

1 ARC ACCESSORIES

Accessories



Cable Lugs - Fixing Hole

- Soldering type
- Type numbers denote amps and fixing hole size

Description	Item Number
200 A 14 mm	W053021
150 A 13 mm	W053022
300 A 17 mm	W053023



Cable Lugs - Crimping

- Crimping type
- 35 to 90: cable mm
- 12 = fixing hole (mm)

Description	Item Number
35 x 12 mm	W053011
50 x 12 mm	W053012
70 x 12 mm	W053013
95 x 12 mm	W053014



Cable Connector

Description	Item Number
CC 20 Plug/Socket	W054154
CC 20 Plug	W054155
CC 20 Socket	W054156



Cable Connectors

Description	Item Number
CC 17 Plug	W054151
CC 18 Socket	W054152



Cable Connector Plug

Description	Item Number
10 - 25 mm	W054489



Chipping Hammer

- Steel heavy duty long life hammer

Item Number	W053020
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Earth Clamp - Crocodile

- Crocodile type 300 A

Description	Item Number
150 A	W053025
300 A	W054146
600 A	W054148



Earth Clamp - Screw Type

- Screw type 600 A

Description	Item Number
600 A TRC	W054147
600 A EC600	W054149



Plug - Welding Socket

- (50 - 70)

Description	Item Number
Socket Welding Male	W033718
Socket Welding Female	W035751



Hot Box 10 kg 220 V Thermostat Controlled

- 220 V thermostat controlled
- Max temp 250°C
- 10 kg

Item Number	W052005
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Abrasives, Cleaning & Preparation Products



Cutting Discs - Inox (Stainless Steel)

Description	Item Number
Superflex 350x3,4x25,4 Inox Cutting Disc	W053379
Superflex 230x2,5 Inox Ultra Cutting Disc	W053407
Superflex 115x2,4 Inox Ultra Cutting Disc	W053411
Superflex 180x2,5 Inox Ultra Cutting Disc	W053408
Superflex 150x2,5 Inox Ultra Cutting Disc	W053409
Superflex 125x2,4 Inox Ultra Cutting Disc	W053410



Cutting Discs - Carbon Steel (Professional)

Description	Item Number
Superflex 125x2,5 Prof Steel Cutting Disc	W053446
Superflex 115x2,5 Prof Steel Cutting Disc	W053447
Superflex 180x3 Prof Steel Cutting Disc	W053442
Superflex 230x3 Prof Steel Cutting Disc	W053441
Superflex 150x3 Prof Steel Cutting Disc	W053443
Superflex 100x2,5x16 Prof Steel Cutting Disc	W053448



Cutting Discs - Carbon Steel (Professional 2-1 / Stainless & Carbon Steel)

Description	Item Number
Superflex 230x1,9 Prof 2-in-1 Cutting Disc	W053405
Superflex 125x1,0 Prof 2-in-1 Cutting Disc	W053406
Superflex 115x1,0 Prof 2-in-1 Cutting Disc	W053440



Cutting Discs - Carbon Steel (Industrial 2-1 / Stainless & Carbon Steel)

Description	Item Number
Superflex 100x1,0x16 IND 2-in-1 Cutting Disc	W053272
Superflex 115x1,6 2-in-1 Cutting Disc	W053403
Superflex 115x1,0 IND 2-in-1 Cutting Disc	W053273
Superflex 230x1,9 IND 2-in-1 Cutting Disc	W053275
Superflex 115x1,0 IND 2-in-1 Cutting Disc (P05)	W053402



Cutting & Grinding Disc

Description	Item Number
Superflex 115x2,2 CG-27 Cutting & Grinding Disc	W053263



Cutting Discs - Carbon Steel (Industrial)

Description	Item Number
Superflex 115x3 IND Steel Cutting Disc	W053285
Superflex 230x3 IND Steel Cutting Disc	W053279
Superflex 350x3,6 IND Steel Cutting Disc	W053274



Grinding Discs - Inox

Description	Item Number
Superflex 230x7 Inox Ultra Grinding Disc	W053416
Superflex 115x6 Inox Ultra Grinding Disc	W053436
Superflex 180x7 Inox Ultra Grinding Disc	W053415
Superflex 150x6,5 Inox Ultra Grinding Disc	W053434
Superflex 125x6 Inox Ultra Grinding Disc	W053435
Superflex 100x6x16 Inox Ultra Grinding Disc	W053437



Grinding Discs - Carbon Steel (Professional)

Description	Item Number
Superflex 115x6 Prof Steel Grinding Disc	W053445
Superflex 125x6 Prof Steel Grinding Disc	W053439
Superflex 100x6x16 Prof Steel Grinding Disc	W053444
Superflex 150x6,5 Prof Steel Grinding Disc	W053438



Grinding Discs - Carbon Steel (Industrial)

Description	Item Number
Superflex 115x6 IND Steel Grinding Disc	W053287
Superflex 230x7,2 IND Steel Grinding Disc	W053291



Grinding Discs - Heavy Duty

Description	Item Number
Superflex 180x7 Heavy Grinding Disc	W053414
Superflex 230x4,1 Heavy Grind (Back)	W053412
Superflex 230x7 Heavy Grinding Disc	W053413
Superflex 230x5,2 Heavy Duty Back Grind	W053417



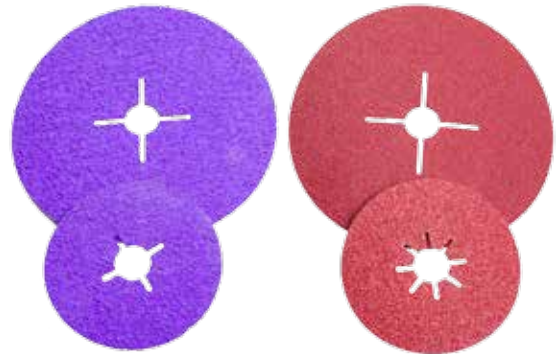
Flap Discs

Description	Item Number
Superflex 115x22 AZ60 IND Flap Disc	W053243
Superflex 115x22 AZ80 IND Flap Disc	W053245
Superflex 180x22 AZ60 IND Flap Disc	W053296
Superflex 180x22 AZ80 IND Flap Disc	W053299
Superflex 150x22 AZ60 IND Flap Disc	W053271
Superflex 115x22 AZ40 IND Flap Disc	W053241
Superflex 115x22 AZ120 IND Flap Disc	W053247
Superflex 180x22 AZ40 IND Flap Disc	W053293
Superflex 180x22 AZ120 IND Flap Disc	W053302
Superflex 125x22 AZ60 IND Flap Disc	W053282



Spindle Mounted Flap Wheel

Description	Item Number
Superflex 50x25x6 P320 Flap Wheel	W053229
Superflex 50x25x6 P120 Flap Wheel	W053429
Superflex 50x25x6 P240 Flap Wheel	W053430
Superflex 50x25x6 P80 Flap Wheel	W053428
Superflex 50x25x6 P60 Flap Wheel	W053251



Fibre Discs

Description	Item Number
Superflex Deerfos 125x22 P60 Fibre Disc	W053424
Superflex Deerfos 125x22 P80 Fibre Disc	W053426
Superflex Deerfos 125x22 P100 Fibre Disc	W053427
Superflex P36 115x22 Bora 9 Cer Fibre D	W053423
Superflex P36 178x22 Bora 9 Cer Fibre D	W053425



Wire Wheels

Description	Item Number
115x10xM14 1 Row Knotted Wire Wheel	W053253
Superflex 50x25x6 MW912 Mounted Wire Wheel	W053257
115x10x22,2 1 Row Knotted Wire Wheel	W053255
180x10xM14 1 Row Knotted Wire Wheels	W053259
180x10x22,2 1 Row Knotted Wire Wheels	W053265



Mounted Points

Description	Item Number
Superflex A12 HC Ruby Mounted Point	W053421
Superflex A11 Ruby Mounted Point	W053227
Superflex A3 Mini HC Ruby Mounted Point	W053225
Superflex IPDS Point Black	W053420
Superflex A3 Jumbo Ruby Mounted Point	W053419
Superflex A1 Ruby Mounted Point	W053231
Superflex A15 Ruby Mounted Point	W053235

Tungsten Burrs

Description	Item Number
Superflex CP102006-A Cyl Pl Tungsten Burr	W053205
Superflex CR102006-C Cyl Rd Tungsten Burr	W053220
Superflex TP102006-G Pointed Tungsten Burr	W053236
Superflex TR102006-F Round Tungsten Burr	W053242
Superflex TR122506-F Round Tungsten Burr	W053244
Superflex T103006-L Ball Nose Tungsten Burr	W053246
Superflex T123006-L Ball Nose Tungsten Burr	W053249
Superflex CP122506-A Cyl Pl Tungsten Burr	W053210
Superflex CR122506-C Cyl Rd Tungsten Burr	W053232
Superflex TP122506-G Pointed Tungsten Burr	W053238
Superflex CP061606-A Cyl Pl Tungsten Burr	W053200
Superflex CR061606-C Cyl Rd Tungsten Burr	W053215
Superflex TP061606-G Pointed Tungsten Burr	W053234
Superflex TR061606-F Round Tungsten Burr	W053240





NDT - Ardrox HF-P Penetrant

- Non-destructive testing for weld quality
- Size - 300 g

Description	Item Number
300 g	W033570



NDT - Ardrox HF-P Developer

- Non-destructive testing for weld quality
- Size - 300 g

Description	Item Number
300 g	W033571



NDT - Ardrox HF-P Remover

- Non-destructive testing for weld quality
- Size - 300 g

Description	Item Number
300 g	W033572



Wire Brush

Description	Item Number
5 Row - Mild Steel	W053003



Wire Brush

Description	Item Number
6 Row - Stainless Steel	W053081



Afox Torch Coolant 5 ℓ

Description	Item Number
5 ℓ	W053576



Anti-Spatter - Spatter Release 640 NO/SI

Description	Item Number
400 ml	W034010



Anti-Spatter TRC Spatter Release Aerosol

Description	Item Number
400 ml	W034015



Anti-Spatter - Spatter Off (Water Based)

- Spatter off (water based)
- Afox anti-spatter paste

Description	Item Number
400 ml	W034009

Electrode Holders & Gouging Torches



Electrode Holder Suhan Jaw Type

- Suhan jaw type
- Light to medium construction
- Fully insulated

Description	Item Number
300 A	W053090
500 A	W053092



Electrode Holder Jackson Type

- Heavy duty construction
- Heat resistant insulation

Description	Item Number
300 A	W053097
500 A	W053098



Electrode Holder Twist Lock

- Twist lock
- Heavy duty
- Fibre lined and heat resistant

Description	Item Number
400 A	W054202
600 A	W054204



Electrode Holder Safegrip Jaw Type

- Heavy duty construction with double ball point cable connections

Description	Item Number
300 A up to 4 mm	W054200
400 A up to 5 mm	W054201
500 A up to 5 mm	W054203
600 A up to 8 mm	W054208



Electrode Holder Optimus Type

- Heavy duty construction
- Heat resistant insulation

Description	Item Number
300 A	W053095
400 A	W053096

Carbon Gouge TRC

- Fast metal removal process
- Easy to control
- Low equipment cost
- Economical to operate
- Easy to operate

Description	Item Number
4,0 x 305 mm - 100 pack	W054915
6,4 x 305 mm - 50 pack	W054917
8,0 x 305 mm - 50 pack	W054918
9,5 x 305 mm - 50 pack	W054919
16 x 355 mm joint - 50 pack	W054922
13 x 355 mm joint - 50 pack	W054926
9,5 x 355 mm joint - 50 pack	W054933
5,0 x 305 mm - 100 pack	W054934



Welding Cable

Afrox welding cable is available with a choice of rubber and PVC insulation. Rubber insulated cable is recommended for use outdoors and is available in different amperages and duty cycles. PVC-insulated cable is used indoors only and is also available in a range of amperages.

Rated Area (mm ²)	Welding current in amps for duty cycle of:					Colour	Item Number
	100%	85%	60%	30%	20%		
Natural Rubber Selection Guide							
16	99	110	130	180	210	Black/Green	W053009
25	130	145	170	245	295	Black/Blue	W053010
35	165	180	215	305	370	Black/Grey	W053007
50	210	230	275	385	470	Black/Red	W053008
70	265	285	410	580	710	Black/Brown	W053015
95	315	345	410	580	710	Black/Yellow	W053016

PVC Selection Guide							
16	110	120	145	200	250	Green	W053100
25	150	165	195	275	340	Blue	W053101
35	185	200	240	340	415	Grey	W053102
50	230	250	300	420	520	Red	W053103
70	290	315	380	530	650	Brown	W053104
95	355	385	465	650	800	Yellow	W053105

Description	Dimensions	Item Number
PVC welding cable	35 mm x 5 m	W053107
PVC welding cable	50 mm x 5 m	W053108
PVC welding cable	70 mm x 5 m	W053109
PVC welding cable	35 mm x 10 m	W053110
PVC welding cable	50 mm x 10 m	W053111
PVC welding cable	70 mm x 10 m	W053113

Classes of Welding	Automatic	Manual	Very intermittent
	(Submerged arc, MIG)	(MMA, HG)	
	Semi-automatic (MIG, MAG, flux cored)		(MMA, MIG, MAG, HG)



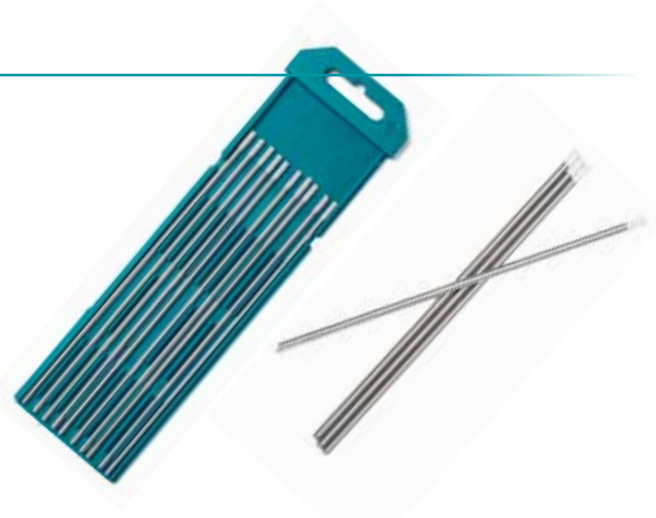
TIG Tungsten

Zirconiated TIG Electrodes (White tips)

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.

The surface condition of zirconiated tungsten electrode is polish grounded. It is bright and tipped with the brown and white colour for its different composition of zirconium in tungsten zirconiated electrode.



Description	Item Number
Wolfram 2% Zirconiated 4,0 mm	W030925
Wolfram 2% Zirconiated 3,2 mm	W030924
Wolfram 2% Zirconiated 2,4 mm	W030908
Wolfram 2% Zirconiated 1,6 mm	W030907

Witstar TIG Tungsten (Teal tips)

Witstar TIG electrodes are made from rare earth materials. They are safe to use and not harmful, unlike thoriated tungsten which is radioactive. Witstar TIG electrodes are used for alloyed and non-alloyed metals, alloyed and non-alloyed coppers, nickel and nickel alloys, aluminium and aluminium alloys, magnesium and magnesium alloys and titanium and titanium alloys.

Description	Item Number
Witstar TIG Tungsten 4,0 mm	W031003
Witstar TIG Tungsten 3,2 mm	W031001
Witstar TIG Tungsten 2,4 mm	W031012
Witstar TIG Tungsten 1,6 mm	W031014
Witstar TIG Tungsten 1,2 mm	W031018



Transarc® Thoriated TIG Tungsten (Red tips)

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; thoria is low-level radioactive material, but it was the first to display a significant improvement over pure tungsten.

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, as they operate well even when overloaded with extra amperage, then improving the performance of welding.



Description	Item Number
Transarc® 2% Thoriated 3,2 mm	W031032
Transarc® 2% Thoriated 2,4 mm	W031024
Transarc® 2% Thoriated 1,6 mm	W031016

2 ARC EQUIPMENT & PROCESSES

Miller Range

MIG Power Sources

Miller MigMatic 220 DX Compact DC CV Package



Single-phase 230 VAC +-15%, 50/60 Hz. Rated at 220 A, 25% duty cycle.

DX model features easy-to-use synergic control with digital display. This makes set-up very simple and provides precise parameter settings for a variety of materials. An additional feature is a spool gun option interface port with auto-detect for reliable and economical welding of aluminium.

Applications include; DIY, light engineering, general fabrication and light-duty manufacturing of machine tools and parts.

Package includes:

- Miller MigMatic 220 DX Compact power source
 - Power source supplied with undergear
- Drive roll kit:
 - *Double-sided V-Groove 0,8 mm & 1,0 mm
- **Binzel MB 25 AK MIG gun
- Earth clamp and welding cable
- Shieldmaster® flowmeter regulator CO₂/Argon
- Noryl basket adaptor
- 3 m inert gas hose and fittings

* Drive roll kit comprises one drive roll per pack

** Binzel MIG gun includes liner, tip adaptor/gas diffuser, contact tip and gas shroud.

Item Number

W034249

Miller MigMatic 250 DX Compact DC CV Package



Three-phase 380 VAC +-15%, 50/60 Hz. Rated at 250 A, 35% duty cycle.

DX model features easy-to-use synergic control with digital display. This makes set-up very simple and provides precise parameter settings for a variety of materials. Additional features include a spool gun option interface port with auto-detect for reliable and economical welding of aluminium, adjustable run-in control that allows for optimal arc starting and reduces possibility of wire stubbing.

Applications include; general engineering, fabrication and maintenance using the MIG, FCAW and MCAW processes.

Package includes:

- Miller MigMatic 250 DX Compact power source
 - Power source supplied with undergear
- Drive roll kit:
 - *Double-sided V-Groove 0,8 mm & 1,0 mm
- **Binzel MB 36 KD MIG gun
- Earth clamp and welding cable
- Shieldmaster® flowmeter regulator CO₂/Argon
- Noryl basket adaptor
- 3 m inert gas hose and fittings

* Drive roll kit comprises one drive roll per pack

** Binzel MIG gun includes liner, tip adaptor/gas diffuser, contact tip and gas shroud.

Item Number

W034250

Miller MigMatic 380 DC CV Package



Three-phase 380 VAC +-15%, 50/60 Hz. Rated at 350 A, 35% duty cycle.

The heavy-duty Miller MigMatic 380 compact (built-in wire feeder) power source provides exceptional arc stability with a four-drive-roll drive system, 20 voltage step selection and adjustable run-in control that allows for optimal arc starting. Additional features include spot weld timer, trigger latch option and multiple inductance selection ports.

Applications include; medium to heavy engineering, fabrication and manufacturing of mining and construction equipment, using the MIG, FCAW and MCAW processes.

Package includes:

- Miller MigMatic 380 DC CV power source
 - Power source supplied with undergear
- Drive roll kit:
 - *Double-sided V-Groove 1,0 mm & 1,2 mm
- **Binzel MB 40 KD MIG gun
- Earth clamp and welding cable
- Shieldmaster® flowmeter regulator CO₂/Argon
- Noryl basket adaptor
- 3 m inert gas hose and fittings

* Drive roll kit comprises one drive roll per pack

** Binzel MIG gun includes liner, tip adaptor/gas diffuser, contact tip and gas shroud.

Item Number

W034383

Miller XPS 450 DC CV Package



Three-phase 380 VAC +-15%, 50 Hz. Rated at 450 A, 45% duty cycle.

The Miller XPS 450 with a segregated (remote) wire feeder provides greater flexibility for the operator. This industrial heavy-duty package comes standard with a rugged four-drive-roll wire feeder that features an adjustable run-in control that allows for optimal arc starting. The Miller XPS 450 comes standard with 40 voltage step selection for exceptional arc stability. Additional features include trigger latch option, gas purging and burn back control and multiple inductance selection ports.

Applications include; medium to heavy engineering, fabrication and manufacturing of mining and construction equipment, with the use of the MIG, FCAW and MCAW processes.

Package includes:

- Miller XPS 450 DC CV power source
 - Power source supplied with undergear
- Drive roll kit:
 - *Double-sided V-Groove 1,0 mm & 1,2 mm
- **Binzel MB 40 KD MIG gun
- Earth clamp and welding cable
- Shieldmaster® flowmeter regulator CO₂/Argon
- Noryl basket adaptor
- 3 m inert gas hose and fittings

* Drive roll kit comprises one drive roll per pack

** Binzel MIG gun includes liner, tip adaptor/gas diffuser, contact tip and gas shroud.

Item Number

W034450

Please note:

- Shielding gas and welding consumable requirements are excluded from above packages and should be selected according to customer requirements.
- Please refer to the Shielding Gases and Welding Consumables section in the Product Reference Manual for detailed product specification and description.

TIG Power Sources

Miller Dynasty 210 Series



Auto-line 230 – 525VAC, 50/60 Hz. Rated at 210 A, 60% duty cycle.

The Miller Dynasty 210 with its AC balance and frequency control which makes welding of aluminium an easy task. The package comes standard with HF and Lift-arc initiation as well as fingertip remote control for continuous amperage adjustment to produce the perfect weld.

Applications include; DIY, light engineering and general light duty manufacturing for the welding of aluminium, carbon steel and stainless steel applications.

Package includes:

- Miller Dynasty 210 AC/DC TIG power source
- TWP 26 AC/DC HF TIG KIT
- TWP 26-25-2, CK 7,6 m 350 A TIG torch
- Collet 2,4 mm
- Collet body 2,4 mm
- Nozzle 10 mm
- Electrode 2% thoriated 2,4 mm dia
- Electrode 2% zirconiated 2,4 mm dia
- Remote fingertip control
- Earth clamp and welding cable
- Shieldmaster® flowmeter regulator CO₂/Argon
- Inert gas hose and fittings

Item Number

W030201

Miller Syncrowave 250DX AC/DC TIG CC Power Source



Single-phase 380/525 VAC +-15%, 50/60 Hz. Rated at 250 A, 40% duty cycle.

The Miller Syncrowave 250DX power source with its squarewave technology provides arc stability when welding aluminium, prevents arc rectification and eliminates tungsten erosion. As additional features the Syncrowave 250DX comes standard with AC/DC+ output selector switch, Lift-arc, HF control and a port for remote amperage control.

Applications include; DIY, light engineering and general light-duty manufacturing and for the root welding of pipes with aluminium, carbon steel and stainless steel applications.

Package includes:

- Miller Syncrowave 250DX AC/DC TIG CC power source

Optional equipment:

- Earth clamp and welding cable
- TWP 26 AC/DC HF TIG KIT
- Remote finger tip or foot control
- Shieldmaster® flowmeter regulator CO₂/Argon
- Inert gas hose and fittings

Item Number

W030919

Miller Syncrowave 350LX AC/DC TIG CC Power Source



Single-phase 380/525 VAC \pm 15%, 50/60 Hz. Rated at 300 A, 60% duty cycle.

The Miller Syncrowave 350LX power source with its squarewave technology provides arc stability when welding aluminium, prevents arc rectification and eliminates tungsten erosion. As additional features the Syncrowave 350LX comes standard with pulsed TIG, AC/DC+ output selector switch, Lift-arc, HF control and a port for remote amperage control.

Applications include; DIY, light engineering and general light-duty manufacturing and for the root welding of pipes with aluminium, carbon steel and stainless steel applications.

Package includes:

- Miller Syncrowave 350LX AC/DC TIG CC power source

Optional equipment:

- Earth clamp and welding cable
- TWP 26 AC/DC HF TIG kit
- Remote finger tip or foot control
- Shieldmaster® flowmeter regulator CO₂/Argon
- Inert gas hose and fittings

Item Number

W030920

Please note:

- Shielding gas, arc accessories and welding consumable requirements are excluded from above packages and should be selected according to customer requirements.
- Please refer to the Shielding Gases, Arc Accessories and Welding Consumables section in the Product Reference Manual for detailed product specification and description.

MMA Power Sources

Miller Blue-Thunder Series

The Miller Blue-Thunder MMA (stick) welding power sources with electromagnetic shunt control combine good welding performance with practicality.

Applications include; mining fabrication, structural fabrication, trailer fabrication, maintenance and repair.

Miller Blue-Thunder 443 DC CC Power Source



Three-phase 380/525 VAC \pm 15%, 50/60 Hz. Rated at 420 A, 45% duty cycle.

Package includes:

- Miller Blue-Thunder 443 DC CC power source
- Power source supplied with running gear

Optional equipment:

- Earth clamp and welding cable
- Electrode holder and welding cable

Item Number

W052420

Multiprocess Power Sources

Miller XMT 350 DC CC/CV Power Source



Auto-line 208 – 575 VAC \pm 10%, 50/60 Hz. Rated at 350 A, 60% duty cycle.

This power source features multiprocess selection. By simply changing accessories an operator can select between the MMA, MIG, FCAW, MCAW and TIG processes. Miller XMT 350 comes standard with wind tunnel technology, adaptive hot start and line voltage compensation. Auto-line is a standard feature on the XMT 350 that allows input voltage selection from single- to three-phase power supplies.

Applications include; petrochemical, construction, shipbuilding, railroad, truck/trailer manufacturing, fabrication and power generation plants.

Package includes:

- Miller XMT 350 DC CC/CV power source

Item Number

W034305

Please note:

- Arc accessories and welding consumable requirements are excluded from above packages and should be selected according to customer requirements.
- Please refer to the Arc Accessories and Welding Consumables section in the Product Reference Manual for detailed product specification and description.

Miller XMT 400 DC CC/CV Power Source



Three-phase 380 VAC +/-10%, 50/60 Hz. Rated at 300 A, 60% duty cycle.

This power source features multiprocess selection of the MMA, MIG, FCAW, MCAW and TIG processes. Miller XMT 400 comes standard with wind tunnel technology, adaptive hot start and line voltage compensation.

Applications include; petrochemical, construction, shipbuilding, railroad, truck/trailer manufacturing, fabrication and power generation plants.

Package includes:
• Miller XMT 400 DC CC/CV power source

Item Number	W034400
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Miller Dimension Rectifier Series

The Miller Dimension series features rugged multiprocess power sources capable of producing welds with the MIG, FCAW, MCAW, scratch-start TIG and MMA processes with the addition of the air carbon arc gouging process. Power sources come standard with hot start and line voltage compensation.

The Afrox range comprises two models; Miller Dimension 562 and Miller Dimension 812.

Applications include; fabrication and construction, heavy manufacturing, maintenance, repair, pressure vessel fabrication, pipe welding, shipbuilding and earth-moving equipment manufacturing.



Miller Dimension 562 DC CC/CV Power Source

Three-phase 380 VAC +/-10%, 50/60 Hz. Rated at 450 A, 100% duty cycle.

Package includes:
• Miller Dimension 562 DC CC/CV power source

Item Number	W034995
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Miller Dimension 812 DC CC/CV Power Source

Three-phase 380/525 VAC +/-10%, 50/60 Hz. Rated at 650 A, 100% duty cycle.

Package includes:
• Miller Dimension 812 DC CC/CV power source

Item Number	W034994
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Engine Driven Power Sources

Miller Blue Star 185 DC CC Power Source



Petrol engine driven power source. Rated at 185 A, 20% duty cycle. Auxiliary voltage 230 VAC, 7,5 kVA peak and 5,5 kVA continuous output, 50 Hz.

Miller Blue Star 185 is a DC petrol engine driven welding power source capable of producing welds with the MMA and scratch-TIG process.

Applications include; maintenance, repair, farm applications, construction and as a stand-alone generator.

Package includes:

- Miller Blue Star 185 DC CC engine driven power source
- Power source supplied with 230 VAC auxiliary plug

Item Number

W052185

Miller Bobcat 250 Series Engine Driven Power Sources

The Bobcat 250 series features rugged multiprocess engine driven power sources capable of producing welds with the MIG, FCAW, TIG (AC/DC) and MMA processes with the addition of the air carbon arc gouging process.

The Afrox range comprises two models; Miller Bobcat 250 Petrol and Miller Bobcat Diesel Driven power sources.

Applications include; maintenance, repair, farm applications, construction and as a stand-alone generator.



Miller Bobcat 250 Petrol AC/DC CC/CV Power Source

Petrol engine driven power source. Rated at 250 A, 60% duty cycle CC/AC, rated at 250 A, 100% duty cycle CC/DC, rated at 250 A, 100% duty cycle CV/DC. Auxiliary voltage 230 VAC, 11 kVA peak and 9,5 kVA continuous output, 50 Hz

Package includes:

- Miller Bobcat 250 Petrol AC/DC CC/CV engine driven power source

Item Number

W052250

Miller Bobcat 250 Diesel AC/DC CC/CV Power Source

Diesel engine driven power source. Rated at 250 A, 100% duty cycle CC/AC, rated at 250 A, 100% duty cycle CC/DC, rated at 250 A, 100% duty cycle CV/DC. Auxiliary voltage 230 VAC, 11 kVA peak and 9,5 kVA continuous output, 50 Hz

Package includes:

- Miller Bobcat 250 Diesel AC/DC CC/CV engine driven power source

Item Number

W052251

Miller Big Blue 400 Pro Power Source



*Trailer optional

Miller Big Blue 400 Pro Power Source

Diesel engine driven power source. Rated at 300 A, 100% duty cycle CC/DC. Auxiliary voltage 120/240 VAC, 12 kVA peak and 10 kVA continuous output, 50/60 Hz.

Package includes:

- Miller Big Blue 400 Pro engine driven power source

Item Number	W052400
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Miller Big Blue 500 X CC Power Source

Diesel engine driven power source. Rated at 500 A, 40% duty cycle CC/DC. Auxiliary voltage 230 VAC, 5,5 kVA peak and 4 kVA continuous output, 50 Hz

Package includes:

- Miller Big Blue 500 DX CC engine driven power source

Item Number	W052500
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Miller Big Blue 600 X CC Power Source

Diesel engine driven power source. Rated at 600 A, 40% duty cycle CC/DC. Auxiliary voltage 230 VAC, 5,5 kVA peak and 4 kVA continuous output, 50 Hz

Package includes:

- Miller Big Blue 600 CX CC engine driven power source

Item Number	W052601
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Miller Wire Feeder



- 22i, 24i, 74s feeders supplied with 3 m 24 VAC contractor and voltage control cord with 14 pin plug. Welding power cable and gas hose not supplied with feeder
- 22i, 24i, 74s feeders exclude drive rolls, gas hose and fittings. To be ordered over and above price of feeder
- W034997 inter-con kit can be used with all above feeders and includes power cable, gas hose and fittings, earth cable and clamp

Wire Feeders

Description	Item Number
Miller SuitCase [®] X-TREME [™] 12VS	W034012
Miller 74s 4 Roll Feeder	W034070
Miller 24i 4 Roll Feeder	W034124

Drive Roll - SuitCase[®]X-TREME[™]12VS

Description	Item Number
0,9 mm VG-2	W034609
1,2 mm VG-2	W034610
1,2 mm VK-2	W034292
1,2 mm UG-2	W034613
1,6 mm UG-2	W034612

Drive Roll - 24i 4 Roll Feeder

Description	Item Number
0,9 mm VG	W046781
1,2 mm VG	W046639
1,2 mm VK	W034651

Drive Roll - 74s 4 Roll Feeder

Description	Item Number
0,9 mm VG	W034228
1,2 mm UG	W034225
1,2 mm VG	W034227
1,2 mm VK	W034291

Optional Extras



Miller Spool Gun - 220/250 DX

Spool gun with auto-detect provides reliable and economical welding of aluminium. Supplied with euro adaptor and amphenol remote plug

Item Number	W034089
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Miller Coolmate

Description	Item Number
Hydracool 1 Vertical 115V	W034733
Hydracool 2 Horizontal 115V	W034093
Coolmate 3 Horizontal 115V	W034735

Cutmaster Range

Plasma Power Sources



Cutmaster 12 True Series 6,1 m

Rated at 40 A, 60% duty cycle. Supply voltage 400 V three-phase, 50/60 Hz. Cut capacity 12 mm genuine cut. Supplied with power supply, SL60 torch, 6,1 m leads, work cable and clamp, spare parts

Item Number W007009

Cutmaster 20 True Series 6,1 m

Rated at 60 A, 40% duty cycle. Supply voltage 400 V three-phase, 50/60 Hz. Cut capacity 20 mm genuine cut. Supplied with power supply, SL60 torch, 6,1 m leads, work cable and clamp, spare parts

Item Number W007030

Cutmaster 25 True Series 6,1 m

Rated at 80 A, 40% duty cycle. Supply voltage 400 V three-phase, 50/60 Hz. Cut capacity 25 mm genuine cut. Supplied with power supply, SL60 torch, 6,1 m leads, work cable and clamp, spare parts

Item Number W007033

Cutmaster 40 True Series 6,1 m

Rated at 120 A, 80% duty cycle. Supply voltage 400 V three-phase, 50/60 Hz. Cut capacity 40 mm genuine cut. Supplied with power supply, SL100 torch, 6,1 m leads, work cable and clamp, spare parts

Item Number W007038

Description	Item Number
O-ring (shield cup)	W007098
O-ring (start cartridge)	W007099
Electrode, max life	W007100
Start cartridge	W007096
Tip 80 A, cutting	W007106
Tip 100 A, cutting	W007107
Shield cup body, std	W007112
Shield cup body, max life	W007113
Shield cap, deflector	W007114
Shield cap, drag, 100 A	W007117
Shield cap, gouging	W007118
Stand off cutting guide	W007028

Afrox Industrial Range

MIG Power Sources



Afrox Industrial MIG 251C

230 V single-phase DC machine capable of delivering 250 A @ 60% duty cycle.

- Multi-process MIG, MMA and Lift-TIG functionality
- Built-in 2 roll wire feeding system
- 18 kg spool capacity
- Digital voltage and amperage display
- Close loop current control
- Inductance control
- 2T / 4T
- Built-in Voltage Reduction Device (VRD)
- Undergear with integrated cylinder rack
- Arc spot timer
- Burn back control

Item Number

W500251

Afrox Industrial MIG 313C

380 V three-phase DC machine capable of delivering 310 A @ 60% duty cycle.

- Multi-process MIG, MMA and Lift-TIG functionality
- Built-in 2 roll wire feeding system
- 18 kg spool capacity
- Digital voltage and amperage display
- Close loop current control
- Inductance control
- 2T / 4T
- Built-in Voltage Reduction Device (VRD)
- Undergear with integrated cylinder rack
- Arc spot timer
- Burn back control

Item Number

W500313

Afrox Industrial MIG 403C

380 V three-phase DC machine capable of delivering 400 A @ 60% duty cycle.

- Multi-process MIG, MMA and Lift-TIG functionality
- Built-in 4 roll wire feeding system
- 18 kg spool capacity
- Digital voltage and amperage display
- Close loop current control
- Inductance control
- 2T / 4T
- Built-in Voltage Reduction Device (VRD)
- Undergear with integrated cylinder rack
- Arc spot timer
- Burn back control

Item Number

W500403

Please note:

- Shielding gas and welding consumable requirements are excluded from above packages and should be selected according to customer requirements.
 - Please refer to the Shielding Gases and Welding Consumables section in the Product Reference Manual for detailed product specification and description.

TIG Power Sources

Afrox Industrial TIG 185 CC Package



Single-phase 230 VAC +-15%, 50/60 Hz. Rated at 185 A, 35% duty cycle.

A lightweight AC/DC inverter power source that provides a consistent welding arc for the TIG and MMA processes. Power source comes standard with frequency, post flow and down slope control.

Applications include; DIY and light maintenance for welding of aluminium, carbon steel and stainless steel applications.

Package includes:

- Arox Industrial TIG AC/DC CC power source
- Air-cooled CK HF-TIG torch kit
- Electrode holder and welding cable
- Earth clamp and welding cable
- S6000 Regulator 40/ CO₂/Argon
- 3 m inert gas hose and fittings

Item Number

W035186

Please note:

- Shielding gas and welding consumable requirements are excluded from above packages and should be selected according to customer requirements.
- Please refer to the Shielding Gases and Welding Consumables section in the Product Reference Manual for detailed product specification and description.

Multiprocess Power Sources

Arox Industrial Multiprocess 175 DC CC/CV Package



Single-phase 230 VAC +-15%, 50/60 Hz. Rated at 175 A, 35% duty cycle.

A versatile portable DC multiprocess power source capable of producing welds with the MIG, TIG and MMA processes.

Applications include; DIY, light maintenance and engineering.

Package includes:

- Arox Industrial Multiprocess 175 DC CC/CV power source
- Drive roll kit:
 - *Double-sided V-Groove 0,6 mm - 0,8 mm, 0,8 mm - 0,9 mm
 - *Double-sided U-Groove 0,8 mm - 1,0 mm
- **Binzel MB 25 AK MIG gun
- Air-cooled Lift-TIG torch kit
- Electrode holder and welding cable
- Earth clamp and welding cable
- S6000 Regulator 40/ CO₂/Argon
- Noryl basket adaptor
- 3 m inert gas hose and fittings

* Drive roll kit comprises two drive rolls per pack

**Binzel MIG gun includes liner, tip adaptor/gas diffuser, contact tip and gas shroud.

Item Number

W035175

Multiprocess Power Sources

Afrox Industrial 453M

Switchable 380 V/525 V three-phase DC machine capable of delivering 450 A @ 100% duty cycle.

- Multi-process MIG/FCAW, MMA and Lift-TIG functionality
- Incorporates a DIG (arc force) function
- Anti-stick function
- Lift-TIG function
- Digital voltage and amperage display
- Adjustable hot start
- Close loop current control
- Line voltage protection
- Built-in Voltage Reduction Device (VRD)
- Inductance control
- Undergear with integrated cylinder rack
- Remote control functionality

** Optional extras includes a 4 roll wire feeder, water recirculator unit, undergear with cylinder rack, USB port for data logging of welding parameters

Item Number

W500453

Please note:

- Arc accessories and welding consumable requirements are excluded from above packages and should be selected according to customer requirements.
- Please refer to the Arc Accessories and Welding Consumables section in the Product Reference Manual for detailed product specification and description.

MMA Power Sources



Afrox Industrial 221S 230 V

230 V single-phase DC machine capable of delivering 220 A @ 35% duty cycle.

- Incorporates a DIG (arc force) function
- Anti-stick function
- Lift-TIG function
- Amperage digital display
- Adjustable hot start
- Built-in Voltage Reduction Devices (VRD)

Item Number

W500221

Afrox Industrial 323S 380 V/525 V

Switchable 380 V/525 V three-phase DC machine capable of delivering 320 A @ 60% duty cycle.

- Incorporates a DIG (arc force) function
- Anti-stick function
- Lift-TIG function
- Amperage digital display
- Adjustable hot start
- Close loop current control
- Line voltage protection
- Built-in Voltage Reduction Devices (VRD)

Item Number

W500323

Please note:

- Arc accessories and welding consumable requirements are excluded from above packages and should be selected according to customer requirements.
- Please refer to the Arc Accessories and Welding Consumables section in the Product Reference Manual for detailed product specification and description.

Afrox Transarc® Range

MIG Power Sources

Transarc® 180P PortaMIG DC CV Package



Single-phase 230 VAC \pm 15%, 50/60 Hz. Rated at 180 A, 35% duty cycle.

The Transarc® 180P offers a compact (built-in wire feeder) inverter technology power source with infinitely variable voltage, amperage and inductance control for easy setting of welding parameters.

Applications include; DIY, light maintenance and engineering.

Package includes:

- Afrox Transarc® 180P PortaMIG DC CV power source
- PortaMIG trolley
- Portashield® gas cylinder
- Drive roll kit:
 - *Double-sided V-Groove 0,6 mm & 0,8 mm, 0,8 mm & 1,0 mm, 1,0 mm & 1,2 mm
 - *Single-sided V-Knurled 0,9 mm
- **Binzel MB 15 AK MIG gun
- S6000 Regulator 40/ CO₂/Argon
- Noryl basket adaptor
- 3 m inert gas hose and fittings

* Drive roll kit comprises one drive roll per pack

**Binzel MIG gun includes liner, tip adaptor/gas diffuser, contact tip and gas shroud.

Item Number

W034181

Please note:

- Welding consumable requirements are excluded from above package and should be selected according to customer requirements.
- Please refer to the Welding Consumables section in the Product Reference Manual for detailed product specification and description.

MMA Power Sources

ARCmate MMA 160 / 200



Single-phase AC 230 V \pm 15% 50/60 Hz. Rated 160 & 200 A, 60% duty cycle respectively.

Applications include; DIY (home fabricator).

Package includes:

- ARCmate MMA (160 A & 100 A) DC CC power source
- Built-in voltage reducer for the MMA process
- Electrode holder and welding cable
- Earth clamp and welding cable

Description

Item Number

ARCmate 160

W005142

ARCmate 200

W005143

Please note:

- Welding consumable requirements are excluded from above package and should be selected according to customer requirements.
- Please refer to the Shielding Gases and Welding Consumables section in the Product Reference Manual for detailed product specification and description.

Plasma Power Sources

Transarc® Plasma Cut 40 Power Source



Single-phase 230 VAC +-15%, 50/60 Hz. Rated at 40 A, 35% duty cycle.

The Transarc® Plasma Cut 40 offers a lightweight (weighs only 8 kg) inverter technology plasma power source for the cutting of various metals. Plasma Cut 40 requires air at 4 bar input pressure and features a post flow selector switch and air control connector.

Applications include; art sculptures, hobby and DIY enthusiasts

Cutting thickness; carbon steel 9 mm, stainless steel 8 mm, aluminium 4 mm

Package includes:

- Afrox Transarc® Plasma Cut 40 power source
- *PT-31 plasma torch
- Air control connector
- Earth clamp and cable

*Plasma torch supplied with first set of consumables

Item Number

W036440

Please note:

- Gas requirements are excluded from above package and should be selected according to customer requirements.
- Please refer to the Compressed Gases section in the Product Reference Manual for detailed product specification and description.

MIG Torches & Consumables



MB 15 AK A/C MIG Gun 3 m

180 A @ 60% duty cycle air-cooled

Item Number	W032001
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MB 25 AK A/C MIG Gun 4 m

230 A @ 60% duty cycle air-cooled

Item Number	W032003
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Shroud Taper MB 15

Item Number	W032011
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Shroud

Description	Item Number
Conical MB 25	W032030
Taper MB 25	W032031
Cylinder MB 25	W032032



Contact Tip

Description	Item Number
M6 MB 15 0,6 mm	W032021
M6 MB 15 0,8 mm	W032022
M6 MB 15 1,0 mm	W032024
M6 MB 15/2 1,2 mm	W032041



Contact Tip

Description	Item Number
M6 0,9 mm	W032023
M6 MB 25/36 0,8 mm	W032025
MB 25/36 0,9 mm	W032026
M6 MB 25/36 1,0 mm	W032027
M6 HD M 1,0 mm	W032028
M6 MB 25/36 1,2 mm	W032029



MB 36 KD A/C MIG Gun 4 m

300 A @ 60% duty cycle air-cooled

Item Number W032004



MB 40 KD A/C MIG Gun 4 m

380 A @ 60% duty cycle air-cooled

Item Number W032007



Shroud Conical

Description	Item Number
Conical MB 36	W032050
Taper MB 36	W032051
Cylinder MB 36	W032052



Shroud

Description	Item Number
Conical MB 40	W032057
Taper MB 40	W032058
Cylinder MB 40	W032059



Tip

Description	Item Number
M8 MB 36/40/501 0,9 mm	W032042
M8 MB 36/40/501 1,0 mm	W032043
M8 MB 36/40/501 1,2 mm	W032044
M8 HD MB 36/40/5 1,2 mm	W032045
M8 HD MB 36/40/5 1,2 mm	W032046
M8 HD MB 36/40/50 1,6 mm	W032047
M8 MB 36/40/501 0,8 mm	W032146



RB 61 HD A/C MIG Gun 4 m

650 A @ 100% duty cycle air-cooled

Item Number W032009



MB 501 D W/C MIG Gun 4 m

500 A @ 100% duty cycle water-cooled

Item Number W032008



Shroud

Description	Item Number
Conical MB 501	W032078
Taper MB 501	W032079
Cylinder MB 501	W032080

TIG Torches & Consumables



TIG Torch

Product	Description	Item Number
TWP 17V-12-2 CK 150 A 3,8 m	150 A @ 100% duty cycle air-cooled	W031171
TWP 18-25 CK 350 A 7,6 m	350 A @ 100% duty cycle water-cooled	W031182
TWP 26-12-2 CK 200 A 3,8 m	200 A @ 100% duty cycle air-cooled	W031261
TWP 26-25-2 CK 200 A 7,6 m	200 A @ 100% duty cycle air-cooled	W031262
TWP 26V-12-2 CK 200 A 3,8 m	200 A @ 100% duty cycle air-cooled	W031263
TWP 26V-25-2 CK 200 A 7,6 m	200 A @ 100% duty cycle air-cooled	W031264

Product	Size (mm)	Item Number
Collet Body	1,6	W031155
Collet Body	2,4	W031156
Collet Body	3,2	W031157

Product	Size (mm)	Item Number
Collet	1,6	W031151
Collet	2,4	W031152
Collet	3,2	W031153
Collet	4,0	W031154

Product	Size (mm)	Item Number
Nozzle	8,0	W031159
Nozzle	10,0	W031160
Nozzle	11,0	W031161
Nozzle	12,5	W031162



Back Cap Long

Item Number	W031163
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Adaptor Power Cable

Item Number	W031166
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Back Cap Short

Item Number	W031164
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Valve 26 V

Item Number	W031267
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3 GAS EQUIPMENT

Regulators & Flowmeters



Aprox SMOOTHFLO™ Regulators

- Hybrid gas pressure regulator incorporating "Dynamic Quadflow Stability Control" (DQSC)
- Easy to use
- Innovative and compact design
- Impressive levels of performance and safety
- Break-off inlet stem
- Robust cladding
- Unique lever activation technology
- Embedded pressure gauges
- Piston-embedded safety valve
- Piston driven technology
- Available for oxygen and acetylene



Aprox SMOOTHFLO™ Multi-Stage Regulators

Model	Description	Gas Used	Delivery Pressure	Inlet Connection	Outlet Connection	Max Inlet Pressure	Item Number
Acetylene	Acetylene 150 kPa	Acetylene	0 - 150 kPa	5/8" BSP LH	3/8" BSP LH	2 500 kPa	W003137
Oxygen	Oxygen 1 000 kPa	Oxygen	0 - 1 000 kPa	5/8" BSP RH	3/8" BSP RH	20 000 kPa	W003139



Oxygen Multi-Stage Regulator

- Series 8500
- For heavy duty welding, cutting and heating
- ISO 2503
- 'Set-and-forget' technology for ultimate safety

Description	Item Number
400 kPa	W003852
1 000 kPa	W003854



Acetylene Multi-Stage Regulator

- Series 8500
- 150 kPa max outlet pressure
- For heavy duty welding, cutting and heating
- ISO 2503
- 'Set-and-forget' technology for ultimate safety

Description	Item Number
150 kPa	W003851



Oxygen Single-Stage Regulator

- Series 6000
- For medium duty welding and cutting
- 600 kPa max outlet pressure
- ISO 2503

Description	Item Number
Series 6000	W003903



Acetylene Single-Stage Regulator

- Series 6000
- For medium duty welding and cutting
- 150 kPa max outlet pressure
- ISO 2503

Description	Item Number
Series 6000	W003601



Single-Stage S6000 Arc 40 Flow Regulator

- Combined regulator/flowmeter, with gauges for MIG/TIG welding using argon or carbon dioxide
- Max gas flow of 40 l/min

Description	Item Number
S6000	W003610



LPG/Handigas Single-Stage Regulator

- S6000 LGS 400
- Now with outlet pressure gauge
- 400 kPa max outlet pressure
- Adequate flow rate for the full range of Afrox LPG nozzles and Sievert® equipment

Description	Item Number
S6000	W010611



Oxygen Single-Stage Regulator PortaPak®

- Suitable for all light duty cutting and welding
- 200 kPa max outlet pressure

Description	Item Number
PortaPak® Regulator	W003031



Acetylene Single-Stage Regulator PortaPak®

- Suitable for all light duty cutting and welding
- 100 kPa max outlet pressure

Description	Item Number
PortaPak® Regulator	W003034



Shieldmaster® Flowmeter Single-Stage CO₂/Argon

- Pre-set flowmeter regulator with accurate flow setting for MIG/TIG welding using argon or carbon dioxide
- Max gas flow of 30 l/min

Description	Item Number
Flowmeter	W003037

Afrox Tip

Cylinder pressures vary with the different compressed gases. Therefore, select the correct regulator for the gas type you are using as well as your application.

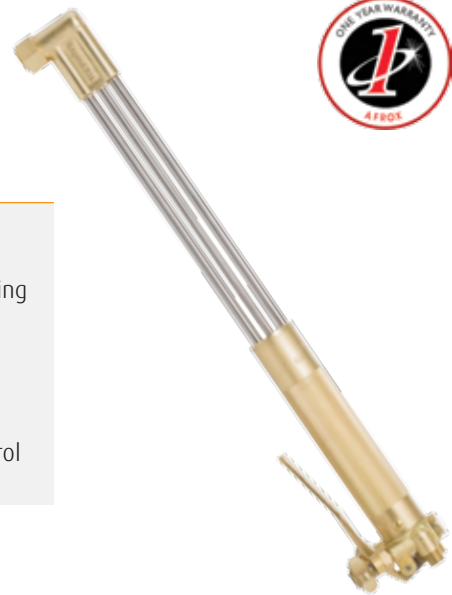
For cutting operations, it is essential to select an oxygen regulator which allows the correct working pressure.

Saffire® Torches & Attachments



Aprox Saffire® Legend 916 Heavy Duty Cutting Torch

- Tip mix principle - maximum operator safety
- Cutting capacity up to 460 mm thick steel
- Robust forged brass angle head for high strength, minimum distortion, positive tip seating and long service life
- Use with screw-in F tips
- Ease-on feature for cutting oxygen
- Needle torch control valves for fast, accurate flame adjustment
- Brass underslung cutting oxygen lever for comfort, ease of operation and positive control
- Stainless steel tubes for maximum strength and corrosion resistance.



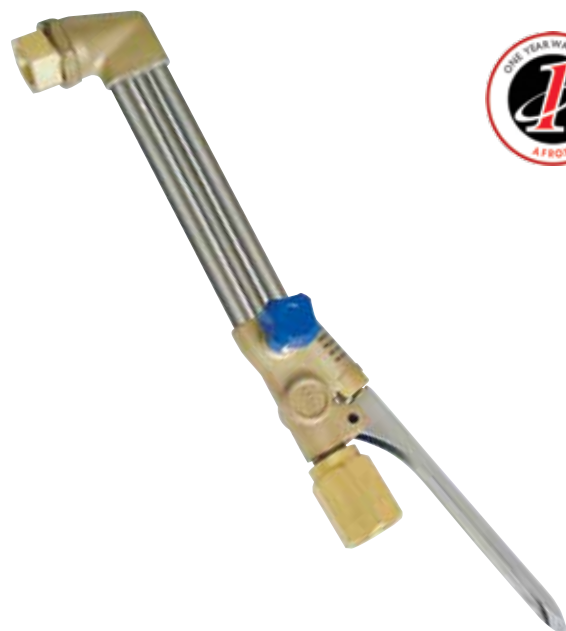
Saffire® Legend 916 Heavy Duty Cutting Torch						
Description	Gas	Head	Length (mm)	Inlet Connection	Item Number	
Saffire® Legend 916	Acetylene	90 degree	510	9/16" UNF	W231001	



Type 2 Shank

- Manufactured from extruded aluminium
- Hose connections 3/8" BSP

Description	Item Number
Type 2 Shank	W005800



Type 2 Cutting Attachment

- The Aprox Type 2 Attachment has a forged brass head and stainless steel tubes. It also features a press-to-cut oxygen lever

Description	Item Number
Type 2 Cutting Attachment	W005801



Universal® Cutting Torch 500 mm - 90 deg

- The Afrox Universal® is a versatile, robust and well-balanced torch capable of cutting steel up to 300 mm thick
- The torch may be used with acetylene or LPG depending on type of nozzle fitted
- Pre-heated oxygen and fuel gas are mixed in the nozzle for greater safety and resistance to backfire
- 3/8" BSP hose connection
- Note: Special nozzles for gouging are also available

Description	Item Number
Universal® Cutting Torch	W005803



Type 2 Mixer

- The Afrox Type 2 Mixer is made of precision-machined brass and weighs only 150 g

Description	Item Number
Type 2 Mixer	W005802

Flashback Arrestors & Quick Release Couplings



**Flashback Arrestor F5
Regulator Mounted**

Description	Item Number
Fuel Gas	W012028
Oxygen	W012029

**Flashback Arrestor F7 Torch
Mounted**

Description	Item Number
Fuel Gas	W012030
Oxygen	W012031

**Quick Release Coupling &
Flashback Arrestor CPN-460**

Description	Item Number
Fuel Gas	W012089
Oxygen	W012088

**Flashback Arrestor
Regulator Mounted PortaPak®**

SANS 50730-1 approved
Safety features include:

- Flashback arrestor
- Temperature activated cut-off valve
- Non-return valve
- Replaceable inlet filter



Description	Item Number
Fuel Gas	W012016
Oxygen	W012017

**Flashback Arrestor F8
Torch Mounted PortaPak®**

SANS 50730-1 approved
Safety features include:

- Flashback arrestor
- Non-return valve
- Replaceable inlet filter



Description	Item Number
Fuel Gas	W012032
Oxygen	W012033

**Quick Release Coupling &
Flashback Arrestor RF 53 NSK**

- 3/8" CPN - 460 (torch mount)
- 3/8" RF 53 NSK (regulator mount)



Description	Item Number
Fuel Gas	W012121
Oxygen	W012120

Afrox Tip

When fuel gases are mixed with oxygen under pressure, there is a chance of one gas mixing back into the other. Once the gases are mixed, there is the risk that this mixture may ignite and explode. This explosion, called a flashback, can travel all the way back into the system, to the point of mixing. It can cause considerable damage to equipment and poses substantial risk to life and limb.

Afrox recommends that each regulator outlet and torch inlet be fitted with a SABS-approved flashback arrestor.

Nozzles



Acetylene Hand Cutting – A-NM6

- Hand cutting
- Use with Universal® and Type 2 torches

Description	Item Number
0,8 short patt.	W005014
1,2 short patt.	W005015
1,6 short patt.	W005016
2,0 short patt.	W005017
2,4 short patt.	W005018
3,2 short patt.	W005020



Acetylene Machine Cutting – A-NM6

- Machine cutting
- Long pattern

Description	Item Number
0,8 long patt.	W005021
1,2 long patt.	W005022
1,6 long patt.	W005023
2,0 long patt.	W005024
2,4 long patt.	W005025
3,2 long patt.	W005026



LPG Cutting – P-NM

- Use with Universal® and Type 2 torches

Description	Item Number
0,8 short patt.	W010236
1,2 short patt.	W010237
1,6 short patt.	W010238
2,0 short patt.	W010239
2,4 short patt.	W010240
3,2 short patt.	W010242



Type 2 Torch Welding

- Use with Type 2 torches

Description	Item Number
0,9 mm	W005037
1,2 mm	W005038
2,0 mm	W005039
2,6 mm	W005040
3,2 mm	W005041
4,0 mm	W005042
5,0 mm	W005043



Welding Nozzle (PortaPak®)

- Use with Combi-Lite torches

Description	Item Number
0,9 mm	W005701
1,2 mm	W005702
2,0 mm	W005703
2,6 mm	W005704
3,2 mm	W005705
4,0 mm	W005706



Cutting Nozzle – A-FN (PortaPak®)

- Acetylene cutting
- Use with Combi-Lite torches

Description	Item Number
0,8	W005708
1,2	W005709
1,6	W005710

Afrox Tip

The Afrox range of nozzles utilises the nozzle-mix principle, whereby the fuel gas and preheat oxygen are kept separate right up to the nozzle and are only mixed once inside the preheat orifices.

Always use an approved nozzle cleaner to clean nozzles to avoid nozzle damage and ensure proper cleaning.

Accessories



Nozzle Cleaners (Standard)

- Suitable for one piece nozzles

Item Number W012172



Multi-Purpose Spanner

Item Number W012590



Safetest Leak Detection Spray

- For use on gas equipment and pipelines
- Afrox approved

Item Number W012045



Inlet Stem & Nut

- Replacement part for all S8500, S8000, S6000 regulators (includes dust cap)

Description	Item Number
O ₂ /AR	W003080
DA/LPG/H ₂	W003081



Triple Flint Spark Lighter

- Includes one spare replacement flint

Item Number W012621



Triple Flint Replacement Flint

Description	Item Number
3 pack	W012622



'O' Clip Crimping Tool

- Suitable for hose 'O' clips

Item Number W012580



Industrial Cylinder Trolley

- Oxy/DA cylinder trolley
- Industrial strength

Item Number W012035

Accessories & PortaPak®

PortaPak®

The Afrox PortaPak® is the ideal welding and cutting set for those difficult-to-get-to jobs. Light and robust, yet still having man-sized capabilities, it is easily moved by one person, and can be lifted through hatches or into service vehicles. Because of its small size and portability, the set is ideal for emergency vehicles or on maintenance duty in industry where portability is a must. The PortaPak® is ideal for fusion weld, braze weld, silver solder, heating and cutting. Nozzles provided will fusion weld steel up to 4 mm and cut steel up to 6 mm thick. The cutting capability can be extended to 20 mm by using the AFN 1,2 mm nozzle or to ± 35 mm using the AFN 1,6 mm nozzle, available as optional extras. Brazing and welding with No. 5 nozzle - six hours. Cutting with 0,8 mm nozzle - 45 minutes. These times are for non-stop operation. The average job requires a fair amount of preparation, and welding and cutting is normally intermittent, which in practice extends these times considerably.



PortaPak®

Available to Purchase Separately	Item Number
Accessory Outfit	W005772
Oxygen Cylinder 1,43 kg	W005740
Acetylene Cylinder 0,94 kg	W005782

PortaPak® Light Duty Gas Cutting & Welding

Portapak® Combi-Lite Shank

Features

- The new Combi-Lite Shank is to be used in conjunction with either the Combi-Lite Mixer or the Combi-Lite Cutting Attachment
- When used in conjunction with the Combi-Lite Mixer and the DH nozzles, the Combi-Lite turns into a welding and brazing torch
- Capable of welding and brazing materials up to 8 mm in thickness
- Ideally suited for use in workshops, garages, laboratories and production lines
- Its handy size and weight minimises operator fatigue over many hours of use.

PortaPak® Combi-Lite Shank			
Gas Type	Brazing Capacity (Steel)	Inlet Connection	Item Number
Acetylene	Up to 8 mm	1/4"	W005716



Portapak® Combi-Lite Mixer

- To be used with the Combi-Lite Shank and DH nozzles

Item Number	W005718
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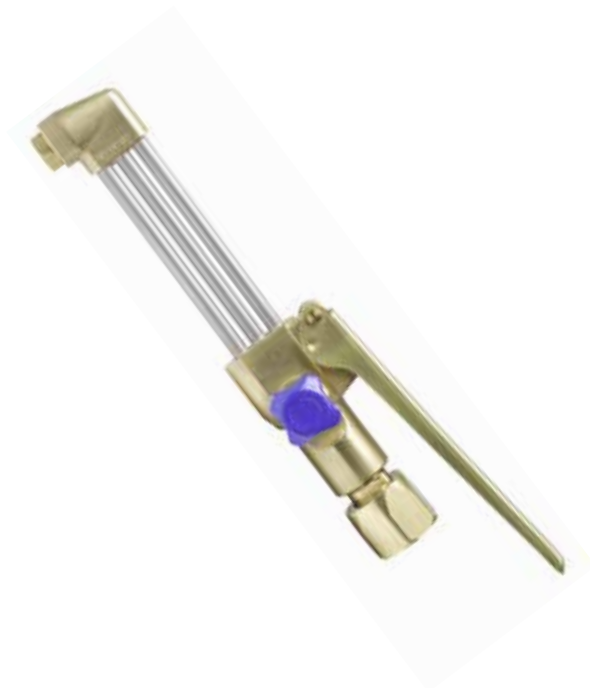


Portapak® Combi-Lite Cutting Attachment

Features

- The Combi-Lite Cutting Attachment is to be used in conjunction with the Combi-Lite Shank and can be used for cutting or welding by simply changing to the appropriate nozzle
- Use the LC nozzles for welding (capable of welding and brazing materials up to 4 mm)
- Use the AF-N nozzles for cutting (capable of cutting steel up to 50 mm).

PortaPak® Combi-Lite Cutting Attachment	
Gas Type	Item Number
Acetylene	W005719



Afrox RedBox Heavy Duty Oxy-Acetylene Kit

Ideal for rugged working environments, such as mines, construction sites, shipyards, quarries, scrap cutting yards and heavy fabrication sites.

Afrox Redbox Heavy Duty Oxy-Acetylene Kit

The Aprox RedBox offer is not just a product, it is a unique service offer as well. This service offer entails the following:

- Serialised numbering of boxes and equipment for tracing and accountability
- Servicing of the equipment by specialist Aprox personnel on a pre-determined schedule as agreed with the customer
- Better cost control
- Improved safety and risk control
- Longer lasting products
- Only ISO/SANS approved equipment is used.

Features

- The Saffire® universal torch can cut up to 300 mm thick steel with the correct size ANM6 cutting nozzle – ISO 5172 approved
- Aprox Saffire® multi-stage regulators are ISO 2503 approved
- ‘Set and forget’ technology – constant pressure delivery
- Flashback arrestors are SANS 50730-1 approved
- Gas hoses are SANS 3821 approved
- 3/8" outlet connectors and fittings.

Applications

- Steel cutting of up to 300 mm with a 3,2 ANM6 nozzle.

Description	Item Number
Afrox RedBox Heavy Duty Oxy-Acetylene Kit	W230600

- | | |
|--|---|
| A Saffire® universal cutting torch | I Nozzle cleaner |
| B Saffire® S8500 acetylene multi-stage regulator | J Triple flint lighter |
| C Saffire® S8500 oxygen multi-stage regulator | K Safetest leak detection solution |
| D Saffire® ANM6 1.6 cutting tip | L Cylinder spindle key |
| E Saffire® F5 regulator-mounted flashback arrestors | M Gas welding goggles |
| F Saffire® F7 torch-mounted flashback arrestors | N Aprox red chrome leather gauntlet gloves – 20 cm |
| G 18 m oxygen and acetylene gas hoses (SANS approved) | O Plastic red box |
| H Multi-purpose spanner | |

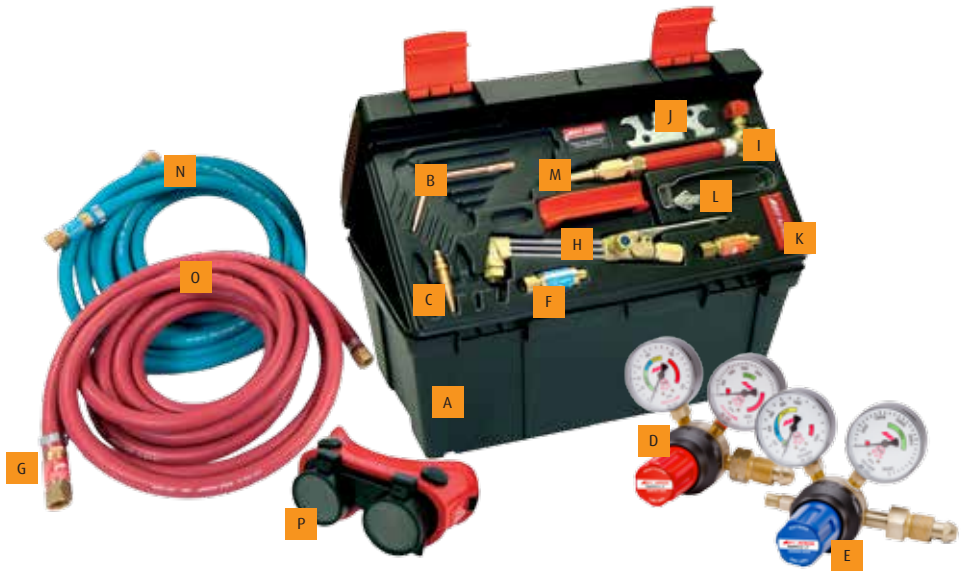


Outfits/Kits

Type 2 Economy Outfit

- A flexible outfit ideal for oxy-acetylene welding and cutting
 - Can be customised to suit your needs.
- Features**
- Unique Afrox encapsulated valves providing extremely stable control of gases
 - Type 2 shank and cutting attachment are constructed from solid brass forgings and have silver-brazed joints for extra strength.

Description	Item Number
Set	W005860



- | | |
|--|----------------------------------|
| A Toolbox | I Type 2 shank |
| B Medium-duty welding nozzle - No. 7 | J Multi-purpose spanner |
| C Cutting nozzle ANM - 0,8 mm | K Nozzle cleaners |
| D Acetylene regulator Series 6000 - 150 kPa | L Triple flint lighter |
| E Oxygen regulator Series 6000 - 400 kPa | M Type 2 mixer |
| F F5 regulator mounted flashback arrestors | N Fitted hose (oxygen) |
| G F7 torch mounted flashback arrestors | O Fitted hose (acetylene) |
| H Type 2 cutting attachment | P Goggles |

Also included but not shown:

- Operation and instruction manual

Please Note: For ultimate safety, always use genuine Afrox Saffire® flashback arrestors and parts. Replacement parts are available for all outfits.

Type 2 Professional Outfit

- A premium outfit for welding, brazing, heating and cutting application
- Capable of cutting up to 75 mm and welds up to 5 mm.

Features

- Unique Afrox encapsulated valves providing extremely stable control of gases
- Type 2 shank and cutting attachment are constructed from solid brass forgings and have silver-brazed joints for extra strength.

Description	Item Number
Set	W005861



- | | |
|---|----------------------------------|
| A Toolbox | K Type 2 shank |
| B Heating neck tube | L Multi-purpose spanner |
| C Acetylene heating nozzle | M Nozzle cleaners |
| D Medium-duty welding nozzles - No. 2, 3, 5, 7, 13 | N Triple flint lighter |
| E Cutting nozzles ANM - 0,8, 1,2, 1,6 | O Type 2 mixer |
| F Saffire® S8500 acetylene multi-stage regulator | P Fitted hose (oxygen) |
| G Saffire® S8500 oxygen multi-stage regulator | Q Fitted hose (acetylene) |
| H F5 regulator mounted flashback arrestors | R Goggles |
| I F7 torch mounted flashback arrestors | S Circle cutting guide |
| J Type 2 cutting attachment | |

Also included but not shown:

- Operation and instruction manual

Please Note: For ultimate safety, always use genuine Afrox Saffire® flashback arrestors and parts. Replacement parts are available for all outfits.

Hoses & Fittings



Picture shown with optional hose connections

Pre-Packed Hose 5 mm PortaPak®

- Pre-packed lengths
- Flame retardant
- SANS 3821 approved

Description	Item Number
3 m Acetylene	W002600
3 m Oxygen	W002601
6 m Acetylene	W002602
6 m Oxygen	W002603



Picture shown with optional hose connections

Pre-Packed Hose 8 mm Industrial

- Pre-packed lengths
- Flame retardant
- SANS 3821 approved

Description	Item Number
6 m Acetylene	W002560
6 m Oxygen	W002561
12 m Acetylene	W002562
12 m Oxygen	W002563
18 m Acetylene	W002564
18 m Oxygen	W002565
30 m Acetylene	W002568
30 m Oxygen	W002569
50 m Acetylene	W002572
50 m Oxygen	W002573
100 m Acetylene	W002576
100 m Oxygen	W002577



Cut-to-Length Handigas Hose (Neoprene)

- Flame retardant
- Sold in metre lengths
- SANS 1156-2 approved
- SANS 3821 approved

Description	Item Number
5 mm (Handigas) per metre	W002439
8 mm (Handigas) per metre	W002440



Hose Connection Kits

- 5 mm 3/8" also available
- Comprise two nipples, two nuts, three 'O' clips

Description	Item Number
5 mm 1/4" BSP R/H	W002270
5 mm 1/4" BSP L/H	W002271
8 mm 3/8" BSP R/H	W002274
8 mm 3/8" BSP L/H	W002275



Parallel Hose Clips

Description	Item Number
5 mm - 10 pack	W002530
8 mm - 10 pack	W002531



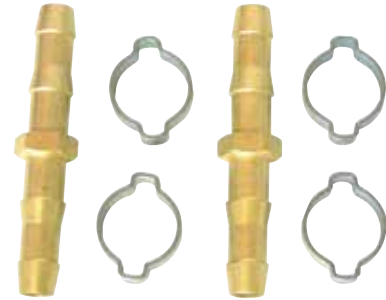
Hose Connection Nuts

Description	Item Number
1/4" BSP L/H	W002516
1/4" BSP R/H	W002517
3/8" BSP L/H	W002166
3/8" BSP R/H	W002167



'O' Clips

Description	Item Number
5 mm - 10 pack	W002543
8 mm - 10 pack	W002544










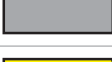


Fittings for Hose Joining

- Comprise two nipples, four 'O' clips

Description	Item Number
5 mm	W002171
8 mm	W002172

4 WELDING CONSUMABLES

Electrode Selection Chart

Afrox Product	Label Colour	Product Characteristics	Product Application
		Ensure that the Open Circuit Voltage (OCV) range of your welding machine is within the specified range for the selected electrode and application	
Vitemax®		General Purpose	Carbon/mild steel – fences, trailers, gates
Speedcraft®		General Purpose	Burglar bars, fireplaces, furniture, etc.
Afrolux®		High Deposition	High speed welding and general fabrication
312		Problem Steel	Dissimilar steels – tools, dies, springs, etc.
316L		Stainless Steel	Heat exchanges, chemical storage tanks, etc.
Transcast® 55		Cast Iron	Cast iron components and cast iron to steel
78MR & 7018-1		Hydrogen Control	Structural applications, pressure vessels, etc.
Gouge		Gouge/Metal Removal	Gouge, cutting and grooving steels
CR70		Hardfacing	Depositing a wear resistant overlay
Alumoid		Aluminium Alloys	Pulleys, housing, sump pans, impellers, etc.

Average thickness of plate	Electrode diameter (mm)	Recommended Afrox Vitemax® current range (A)
Up to 1,5 mm	2,0 mm	40 – 80
1,5 mm – 2,0 mm	2,5 mm	60 – 95
2,0 mm – 5,0 mm	3,15 mm	100 – 130
5,0 mm – 8,0 mm	4,0 mm	140 – 165
8,0 mm upwards	5,0 mm	170 – 260

Electrodes



Vitemax®

- South Africa's premium rutile electrode for welding mild steel in all positions
- Features a smooth arc action, with very little spatter and excellent restriking

* (multi-kg box)

Description	Item Number
2,0 mm 4 kg box*	W075001
2,5 mm 5 kg box*	W075002
3,15 mm 5 kg box*	W075003
4,0 mm 5 kg box*	W075004
5,0 mm 6 kg box*	W075005
2,0 mm 1 kg box	W072001
2,5 mm 1 kg box	W072002
3,15 mm 1 kg box	W072003
4,0 mm 1 kg box	W072004



Afrolux®

- Heavily coated rutile electrode contains iron powder in the coating which increases the amount of weld metal deposited by approximately 160%
- Recommended for high speed welding of fillet and butt joints in carbon steels in the downhand position

* (multi-kg box)

Description	Item Number
2,5 mm 4 kg box*	W075202
3,15 mm 5 kg box*	W075203
4,0 mm 5 kg box*	W075204
5,0 mm 5 kg box*	W075205
6,3 mm 5 kg box*	W075207



Transarc® 6013

- Excellent strike and restriking characteristics
- Self-lifting slag
- Produces a very stable arc
- Can be used with AC or DC+

Description	Item Number
2,5 mm 5 kg	W075132
3,15 mm 5 kg	W075133
4 mm 5 kg	W075134



DriPac

The Afrox DriPac range of electrodes has been specifically introduced to offer extra protection against any moisture pick-up and to keep hydrogen levels as low as possible. After the electrodes have undergone the normal production process, they are kept in a humidity room prior to being vacuum-packed in special aluminium foil.

- Eliminates re-baking of electrodes, increasing productivity
- Vacuum-packed preventing moisture absorption
- 2 kg packs to ensure optimum use of electrodes
- Vacuum-packed Increased shelf life
- Excellent weldability

Description	Item Number
Afrox 7018-1 DriPac 2,5 mm 2 kg pack	W075482
Afrox 7018-1 DriPac 3,15 mm 2 kg pack	W075483
Afrox 7018-1 DriPac 4,0 mm 2 kg pack	W075484
Afrox KV2 DriPac 2,5 mm 2 kg pack	W075516
Afrox KV2 DriPac 3,15 mm 2 kg pack	W075517
Afrox KV2 DriPac 4,0 mm 2 kg pack	W075518
Afrox KV3 DriPac 2,5 mm 2 kg pack	W075526
Afrox KV3 DriPac 3,15 mm 2 kg pack	W075527
Afrox KV3 DriPac 4,0 mm 2 kg pack	W075528
Afrox KV5 DriPac 2,5 mm 2 kg pack	W075546
Afrox KV5 DriPac 3,15 mm 2 kg pack	W075547
Afrox KV5 DriPac 4,0 mm 2 kg pack	W075548
Afrox KV5L DriPac 2,5 mm 2 kg pack	W075572
Afrox KV5L DriPac 3,15 mm 2 kg pack	W075573
Afrox KV5L DriPac 4,0 mm 2 kg pack	W075574



7018-1®

- All-position basic coated hydrogen-controlled electrode of premium quality
- Used for welding a variety of carbon manganese and low alloy steels and in the fabrication of pressure vessels pipe work and general structural fabrication work

* (multi-kg box)

Description	Item Number
2,5 mm 4 kg box*	W075282
3,15 mm 4 kg box*	W075283
4,0 mm 4 kg box*	W075284
5,0 mm 6 kg box*	W075285
6,3 mm 6 kg box*	W075287
2,5 mm DriPac 2 kg box	W075482
3,15 mm DriPac 2 kg box	W075483
4,00 mm DriPac 2 kg box	W075484



Afrox 78MR®

- Formulated with a unique moisture resistant coating
- Can be used with AC/DC machines and features excellent mechanical properties
- Recommended for all structural applications where stringent mechanical properties and X-ray quality joints are required

* (multi-kg box)

Description	Item Number
2,5 mm 4 kg box*	W075272
3,15 mm 4 kg box*	W075273
4,0 mm 4 kg box*	W075274
5,0 mm 6 kg box*	W075275
6,3 mm 6 kg box*	W075277



Oerlikon Fincord M

- Medium coated rutile type electrode for welding mild steel in all positions

* (multi-kg box)

Description	Item Number
2,5 mm 5 kg box*	W111002
3,15 mm 5 kg box*	W111003
4,0 mm 5 kg box*	W111004
5,0 mm 5 kg box*	W111005



Oerlikon Tenacito 7018-1

- Low hydrogen basic electrode for welding medium tensile structural and fine grained steels

* (multi-kg box)

Description	Item Number
2,5 mm 5 kg box*	W075372
3,15 mm 5 kg box*	W075373
4,0 mm 5 kg box*	W075374
5,0 mm 5 kg box*	W075375



Arox 312

- A low carbon 29% Cr 9% Ni rutile basic coated electrode
- * (multi-kg box)

Description	Item Number
2,5 mm sleeve	W072692
3,25 mm sleeve	W072693
2,5 mm 1 kg box	W072682
3,25 mm 1 kg box	W072683
2,5 mm 4 kg box*	W075692
3,25 mm 4 kg box*	W075693



Arox 316L

- A low carbon 19% Cr 12% Ni and 3% Mo rutile basic coated electrode
- * (multi-kg box)

Description	Item Number
2,5 mm sleeve	W072752
3,25 mm sleeve	W072753
2,5 mm 1 kg box	W072782
3,25 mm 1 kg box	W072783
2,5 mm 4 kg box*	W075752
3,25 mm 4 kg box*	W075753
4,0 mm 4 kg box*	W075754



Transcast 55

- A nickel iron alloy electrode for welding cast iron and cast iron to steel
- * (multi-kg box)

Description	Item Number
3,15 mm sleeve	W072933
3,15 mm 1 kg box	W072934
3,15 mm 5 kg box*	W075933
4,0 mm 5 kg box*	W075934



Ferroloid 4

- A nickel cored electrode designed to produce machinable welds in cast iron
- * (multi-kg box)

Description	Item Number
2,5 mm 1 kg box	W072832
3,15 mm 1 kg box	W072833
2,5 mm 5 kg box*	W075832
3,15 mm 5 kg box*	W075833
4,0 mm 5 kg box*	W075834



Afrox 308L

- A premium grade stainless steel electrode for welding 304/304L grade stainless steel

* (multi-kg box)

Description	Item Number
2,5 mm 1 kg box	W072701
3,25 mm 1 kg box	W072703
2,5 mm 5 kg box*	W075702
3,25 mm 5 kg box*	W075703
4,0 mm 5 kg box*	W075704



Afrox 309L

- A premium grade stainless steel electrode for dissimilar joints and cladding

* (multi-kg box)

Description	Item Number
2,5 mm 1 kg box	W072772
3,25 mm 1 kg box	W072773
2,5 mm 4 kg box*	W075772
3,25 mm 4 kg box*	W075773
4,0 mm 4 kg box*	W075774
5,0 mm 4 kg box*	W075775

Wire



MIG 3000 Plus (plastic spool)

- Copper coated, carbon steel welding wire. Offers good value for money
- For best results, the product should be used with the Argoshield® range of shielding gases

Description	Item Number
0,9 mm 18 kg spool	W033931
1,0 mm 18 kg spool	W033942
1,2 mm 18 kg spool	W033943



Coremax 71 Plus

- Carbon steel and stainless steel flux cored wire for general fabrication

Description	Item Number
1,2 mm 15 kg spool	W081230
1,6 mm 15 kg spool	W081231



MIG 6000

- The premium quality, copper coated, carbon steel welding wire used when nothing but the best weldability will do
- It is particularly favoured by high integrity manufacturers where high speed, robot quality welding is undertaken

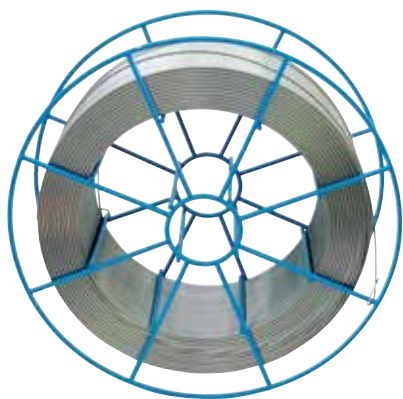
Description	Item Number
0,8 mm 15 kg spool	W033900
0,9 mm 18 kg spool	W033901
1,0 mm 18 kg spool	W033902
1,2 mm 18 kg spool	W033903
1,6 mm 18 kg spool	W033905



Afrox MIG 9000 GoldFlo

- Premium quality bronze coated MIG wire from high quality double deoxidised rod
- Recommended for welding of mild and medium tensile strength steels
- Designed for both single- and multiple-pass welding in all positions
- Has excellent, smooth wire feedability

Description	Item Number
1,0 mm 18 kg spool	W033972
1,2 mm 18 kg spool	W033972
1,0 mm 250 kg drum	W033992
1,2 mm 250 kg drum	W033993



MIG 309LSi

Description	Item Number
1,0 mm 15 kg spool	W033227
1,2 mm 15 kg spool	W033228

MIG 316LSi

Description	Item Number
1,0 mm 15 kg spool	W033234
1,2 mm 15 kg spool	W033232



MIG 6048

- A premium grade high strength low alloy wire dual classified as an AWS ER 100S-G or ER110S-G

Description	Item Number
1,2 mm 15 kg spool	W033188



TIG 308L

Description	Item Number
1,6 mm 5 kg tube	W030560
2,0 mm 5 kg tube	W030562
2,4 mm 5 kg tube	W030561

TIG 316L

Description	Item Number
1,6 mm 5 kg tube	W030550
2,0 mm 5 kg tube	W030553
2,4 mm 5 kg tube	W030551

TIG 70S-6

Description	Item Number
1,6 mm 5 kg tube	W030501
2,0 mm 5 kg tube	W030502
2,4 mm 5 kg tube	W030503



Duracor 59

- Premium grade self-shielded flux cored wire. Used for hardfacing of sugar cane hammers and knives, dipper teeth, coal crushers, etc.
- 25 kg coils

Description	Item Number
2,8 mm 25 kg spool	W071728

Gas Brazing & Welding



Flux Brazing M15

- M15 bronze brazing flux
- Stainless steel
- Aluminium

Description	Item Number
500 g jar	W001553



Easy-Flo (Ordinary Grade)

- Flux powder
- Stainless steel
- Aluminium

Description	Item Number
250 g jar	W001852



Bronze Brazing M15 (Bare)

- Brazing rods
- Use with M15 brazing flux

* (multi-kg box)

Description	Item Number
3,2 mm 5 kg*	W000500
2,0 mm 5 kg*	W000504



Silvercoat 30

Description	Item Number
1,5 mm 100 g	W001031
1,5 mm 1 kg	W001032

Silverflo 55

Description	Item Number
1,5 mm 100 g	W001055



Fluxcoat 402

Description	Item Number
Fluxcoat 402 1,5 mm (sleeve)	W001180
Fluxcoat 402 1,5 mm-100 g	W001197
Fluxcoat 402 1,5 mm 1 kg tube	W001297



Aluminium GMA Wire (GRADE 5356)

Description	Item Number
Filmax Alum 5356 (5% mg) 1,2 mm 7 kg spool	W033175
Filmax Alum 5356 (5% mg) 1,6 mm 7 kg spool	W033176



Aluminium GMA Wire (GRADE 5183)

Description	Item Number
Filmax Alum 5183 (4,5% mg) 1,2 mm 7 kg spool	W033156
Filmax Alum 5183 (4,5% mg) 1,6 mm 7 kg spool	W077539



CR 70

Description	Item Number
Afrox CR70 4 mm 5 kg box	W075644
Afrox CR70 5 mm 5 kg box	W075645
Afrox CR70MR 4 mm 5 kg box	W075648



Aluminium GTA Filler Rods (GRADE 5356)

Description	Item Number
TIG Alum 5356 (5% mg) 2,4 mm 2 kg tube	W030520
TIG Alum 5356 (5% mg) 3,2 mm 2 kg tube	W030521
TIG Alum 5356 (5% mg) 1,6 mm 2 kg tube	W030522



Aluminium GTA Filler Rods (GRADE 5183)

Description	Item Number
TIG Alum 5183 (4,5% mg) 1,6 mm 2 kg tube	W077529
TIG Alum 5183 (4,5% mg) 2,4 mm 2 kg tube	W077531
TIG Alum 5183 (4,5% mg) 3,2 mm 2 kg tube	W077532
TIG Alum 5183 (4,5% mg) 4,0 mm 2 kg tube	W077533

Ferrous & Non-Ferrous Metals

There are many ferrous and non-ferrous metals and alloys of great importance to the manufacturing industry and used in fabrication today.

Some of the most commonly used include:

- Aluminium and its alloys
- Carbon steels
- Galvanised and coated steels
- Alloy steels
- Stainless steels
- Cast irons
- Copper and its alloys
- Nickel and its alloys
- Titanium.

Pure aluminium is a relatively soft, ductile material and for most engineering applications it is alloyed with a range of materials to improve its properties. Each alloy is given a four number designation dependent on the main alloying element, for example 4xxx series alloys have silicon as the main alloying element, and 6xxx series are alloyed with magnesium and silicon. Some alloying elements, such as copper, can make an alloy difficult if not impossible to weld.

Carbon steels cover a wide range of commonly used engineering materials including the so-called mild steels. The term carbon steels is also taken to include carbon manganese steels, structural steels, HSLA steels and Q&T steels which include HY and QT types.

Galvanised and coated steels are a very specific group of normally low carbon steels, which have undergone a surface treatment either to improve some property, such as corrosion resistance or to improve its appearance. In a welding and cutting context, these coating materials can often create problems with both weld and cut quality and health hazards in terms of fumes created as they are vapourised.

Alloy steels are carbon and carbon manganese steels which have other alloying elements such as nickel, chromium and molybdenum added to them to improve their mechanical properties. Low temperature alloy steels have small amounts of nickel added. Creep resisting steels are alloyed with chromium and molybdenum. These steels are often used in high temperature environments such as steam boilers. High manganese steels can contain 14% Mn giving these materials high hardness, making them suitable for application such as railway lines.

Stainless steels are defined as steels containing more than 13% Cr. There are four basic categories of stainless steel of which the most common are the austenitic steels such as 316, and 304 alloys which contain both chrome and nickel. Ferritic stainless steels are chrome-containing alloys with low levels of carbon, such as 409 and 430 grades. Martensitic steels are also chrome-containing but have much higher levels of carbon. 410 and 416 are examples of these materials. Duplex stainless steels have a mixed microstructure of ferrite and austenite and properties to match.

The main types of cast iron are grey cast iron, white cast iron, malleable cast iron and alloy cast iron. Grey cast iron contains 2 to 4% C and over 2% Si. White cast iron has the same range of carbon as grey but has less than 1% Si. Malleable cast iron is basically heat-treated white cast iron. Alloy cast irons may be alloyed with chromium, nickel, molybdenum, and other elements to give specific strength, corrosion, or high temperature properties.

Copper can be used as an engineering material in its pure form but is normally alloyed with other materials to improve its mechanical properties. The most common alloys of copper are brasses in which zinc is the main alloying element and bronzes, which contain tin. Another widely used alloy group is the cupro-nickels, which are nickel-containing alloys used mainly for their excellent salt water corrosion properties.

Nickel alloys are used in a wide variety of applications including marine environments, aerospace and high temperature areas. Inconels® and Nimonics are nickel chrome alloys, while Incolloys® are nickel iron alloys. Hastelloys® are nickel, chrome and iron alloys, while Monels are nickel-rich copper-containing alloys.

Titanium is an attractive engineering material because of its low density, excellent corrosion resistance and the high strengths that can be obtained through alloying. Its reactive nature, however, can give problems when it is welded and keeping oxygen levels very low is of fundamental importance.