

Melting Point °C	1440
UTS N/mm ²	640
Hardness BHN	180

Chemical Composition

C	Si	Mn	Ni	Cr
0.02	0.40	1.50	10.0	21.0

Welding Positions



Current Type

DC-

Shielding Gas

Pure Argon

Manufacturer's Approvals

Approvals on request

Product Information

5.0kg Tube

Pt No.	Diameter
7216	1.6mm
7217	2.4mm
7218	3.2mm

309 L

Features and Applications

- Stainless steel rod containing higher amounts of chromium and nickel. Can be used for joining material of similar composition and dissimilar stainless steels
- Chemical, power generation, repair and maintenance

Standards

AWS : 5.9 ER 309 L
EN ISO 14343 – A W23 12L

Mechanical Properties

Melting Point °C	1440
UTS N/mm ²	650
Hardness BHN	180

Chemical Composition

C	Si	Mn	Ni	Cr
0.10	0.40	1.50	13.0	26.0

Welding Positions



Current Type

DC-

Shielding Gas

Pure Argon

Manufacturer's Approvals

Approvals on request

Product Information

5.0kg Tube

Pt No. Diameter

7219 1.6mm

7220 2.4mm

7221 3.2mm

310

Features and Applications

- Chromium/Nickel welding wire for welding heat-resistant austenitic steels of the 25Cr/20Ni type
- Chemical industry, power generation

Standards

AWS : A5.9 ER 310
EN ISO 14343 : A 25 20

Mechanical Properties

Melting Point °C	1440
UTS N/mm ²	590
Hardness BHN	200

Chemical Composition

C	Mn	Ni	Cr
0.01	1.80	21.0	26.0

Welding Positions



Current Type

DC-

Shielding Gas

Pure Argon

Manufacturer's Approvals

Approvals on request

Product Information

5.0kg Tube

Pt No. Diameter

7229 1.6mm

7230 2.4mm

7231 3.2mm

312

Features and Applications

- A 29-9 stainless steel rod suitable for joining difficult to weld steel such as tool, spring steel and dissimilar materials and has a high resistance to weld metal cracking
- Repairs to tool/spring/manganese/high speed and cast steels
Also recommended for repairs to dies and moulds

Standards

AWS : 5.9 ER 312
EN ISO 14343 : 29-9
BS 2901 312 S94

Mechanical Properties

Melting Point °C	1440
UTS N/mm ²	750
Hardness BHN	200

Chemical Composition

C	Si	Mn	Ni	Cr	Mo
0.10	0.40	1.70	9.00	30.0	0.10

Welding Positions



Current Type

DC-

Shielding Gas

Pure Argon

Manufacturer's Approvals

Approvals on request

Product Information

5.0kg Tube

Pt No.	Diameter
7227	1.6mm
7228	2.4mm

316 L

Features and Applications

- A molybdenum bearing stainless steel rod with low carbon content. It is corrosion resistant for joining molybdenum bearing austenitic stainless steel
- Nuclear, chemical and food industries

Standards

AWS : 5.9 ER 316L
EN ISO 14343 : 19123L
BS 2901 316 S92

Mechanical Properties

Melting Point °C	1440
UTS N/mm ²	650
Hardness BHN	180

Chemical Composition

C	Si	Mn	Ni	Cr	Mo
0.02	0.40	1.50	12.0	19.0	2.00

Welding Positions



Current Type

DC-

Shielding Gas

Pure Argon

Manufacturer's Approvals

Approvals on request

Product Information

5.0kg Tube

Pt No.	Diameter
7222	1.0mm
7223	1.2mm
7224	1.6mm
7225	2.4mm
7226	3.2mm

SG2

Features and Applications

- A copper coated mild steel MIG wire for welding mild and medium tensile steels
- General construction, shipbuilding and automotive industries

Standards

AWS : A5.18 ER70 S-6
BS : 2901 : A18
EN ISO 14341-A-G 42 4 C1/M21 3Si1
EN 10204 : 3.1

Mechanical Properties

Melting Point °C	1450
UTS N/mm ²	500
Hardness BHN	120

Chemical Composition

C	Si	Mn
0.10	0.80	1.30

Welding Positions



Current Type

DC+

Shielding Gas

Argon / CO₂ mix

Manufacturer's Approvals

Approvals on request

Product Information

0.7kg Spool		5.0kg Spool		15.0kg Spool	
Pt No.	Diameter	Pt No.	Diameter	Pt No.	Diameter
7300	0.6mm	7303	0.6mm	7306	0.6mm
7301	0.8mm	7304	0.8mm	7307	0.8mm
7302	1.0mm	7305	1.0mm	7308	1.0mm
				7309	1.2mm
				7310	1.6mm

SG2 – SuperPAK

Features and Applications

- A copper coated mild steel MIG wire for welding mild and medium tensile steels
- General construction, shipbuilding and automotive industries

Standards

AWS : A5.18 ER70 S-6
BS : 2901 : A18
EN ISO 14341-A-G 42 4 C1/M21 3Si1
EN 10204 : 3.1

Mechanical Properties

Melting Point °C	1450
UTS N/mm ²	500
Hardness BHN	120

Chemical Composition

C	Si	Mn
0.10	0.80	1.30

Welding Positions



Current Type

DC+

Shielding Gas

Argon / CO₂ mix

Manufacturer's Approvals

Approvals on request

Product Information

250kg Drum	
Pt No.	Diameter
7312	0.8mm
7313	1.0mm
7314	1.2mm



SG3

Features and Applications

- A copper coated steel Mig wire with increased silicon and manganese for improved UTS
- General fabrication, shipbuilding, power generation

Standards

AWS : A5.18 ER70 S – 6
 EN ISO 636 – A W4 Si1
 EN ISO 14341-A-G 46 4 M21/42 4 C1 4Si1
 EN 10204 : 3.1

Mechanical Properties

Melting Point °C	1450
UTS N/mm ²	600
Hardness BHN	120

Chemical Composition

C	Si	Mn
0.10	1.00	1.75

Welding Positions



Current Type

DC+

Shielding Gas

Argon / CO₂ mix

Manufacturer's Approvals

Approvals on request

Product Information

15.0kg Spool

Pt No.	Diameter
7320	0.8mm
7321	1.0mm
7322	1.2mm

A32

Features and Applications

- A copper coated alloy steel wire containing 1.0% chromium and 0.5% molybdenum for welding low alloy and creep resistant steels
- Shipbuilding, offshore, chemical and power generation industries

Standards

BS 2901 A32

Mechanical Properties

Melting Point °C	1450
UTS N/mm ²	500
Hardness BHN	180

Chemical Composition

C	Si	Mn	Cr	Mo
0.10	0.60	1.00	1.30	0.50

Welding Positions



Current Type

DC+

Shielding Gas

Argon / CO₂ mix

Manufacturer's Approvals

Approvals on request

Product Information

15.0kg Spool

Pt No.	Diameter
7329	1.0mm
7330	1.2mm

E71T-1

Features and Applications

- A rutile flux cored wire for welding structures fabricated in mild steel and low alloyed structural steel in all positions
- Shipbuilding, offshore and general fabrications

Standards

AWS : E 71 T-1
EN ISO 17632-A-T 42 4 R C/M 2 H10

Mechanical Properties

Melting Point °C	1450
UTS N/mm ²	510
Hardness BHN	120

Chemical Composition

C	Si	Mn
0.05	0.60	1.30

Welding Positions



Current Type

DC+

Shielding Gas

Argon / CO₂ mix

Manufacturer's Approvals

Approvals on request

Product Information

15.0kg Spool

Pt No.	Diameter
7332	1.2mm

Gasless Flux Cored Wire

Features and Applications

- Self shielding steel MIG wire. Ideal for DIY use
- Automotive repair, general repair and maintenance

Standards

AWS : E71T – GS

Mechanical Properties

Melting Point °C	1450
UTS N/mm ²	400
Hardness BHN	120

Chemical Composition

C	Si	Mn	Al
0.25	0.40	0.70	2.40

Welding Positions



Current Type

AC/DC+

Shielding Gas

None required

Manufacturer's Approvals

Approvals on request

Product Information

0.45kg Spool		1.0kg Spool		4.5kg Spool	
Pt No.	Diameter	Pt No.	Diameter	Pt No.	Diameter
7335	0.8mm	7337	0.8mm	7338	0.8mm
7336	0.9mm			7339	0.9mm

600S

Features and Applications

- Solid hard facing MIG wire for high wear resistance
- Agricultural, earth moving and stone crushing industries

Standards

Din 8555 : MSG 6 – GZ – 60

Mechanical Properties

Melting Point °C	1450
Hardness BHN	580/650

Chemical Composition

C	Si	Mn	Cr
0.45	3.00	0.40	9.00

Welding Positions



Current Type

DC+

Shielding Gas

Argon / CO₂ mix

Manufacturer's Approvals

Approvals on request

Product Information

15.0kg Spool

Pt No. Diameter

7345 1.0mm

7346 1.2mm

A15

Features and Applications

- A copper coated mild steel rod with a high level of deoxidants (triple deoxidised) to enable sound porosity free welds to be made on mild and low alloy steels
- General fabrication, power generation and chemical industries

Standards

AWS : ER 70S-2
EN 1668 W2 Ti
BS 2901 A15

Mechanical Properties

Melting Point °C	1450
UTS N/mm ²	440
Hardness BHN	120

Chemical Composition

C	Si	Mn	Al
0.06	0.60	1.30	0.10

Welding Positions



Current Type

DC-

Shielding Gas

Pure Argon

Manufacturer's Approvals

Approvals on request

Product Information

5.0kg Tube

Pt No. Diameter

7350 1.0mm

7351 1.2mm

7352 1.6mm

7353 2.4mm

7354 3.2mm

A17

Features and Applications

- A low carbon double deoxidised rod for TIG welding mild steel
- General fabrication and shipbuilding

Standards

BS 2901 A17

Mechanical Properties

Melting Point °C	1450
UTS N/mm ²	400
Hardness BHN	120

Chemical Composition

C	Si	Mn
0.10	0.30	1.00

Welding Positions



Current Type

DC-

Shielding Gas

Pure Argon

Manufacturer's Approvals

Approvals on Approvals on request

Product Information

5.0kg Tube

Pt No.	Diameter
7356	1.6mm
7357	2.4mm

A18

Features and Applications

- Copper coated deoxidised steel rod for TIG welding mild steel
- General fabrication and ship building

Standards

AWS : ER 70S – 6
BS 2901 A18

Mechanical Properties

Melting Point °C	1450
UTS N/mm ²	400
Hardness BHN	120

Chemical Composition

C	Si	Mn
0.10	1.00	1.30

Welding Positions



Current Type

DC-

Shielding Gas

Pure Argon

Manufacturer's Approvals

Approvals on request

Product Information

5.0kg Tube

Pt No.	Diameter
7360	1.0mm
7361	1.2mm
7362	1.6mm
7363	2.4mm
7364	3.2mm

A31

Features and Applications

- A copper coated alloy steel rod containing 0.5% molybdenum. Suitable for use on low temperature pressure vessel and pipe work applications
- Shipbuilding, offshore, chemical and power generation industries

Standards

AWS : ER 80S – D2
BS 2901 A31

Mechanical Properties

Melting Point °C	1450
UTS N/mm ²	450
Hardness BHN	180

Chemical Composition

C	Si	Mn	Mo
0.10	0.70	1.80	0.50

Welding Positions



Current Type

DC-

Shielding Gas

Pure Argon

Manufacturer's Approvals

Approvals on request

Product Information

5.0kg Tube

Pt No. Diameter

7366 1.6mm

7367 2.4mm

A32

Features and Applications

- A copper coated alloy steel rod containing 1.0% chromium and 0.5% molybdenum for welding low alloy and creep resistant steels
- Shipbuilding, offshore, chemical, power generation industries

Standards

AWS : ER 80S – B2
BS 2901 A32

Mechanical Properties

Melting Point °C	1450
UTS N/mm ²	460
Hardness BHN	180

Chemical Composition

C	Si	Mn	Cr	Mo
0.10	0.55	1.00	1.30	0.5

Welding Positions



Current Type

DC-

Shielding Gas

Pure Argon

Manufacturer's Approvals

Approvals on request

Product Information

5.0kg Tube

Pt No. Diameter

7370 1.6mm

7371 2.4mm

7372 3.2mm

Tungsten Electrodes

Applications

Tungsten	Material	Current
Ceriated	Any Material	AC-DC
Thoriated	Stainless or Mild Steel	DC
Zirconiated	Aluminium & Alloys	AC
Lanthanated	Any Material	AC-DC
Multi-Type	Any Material	AC-DC
Pure	Aluminium & Magnesium	AC
E3 Rare Earth	Any Material	AC-DC
WR	Any Material	AC-DC

Standards

EN26848



Electrode Diameter (mm)	2% Thoriated Red Part No.	0.8% Zirconiated White Part No.	2% Ceriated Grey Part No.	1% Lanthanated Black Part No.	Multi-type Gold Part No.	Pure Tungsten Green Part No.	E3 Rare Earth Purple Part No.	WR02 Tungsten Turquoise Part No.	2% Lanthanated Blue Part No.	Pack Qty
1.0	1104	1121	1094	1132	1560	1895	–	1894	1155	10
1.2	1105	1123	1095	1142	1561	–	–	–	–	10
1.6	1106	1111	1097	1170	1562	1933	1990	1994	1156	10
2.0	1117	1124	1096	1143	1149	1932	1991	1995	1159	10
2.4	1107	1112	1098	1171	1563	1934	1992	1996	1157	10
3.2	1108	1113	1099	1172	1564	1935	1993	1997	1158	10
4.0	1109	1114	1100	1173	1565	1936	–	–	–	10
4.8	1110	1115	1101	1174	1566	–	–	–	–	5
6.4	1118	1116	1102	1175	1567	–	–	–	–	5

E6013

Features and Applications

- Rutile cellulosic coated electrode for welding in all positions, especially suitable for where one single type of electrode is required
- Ship building, offshore, General fabrication, repair and maintenance

Standards

AWS : E 6013
 EN ISO 2560 : E420 RC11
 EN 1024 : 3.1

Mechanical Properties

Yield Strength N/mm ²	410-450
Tensile Strength N/mm ²	460-510
Elongation %	24-28

Chemical Composition

C	Si	Mn
0.12	0.40	0.60

Welding Positions



Current Type

AC/DC+

Arc Voltage

42V

Manufacturer's Approvals

Approvals on request

Product Information

5.0kg & 1.0kg Pack / 20.0kg Carton & 2.5kg Pack / 15.0kg Carton

5.0kg	2.5kg	1.0kg	Diameter	Length	Current
7400			2.0mm	300mm	45-80
7401	4500	7397	2.5mm	350mm	60-110
7402	4501	7398	3.2mm	350mm	100-140
7403	4502	7399	4.0mm	400mm	140-180
7404			5.0mm	400mm	130-220

E7018

Features and Applications

- Universal basic coated low hydrogen electrode for applications where high demands on impact value (even at low temperatures) are required. Excellent welding characteristics in all positions (except vertically downward)
- Ship building, offshore gas and oil industries, power generation

Standards

AWS : E7018
 EN ISO 2560 : E42 5 B 32H5

Mechanical Properties

Yield Strength N/mm ²	460-490
Tensile Strength N/mm ²	560
Elongation %	25-30

Chemical Composition

C	Si	Mn
0.05	0.55	1.00

Welding Positions



Current Type

AC/DC+

Arc Voltage

65V

Manufacturer's Approvals

Approvals on request

Product Information

5.0kg Pack / 20.0kg Carton (Sold by Carton)

Part No.	Diameter	Length	Current
7408	2.5mm	350mm	80-100
7409	3.2mm	350mm	100-140
7410	4.0mm	400mm	130-190
7411	5.0mm	400mm	190-240

Super Optimal 6013

Features and Applications

- Rutile type medium coated electrode, used for the welding of large structures and process pipe work in the shipbuilding and construction industries where precise fit-ups are difficult to achieve. SUPER OPTIMAL 6013 is a superior quality electrode designed to give high impact toughness properties.

Standards

AWS A5.1: E6013
EN ISO 2560-A: E38 0 R 12

Mechanical Properties

Yield Strength N/mm ²	≥380
Tensile Strength N/mm ²	470-540
Elongation %	≥24

Chemical Composition

C	Si	Mn	P	S
0.07	0.20	0.50	0.03	0.03

Welding Positions



Current Type

AC/DC (±)

Manufacturer's Approvals

Approvals on request

Product Information

5.0kg Vaccum Inner Pack / 20.0kg Master Pack

Part No.	Diameter	Length	Current
7601	2.5mm	350mm	60-80
7602	3.2mm	350mm	110-135
7603	4.0mm	350mm	160-180
7604	5.0mm	35mm	180-230

Super Optimal 7018 S

Features and Applications

- Basic heavy coated, electrode for producing tough and crack-free welded joints even on steels having a carbon content up to 0.40%. Good operating characteristics when positional welding. Weld metal has good toughness properties down to -50°C. Ultimate mechanical properties in 7018-1 group.

Standards

AWS A5.1: E7018-1 H4
EN 499: E 42 5 B 32 H5
EN ISO 2560: E 42 5 B 32 H5

Mechanical Properties

Yield Strength N/mm ²	450
Tensile Strength N/mm ²	550-620
Elongation %	30

Chemical Composition

C	Si	Mn	P	S
0.07	0.30	1.40	0.025	0.020

Welding Positions



Current Type

AC/DC (+)

Manufacturer's Approvals

Approvals on request

Product Information

5.0kg Vaccum Inner Pack / 20.0kg Master Pack

Part No.	Diameter	Length	Current
7605	2.5mm	350mm	60-80
7606	3.2mm	350mm	110-135
7607	4.0mm	350mm	140-180

Super Optimal 6010

Features and Applications

- Cellulosic coated deep penetration electrode for welding of pipes and pipelines in all positions using conventional and stove pipe techniques. Characterised by a deeply penetrating, forceful and spray type arc. Excellent arc striking/re-striking. It is suitable for welding root passes, fill and cover passes.

Standards

AWS : A5.1 : E6010
 EN ISO 2560-A : E38 3 C 21
 EN 499 : E 38 3 C 21

Mechanical Properties

Yield Strength N/mm ²	400
Tensile Strength N/mm ²	470
Elongation %	30

Chemical Composition

C	Si	Mn
0.10	0.20	0.60

Welding Positions



Current Type

AC/DC (+)

Manufacturer's Approvals

Approvals on request

Product Information

5.0kg Vaccum Inner Pack / 20.0kg Master Pack

Part No.	Diameter	Length	Current
7405	2.5mm	350mm	40-70
7406	3.2mm	350mm	70-100
7407	4.0mm	350mm	100-140

Super Optimal 7016

Features and Applications

- Basic coated, low hydrogen electrode for producing tough and crack-free welded joints. Good operating characteristics when positional welding. Excellent for joints access making electrodes suitable for root joint welding. Weld metal has good toughness properties down to -50°C. Suitable for most heavy industries.

Standards

AWS A5.1 : E7016 - H4
 EN ISO 2560-A : E 42 5 B 1 2 H5
 EN 499 : E 42 5 B 12 H5

Mechanical Properties

Yield Strength N/mm ²	450
Tensile Strength N/mm ²	550-620
Elongation %	30

Chemical Composition

C	Si	Mn	S	P
0.07	0.30	1.30	0.020	0.025

Welding Positions



Current Type

AC/DC (+)

Manufacturer's Approvals

Approvals on request

Product Information

5.0kg Vaccum Inner Pack / 20.0kg Master Pack

Part No.	Diameter	Length	Current
7412	2.5mm	350mm	50-80
7413	3.2mm	350mm	90-130
7414	4.0mm	350mm	130-170

Super Optimal 7024

Features and Applications

- High efficiency, iron powder electrode designed for outstanding deposition rates with efficiency of approximately 140-150%. Excellent arc stability, soft fusion, fine ripples, self releasing slag, very low spatter. Suitable for heavy steel structures, storage tanks, bridge girders, earth moving equipment fabrication, etc.

Standards

AWS A 5.1 : E 7024
 ISO 2560-A : E 42 0 RR 53
 EN 499 : E 42 0 RR 53

Mechanical Properties

Yield Strength N/mm² >400
 Tensile Strength N/mm² 510-600
 Elongation % 24

Chemical Composition

C	Si	Mn	S	P
0.10	0.40	0.90	0.020	0.025

Welding Positions



Current Type

AC/DC (-)

Manufacturer's Approvals

Approvals on request

Product Information

5.0kg Vacuum Inner Pack / 20.0kg Master Pack

Part No.	Diameter	Length	Current
7415	3.2mm	350mm	120-150
7416	4.0mm	350mm	150-190
7417	5.0mm	350mm	180-230

Cutting/Gouging

Features and Applications

- Ideal for cutting, grooving and gouging steels, stainless steel, copper alloy, cast iron and cast steels

Standards

Mechanical Properties

Chemical Composition

Welding Positions



Current Type

AC/DC (-)

Manufacturer's Approvals

Approvals on request

Product Information

5.0kg Vacuum Inner Pack / 20.0kg Master Pack

Part No.	Diameter	Length	Current
7420S	3.2mm	350mm	150-200
7421S	4.0mm	350mm	200-250
7422S	5.0mm	350mm	300-350

Superhard 650

Features and Applications

- High alloyed air hardening type electrode depositing non-machineable weld metal, the deposit is free from Cracks, porosities and slag inclusions. Recommended for rock drills, drill bits, coal cutter blades, bulldozer blades, excavator teeth, bucket lips and other metal to metal wear.

Standards

DIN 8555 : E6-UM-60-S

Mechanical Properties

Hardness 58-60 HRC

Chemical Composition

C	Si	Mn	Cr	Fe
0.50	0.60	0.60	7.50	Balance

Welding Positions



Current Type

AC/DC (+)

Manufacturer's Approvals

Approvals on request

Product Information

5.0kg Vacuum Inner Pack / 20.0kg Master Pack

Part No.	Diameter	Length	Current
7423S	2.5mm	350mm	90-120
7424S	3.2mm	350mm	140-180
7425S	4.0mm	350mm	180-230

Supercast Ultima

Features and Applications

- Nickel electrode for welding of grey cast iron, malleable iron, cast iron and for welding on fatigued casted parts. For rectification of castings. Ferrocast ultima gives perfect welding results, even with low amperages. The arc is smooth and intensive, low spatters with easy removal of slag.

Standards

AWS A 5.15 : ENI-CI

Mechanical Properties

Hardness 165 HB (approximately)
Tensile Strength N/mm² 450

Chemical Composition

C	Si	Mn	Ni	Fe & Others
1.00	0.50	0.35	97.50	Balance

Welding Positions



Current Type

AC/DC (+)

Manufacturer's Approvals

Approvals on request

Product Information

2.0kg Vacuum Inner Pack with Plastic Tube / 10.0kg Master Pack

Part No.	Diameter	Length	Current
7430S	2.5mm	350mm	50-70
7431S	3.2mm	350mm	70-90
7432*	4.0mm	350mm	100-130

*Supplied on 1.0kg Packet

Supercast NiFe

Features and Applications

- Graphite basic coated electrode with a Ferro-Nickel alloy deposit for joining and repairing nodular cast iron. Deposit homogeneous and highly resistant against cracks. Particularly recommended for dissimilar welding of cast iron to steels and constructions of cast iron.

Standards

AWS A 5.15 : E NiFe-C1
DIN 8573 : E NiFe- 1 BG11

Mechanical Properties

Yield Strength N/mm² >480
Hardness 190 HB

Composition

Ni
56.0

Welding Positions



Current Type

AC/DC (+)

Manufacturer's Approvals

Approvals on request

Product Information

2.0kg Vaccum Inner Pack with Plastic Tube / 10.0kg Master Pack

Part No.	Diameter	Length	Current
7434S	2.5mm	350mm	60
7435S	3.2mm	350mm	80
7436S	4.0mm	350mm	120

Super Optimal 308L-17

Features and Applications

- Low carbon Rutile-silica-coated 19Cr, 10Ni austenitic stainless steel electrode with controlled ferrite approximately 6-8% for maximum resistance to cracking and corrosion. Core wire is 308LER. Coating with very low moisture pick up. Soft fusion without spatters, easy slag removal and exceptional weld bead.

Standards

AWS A 5.4 : E 308L-17
DIN 8556 : E 19 9 LR 23
EN 1600 : E 19 9 L R 32

Mechanical Properties

ISO- V J RT 60
Tensile Strength N/mm² 610
Elongation % 38

Composition

C	Si	Mn	Cr	Ni	Mo	S	P
0.03	0.90	0.80	19.00	9.50	0.10	0.010	0.025

Welding Positions



Current Type

AC/DC (+)

Manufacturer's Approvals

Approvals on request

Product Information

2.0kg Vaccum Inner Pack with Plastic Tube / 10.0kg Master Pack

Part No.	Diameter	Length	Current
7438S	2.5mm	350mm	50-70
7439S	3.2mm	350mm	70-100
7440S	4.0mm	350mm	100-140

Super Optimal 309L-17

Features and Applications

- Rutile type low carbon MMA electrode for joining dissimilar steels (austenitic to ferritic steels) and for cladding of austenitic steels. Weld metal consists of austenite with approximately 15% delta ferrite. Cladding on unalloyed and low-alloy steels are corrosion resistant in the first layer.

Standards

AWS A 5.4 : E 309L- 17
 DIN 8556 : E 23 12 LR 23
 EN 1600 : E 23 12 LR 12

Mechanical Properties

ISO- V J RT	60
Tensile Strength N/mm ²	600
Elongation %	>35

Chemical Composition

C	Si	Mn	Cr	Ni	Mo	S	P
0.03	0.90	0.90	23.80	12.80	0.10	0.012	0.020

Welding Positions



Current Type

AC/DC (+)

Manufacturer's Approvals

Approvals on request

Product Information

2.0kg Vaccum Inner Pack with Plastic Tube / 10.0kg Master Pack

Part No.	Diameter	Length	Current
7442S	2.5mm	350mm	60-80
7443S	3.2mm	350mm	80-120
7444S	4.0mm	350mm	110-150

Super Optimal 309 MOL-17

Features and Applications

- Low carbon Rutile-basic coated 23Cr 12Ni 2Mo stainless steel type electrode, used to weld on AISI 309 & 316L stainless steels and for dissimilar joints between construction, mild steels and stainless steels. Intermediate layer for a 316 L type cladding.

Standards

AWS A 5.4 : E 309 LMO- 17
 DIN 8556 : E 23 13 2 LR 23
 EN 1600 : E 23 13 2 LR 12

Mechanical Properties

ISO- V J RT	65
Tensile Strength N/mm ²	600
Elongation %	35

Chemical Composition

C	Si	Mn	Cr	Ni	Mo	S	P
0.03	0.90	1.00	23.50	13.10	2.50	0.012	0.015

Welding Positions



Current Type

AC/DC (+)

Manufacturer's Approvals

Approvals on request

Product Information

2.0kg Vaccum Inner Pack with Plastic Tube / 10.0kg Master Pack

Part No.	Diameter	Length	Current
7446S	2.5mm	350mm	50-80
7447S	3.2mm	350mm	80-110
7448S	4.0mm	350mm	100-140

Super Optimal 316-17

Features and Applications

- Rutile-silica-coated Mo containing austenitic stainless steel electrode with approx 6-8% ferrite. Coating with very low moisture pick-up. Soft fusion, without spatters, very easy slag removal, exceptional bead appearance, easy restriking.

Standards

AWS A 5.4 : E 316- 17
 DIN 8556 : E 19 12 3 R 23
 EN 1600 : E 19 12 3 R 32

Mechanical Properties

ISO- V J RT	60
Tensile Strength N/mm ²	590
Elongation %	38

Chemical Composition

C	Si	Mn	Cr	Ni	Mo	S	P
0.04	0.90	0.80	18.50	11.60	2.30	0.015	0.025

Welding Positions



Current Type

AC/DC (+)

Manufacturer's Approvals

Approvals on request

Product Information

2.0kg Vaccum Inner Pack with Plastic Tube / 10.0kg Master Pack

Part No.	Diameter	Length	Current
7450S	2.5mm	350mm	50-70
7451S	3.2mm	350mm	70-100
7452S	4.0mm	350mm	100-140

Super Optimal 312-17

Features and Applications

- Electrode for high strength joint welding and surfacings of similar and equal steels or cast steels, for joint welding tensile unalloyed steels, tempered and tool steels, high manganese steels, spring steels and joints between dissimilar steels with high alloyed stainless steels.

Standards

AWS A5.4 : E 312-17

Mechanical Properties

Yield Strength N/mm ²	>500
Tensile Strength N/mm ²	>800
Elongation %	>20

Chemical Composition

C	Si	Mn	Cr	Ni	S	P
0.10	0.90	1.00	29.00	9.00	0.012	0.015

Welding Positions



Current Type

AC/DC (+)

Manufacturer's Approvals

Approvals on request

Product Information

2.0kg Vaccum Inner Pack with Plastic Tube / 10.0kg Master Pack

Part No.	Diameter	Length	Current
7454S	2.5mm	350mm	50-80
7455S	3.2mm	350mm	80-110
7456S	4.0mm	350mm	110-150

CCMS

Features and Applications

- An oxygen/acetylene copper coated mild steel rod for all types of mild steel and wrought iron welding
- Particularly suitable for welding sheet metal panels, plates and tubes

Standards

AWS : A5.2 R45
BS 1453 A1

Mechanical Properties

Melting Point °C	1450
UTS N/mm ²	350
Hardness BHN	120

Chemical Composition

C	Si	Mn
0.07	0.10	0.40

Welding Positions



Current Type

Recommended Gas

Oxygen/Acetylene

Manufacturer's Approvals

Approvals on request

Product Information

5.0kg Tube

Pt No.	Diameter
7460	1.6mm
7461	2.4mm
7462	3.2mm

Silicon Bronze C2

Features and Applications

- A multi purpose silicon bronze brazing rod suited to all types of fabrication work involving steel, cast iron, copper and dissimilar metal joints. Use a general brazing flux for best results
- Automotive, wheelchair, tubular furniture and bicycle industries, repair and maintenance

Standards

EN 1044 : CU 302
BS 1845 CZ6A 1453 C2

Mechanical Properties

Melting Point °C	875
UTS N/mm ²	420
Hardness BHN	120

Chemical Composition

Cu	Si	Sn	Zn
60.0	0.30	0.30	34.0

Welding Positions



Current Type

Recommended Gas

Oxygen/Acetylene

Manufacturer's Approvals

Approvals on request

Product Information

2.5kg Tube

Pt No.	Diameter
7468	1.6mm
7469	2.4mm
7470	3.2mm

Flux Coated Bronze C2FC

Features and Applications

- Flux coated silicon bronze rod for continuous brazing through not having to flux dip the rod. Ideal for general mild steel, galvanised steel, dissimilar joints and DIY enthusiasts
- Automotive, tubular furniture, repair and maintenance DIY

Standards

EN 1044 : Cu302
BS 1845 C26A 1453 C2

Mechanical Properties

Melting Point °C	875
UTS N/mm ²	420
Hardness BHN	120

Chemical Composition

Cu	Si	Sn	Zn
60.0	0.30	0.30	34.0

Welding Positions



Current Type

Recommended Gas

Oxygen/Acetylene

Manufacturer's Approvals

Approvals on request

Product Information

2.5kg Tube

Pt No. **Diameter**

7473 2.4mm

7474 3.2mm

Bronze C2 K (Flux Impregnated)

Features and Applications

- A flux impregnated silicon bronze rod which is perfect for brazing clean mild steel components and is ideally suited for use in motor body shops and sheet metal fabrications
- Automotive, sheet metal and tubular furniture manufacturers

Standards

EN 1044 : Cu 302
BS 1845 CZ 6A 1453 C2

Mechanical Properties

Melting Point °C	875
UTS N/mm ²	420
Hardness BHN	120

Chemical Composition

Cu	Si	Sn	Zn
60.0	0.30	0.30	34.0

Welding Positions



Current Type

Recommended Gas

Oxygen/Acetylene

Manufacturer's Approvals

Approvals on request

Product Information

2.5kg Tube (500mm length)

Pt No. **Diameter**

7476 2.4mm

7477 3.2mm

Bronze MN

Features and Applications

- A brazing rod with additions of manganese and tin giving a free flowing characteristic. Use a general brazing flux or liquid gas flux
- Automotive, wheelchair, bicycle industries

Standards

AWS : RB Cu Zn – C

Mechanical Properties

Melting Point °C	870
UTS N/mm ²	460
Hardness BHN	130

Chemical Composition

Cu	Fe	Si	Mn	Sn	Zn
60.0	1.20	0.15	0.50	1.10	37.0

Welding Positions



Current Type

Recommended Gas

Oxygen/Acetylene

Manufacturer's Approvals

Approvals on request

Product Information

5.0kg Tube

Pt No.	Diameter
7480	1.5mm
7481	2.0mm
7482	2.5mm
7483	3.0mm

Bronze C5

Features and Applications

- Nickel bronze rod for use on cast iron, copper alloy, stainless steel and alloy steels. Gives excellent wearing properties and is ideal for structures requiring a high tensile strength. Use a general brazing flux or a stainless steel brazing flux
- Bicycle, tubular structures repair and maintenance

Standards

EN 1044 : Cu 305
BS : 1845 CZ8 1453 C5

Mechanical Properties

Melting Point °C	950
UTS N/mm ²	540
Hardness BHN	200

Chemical Composition

Cu	Si	Ni	Zn
48.0	0.30	10.0	39.0

Welding Positions



Current Type

Recommended Gas

Oxygen/Acetylene

Manufacturer's Approvals

Approvals on request

Product Information

5.0kg Tube

Pt No.	Diameter
7485	1.6mm
7486	2.4mm
7487	3.2mm

Bronze C5 FC

Features and Applications

- A flux coated nickel bronze for use on cast iron, copper alloys, stainless steel and alloy steel. The nickel content makes this rod ideal for joints requiring high strength
- Tubular structures, repair and maintenance

Standards

EN 1044 : Cu 305
BS : 1845 CZ 8 1453 C5

Mechanical Properties

Melting Point °C	950
UTS N/mm ²	540
Hardness BHN	200

Chemical Composition

Cu	Si	Ni	Zn
48.0	0.30	10.0	39.0

Welding Positions



Current Type

Recommended Gas

Oxygen/Acetylene

Manufacturer's Approvals

Approvals on request

Product Information

5.0kg Tube

Pt No.	Diameter
7530	2.5mm
7531	3.0mm

CP2

Features and Applications

- A copper phosphorous rod with 2% silver to give improved ductility and easier flowing characteristics. It is also highly resistant to corrosion. The rod is self fluxing on copper but a copper flux is required on brass joints
- Electric motors, hot water cylinders, copper/brass fabrication

Standards

AWS : B Cu P – 6
EN 1044 : CP105
BS 1845 CP2

Mechanical Properties

Melting Point °C	650
UTS N/mm ²	420
Hardness BHN	190

Chemical Composition

Ag	P	Cu
2.00	6.00	92.0

Welding Positions



Current Type

Recommended Gas

Oxygen/Acetylene

Manufacturer's Approvals

Approvals on request

Product Information

1.0kg Tube

Pt No.	Diameter
7537	2.5mm
7538	3.0mm

CP3

Features and Applications

- A copper phosphorous rod with good electrical conductivity and corrosion resistance. It is self-fluxing on copper. A copper flux is required on brass joints
- Artistic foundries and general copper and brass fabrications

Standards

AWS : B Cu P – 2
 EN 1044 : CP201
 BS : 1845 CP3

Mechanical Properties

Melting Point °C	710
UTS N/mm ²	500
Hardness BHN	200

Chemical Composition

P	CU
7.00	93.0

Welding Positions



Current Type

Recommended Gas

Oxygen/Acetylene

Manufacturer's Approvals

Approvals on request

Product Information

1.0kg Tube

Pt No.	Diameter
7533	1.5mm
7534	2.5mm
7535	3.0mm

CP4

Features and Applications

- A copper phosphorous rod with 5% silver to give excellent flow and ductility (greater than CP2). The rod is self-fluxing on copper but a copper flux is required when joining brass
- General copper/brass fabrications

Standards

AWS : B Cu P – 3
 EN 1044 : CP 104
 BS 1845 CP4

Mechanical Properties

Melting Point °C	640
UTS N/mm ²	600
Hardness BHN	190

Chemical Composition

Ag	P	Cu
5.00	6.00	89.0

Welding Positions



Current Type

Recommended Gas

Oxygen/Acetylene

Manufacturer's Approvals

Approvals on request

Product Information

1.0kg Tube

Pt No.	Diameter
7499	1.5mm
7500	2.5mm



Silver AG28

Features and Applications

- Cadmium-free 40% silver solder suitable for all ferrous and non ferrous metals except Aluminium and its alloys
- Artistic foundries, power generation, general copper/ brass fabrications

Standards

AWS : A5.8-92 B Ag-28
EN 1044 Ag 105

Mechanical Properties

Melting Point °C	640
UTS N/mm ²	440
Hardness BHN	130

Chemical Composition

Ag	Cu	Zn	Sn
40.0	30.0	28.0	2.00

Welding Positions

Current Type

Recommended Gas

Oxygen/Acetylene

Manufacturer's Approvals

Approvals on request

Product Information

0.25kg Tube		1.0kg Tube	
Pt No.	Diameter	Pt No.	Diameter
7503	1.5mm	7505	1.5mm
7504	2.5mm	7506	2.5mm

Silver AG14

Features and Applications

- Cadmium-free 55% silver solder which is free flowing and ideal for close fitting capillary joints. It gives a good colour match on stainless steel
- Artistic foundries, food industry, power generation

Standards

AWS : A5.8 Bag 7
EN 1044 AG103
BS 1845 AG14

Mechanical Properties

Melting Point °C	630
UTS N/mm ²	415
Hardness BHN	145

Chemical Composition

Ag	Cu	Zn	Sn
55.0	21.0	22.0	2.00

Welding Positions

Current Type

Recommended Gas

Oxygen/Acetylene

Manufacturer's Approvals

Approvals on request

Product Information

0.25kg Tube		1.0kg Tube	
Pt No.	Diameter	Pt No.	Diameter
7515	1.5mm	7508	1.5mm
7516	2.5mm	7509	2.5mm

Silver AG14 FC

Features and Applications

- Cadmium free 55% flux coated silver solder
- Artistic foundries, food industry, power generation

Standards

AWS : A5.8 Bag 7
EN 1044 AG103
BS 1845 AG 14

Mechanical Properties

Melting Point °C	630
UTS N/mm ²	415
Hardness BHN	145

Chemical Composition

Ag	Cu	Zn	Sn
55.0	21.0	22.0	2.00

Welding Positions

Current Type

Recommended Gas

Oxygen/Acetylene

Manufacturer's Approvals

Approvals on request

Product Information

0.25kg Tube		1.0kg Tube	
Pt No.	Diameter	Pt No.	Diameter
7517	1.5mm	7511	1.5mm
7518	2.5mm	7512	2.5mm

Visit

Mig, Tig & Plasma sections for a wide range of Torches and Consumables

Arc Welding Accessories for Electrode Holders, Clamps, Connectors and other MMA accessories – plus Ovens and Quivers

Gas Welding for all you need from Regulators, Nozzles, Hoses and Fittings to Cutting Equipment

Safety & PPE for Welding Helmets and PAPR plus a comprehensive range of quality products to protect your Hearing, Head, Face, Eyes, Hands, Respiratory and Clothing

Welding Tools sections comprising all you need from Jacks, Clamps, Accessories and Kits to Fit Up and Magnetic Tools

Air & Cordless Tools including Compressors, Hand Tools, Kits and Accessories

Pastes

1669
Standard Pickling Paste – 2.0kg (4 per case)*

1670
Rapid Pickling Paste – 2.0kg (4 per case)*

1671
Neutralisation Paste – 2.0kg (4 per case)*

*MOQ due to delivery restrictions



Polinox-P Rapid Pickling Paste

Pickling ensures the corrosion resistance of components made of stainless steel increases considerably their service life and usefulness.

Made in the EU and free from hydrochloric acid and chlorides, the Polinox-P Rapid pickling paste is a high strength orange pickling paste which quickly and completely removes heavy scale and burring from high alloy materials.

ZY070602
Polinox-P Rapid Pickling Paste
2.0kg (4 per case)*



Flux Powder



7520
Aluminium Welding – 500g
Powder Flux for gas welding Aluminium

7521
Aluminium Brazing – 500g
Powder Flux for gas brazing Aluminium and its alloys

7522
General Brazing – 500g
Powder Flux for gas brazing steel and cast iron

7523
Copper Welding and Brazing – 500g
Powder Flux for welding and brazing copper and its alloys

7524
Silver Solder – 500g
Powder Flux (boric acid and borates free) for silver solder operations

Brushes

983
Pickling Paste Brush



Premium Anti-Spatter Sprays



1362
Premium Anti-Spatter Spray – 300ml
Case of 12



1394
Cleanweld Anti-Spatter Spray – 600ml
Case of 12

Anti-Spatter Sprays



1357
Anti-Spatter Spray – 300ml
Case of 12



1358
Anti-Spatter Spray – 300ml
Case of 12

Water Based Anti-Spatter

1365
5 litres
Case of 4

1366
25 litres
Qty 1



Crack Detector/Metal Working Sprays



Item	Part No.	Description	Case Qty
①	1800	Crack Detector Penetrant – 300ml	12
②	1801	Crack Detector Developer – 300ml	12
③	1802	Crack Detector Cleaner – 300ml	12
④	1803	Leak Detector – 300ml	12
⑤	1807	Tapping and Cutting Oil – 300ml	12
⑥	1808	Galvanising Spray – 300ml	12
⑦	1809	Safe Solvent Cleaner – 300ml	12

Tip Dip

1490
Anti-spatter paste – 500g
For MIG and TIG welding torch protection and weld spatter minimisation.





Corten Excellent resistance to atmospherical agents thanks to the presence of Cu, Cr, Ni. Suitable for bridges, cranes, ground moving machinery, boilers, building structures petrochemical sector, fans, gas pipes, fume suction etc.

ALLOY	AWS	GRADE	MIG (15.0kg Spool)
ER80-S-G	A5.28	EN ISO 1431-A-G 50 4 C1/M21 Z3Ni1	7800 – 1.0mm
			7801 – 1.2mm

NiCrMo-3 Ni-based solid wire for SAW welding. Corrosion and heat resistant. For welding of high alloyed steels, heat resistant steels, corrosion resistant steels, 9% Ni-steels and similar steels with high toughness at low temperatures. NiCrMo-3 shall be combined with Flux 10.90 or Flux 10.16.

ALLOY	AWS	GRADE	MIG (15.0kg Spool)	TIG (5.0kg Tube)
ERNiCrMo-3	A5.14	NiCr22Mo9Nb / S Ni 6625	7803 – 1.0mm	7805 – 2.4mm
			7804 – 1.2mm	

NiCrMo-4 is a corrosion and heat resistant, nickel-chromium wire welding of high alloyed steel, heat resistant steel, corrosion resistant steel, 9Ni steels and similar steels with high toughness at low temperatures. Good resistance to stress.

ALLOY	AWS	GRADE	MIG (15.0kg Spool)	TIG (5.0kg Tube)
ERNiCrMo-4	A5.14	NiCr15Mo16Fe6W4 / S Ni 6276	7806 – 1.0mm	7808 – 2.4mm
			7807 – 1.2mm	

NiCrMo13 Bare Ni-Cr-Mo wire for welding of high alloyed Ni-base materials, 9% Ni steel and super austenitic steels of type 20Cr-25Ni with 4-6% Mo. Can also be used for welding carbon steel to Ni base steel. The weld metal has a very good toughness and is corrosion resistant over a wide range of applications in oxidizing and reducing media.

ALLOY	AWS	GRADE	MIG (15.0kg Spool)	TIG (5.0kg Tube)
ERNiCrMo13	A5.14	RNiCr23Mo-16 / S Ni 6059	7809 – 1.0mm	7811 – 2.4mm
			7810 – 1.2mm	

NiCu-7 Bare nickel based welding wire alloyed with 30% Cu for welding of base materials of the same type. Can also be used to join these alloys to steel. The weld metal has good resistance to flowing seawater and has high strength and toughness over a rather wide temperature range. Has also good resistance to hydrofluoric acid, sulfuric acid, alkalis etc. Can be used for welding of similar types of base materials which are age-hardenable with small additions of Ti and Al.

ALLOY	AWS	GRADE	MIG (15.0kg Spool)	TIG (5.0kg Tube)
ERNiCu-7	A5.14	NiCu30Mn3Ti / S Ni 4060	7812 – 1.0mm	7814 – 2.4mm
			7813 – 1.2mm	

NiFe-CI A nickel-iron electrode for welding normal grades of cast iron and for joining them to steel. Can be used for malleable modular cast iron and alloy cast iron. It has a special iron jacketed Ni core wire, which gives the wire much improved current carrying capacity compared to electrodes with a homogeneous core wire. The electrode produces a weld metal stronger and more resistant to solidification cracking than the pure nickel electrode types. Typical applications are repair of pump bodies, heavy machine sections, gear teeth, flanges and pulleys.

ALLOY	AWS	GRADE	MIG (15.0kg Spool)	TIG (5.0kg Tube)
ERNiFe-CI	A5.14	NiFe-1	7815 – 1.0mm	7817 – 2.4mm
			7816 – 1.2mm	

2209 Bare, corrosion-resistant, duplex welding wire for welding austenitic-ferritic stainless alloys of the 22% Cr, 5% Ni, 3% Mo types. 2209 has high general corrosion resistance. In media containing chloride and hydrogen sulphide, the alloy has high resistance to intergranular corrosion, pitting and especially to stress corrosion. The alloy is used in a variety of applications across all industrial sectors.

ALLOY	AWS	GRADE	MIG (15.0kg Spool)	TIG (5.0kg Tube)
ER2209	AWS A5.9	22 9 3 N L	7818 – 1.0mm	7820 – 2.4mm
			7819 – 1.2mm	