



MATWELD CATALOGUE EDITION 6



WELDING MACHINES



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WELDING MACHINES

Over the last 20 years Matweld has built up a solid reputation for providing quality affordable Welding machines.

Offering solutions from entry level DIY to state of the art inverter based multi-process machines the Matweld range

offers the right machine for the job at hand.

Matweld welding machines are sourced from overseas suppliers and are often modified to meet the needs of local

conditions. Matweld Welders carry a two year warranty on parts and workmanship and are backed up by service

departments in the four major centres around South Africa.



120 AMP INVERTER WELDER - MAT9006K

These models are portable inverter DC arc welders. The robust format makes them versatile and effective for a variety of uses. The welder complies too current regulations and the optimum quality of materials used will ensure a long life with complete safety



TECHNICAL DATA	120AMP MAT9006K
Main Voltage	220V
Duty Cycle %	60%
Welding Current Range	20-120amps
Minimum Electrode	2mm
Maximum Electrode	3.2
Weight	4.7 Kg
Protection class:	IP21S

ACCESSORIES:

- Electrode holder with cable & dinse connector
- Earth clamp with cable & dinse connector
- Hand held face mask
- Wire brush & chipping hammer

150 AMP INVERTER WELDER - MAT9004K

These models are portable inverter DC arc welders. The robust format makes them versatile and effective for a variety of uses. The welder complies too current regulations and the optimum quality of materials used will ensure a long life with complete safety

TECHNICAL DATA	150AMP MAT9004K
Main Voltage	220V
Duty Cycle %	60%
Welding Current Range	20-150amps
Minimum Electrode	2mm
Maximum Electrode	3.2mm
Weight	4.7 Kg
Protection class:	IP21S

ACCESSORIES:

- Electrode holder with cable & dinse connector
- Earth clamp with cable & dinse connector
- Hand held face mask
- Wire brush & chipping hammer





200 AMP INVERTER WELDER - MAT9005

These models are portable inverter DC arc welders. The robust format makes them versatile and effective for a variety of uses. The welder complies too current regulations and the optimum quality of materials used will ensure a long life with complete safety

TECHNICAL DATA	200AMP MAT9005
Main Voltage	220V
Duty Cycle %	60%
Welding Current Range	20-200amps
Minimum Electrode	2mm
Maximum Electrode	4mm
Weight	4.7 Kg
Protection class:	IP21S

ACCESSORIES:

- Electrode holder with cable & dinse connector
- Earth clamp with cable & dinse connector
- Hand held face mask
- Wire brush & chipping hammer



WELDER INVERT W/KIT 200A 220V SB - MAT9005C

TECHNICAL DATA	200AMP MAT9005
Main Voltage	220V
Duty Cycle %	60%
Welding Current Range	20-200amps
Minimum Electrode	2mm
Maximum Electrode	4mm
Weight	4.7 Kg
Protection class:	IP21S

FEATURES:

- Lightweight and portable
- Cable kit, helmet, wire brush/chipping hammer included
- Digital display
- Advanced igbt technology
- Suitable for arc/tig welding





INVETER 200A + HELMET COMBINATION - MAT9005KC

TECHNICAL DATA	200AMP MAT9005
Main Voltage	220V
Duty Cycle %	60%
Welding Current Range	20-200amps
Minimum Electrode	2mm
Maximum Electrode	4mm
Weight	4.7 Kg
Protection class:	IP21S

FEATURES:

- Lightweight and portable
- Cable kit, helmet, wire brush/ Chipping hammer included
- Digital display
- Advanced igbt technology
- Suitable for arc/tig welding



200 AMP INVERTER WELDER - MAT9005KIT

These models are portable inverter DC arc welders. The robust format makes them versatile and effective for a variety of uses. The welder complies too current regulations and the optimum quality of materials used will ensure a long life with complete safety

TECHNICAL DATA	200AMP MAT9005KIT
Main Voltage	220V
Duty Cycle %	60%
Welding Current Range	20-200amps
Minimum Electrode	2mm
Maximum Electrode	4mm
Weight	4.7 Kg
Protection class:	IP21S

ACCESSORIES:

- Electrode holder with cable & dinse connector
- Earth clamp with cable & dinse connector
- Hand held face mask
- Wire brush & chipping hammer
- Auto Dark
- Adjustable Helmet



200 AMP INVERTER WELDER - MAT9005P

These models are portable inverter DC arc welders. The robust format makes them versatile and effective for a variety of uses. The welder complies too current regulations and the optimum quality of materials used will ensure a long life with complete safety

TECHNICAL DATA	200AMP MAT9005P
Main Voltage	220V
Duty Cycle %	60%
Welding Current Range	20-200amps
Minimum Electrode	2mm
Maximum Electrode	3.2mm
Weight	4.7 Kg
Protection class:	IP21S

ACCESSORIES:

- Electrode holder with cable & dinse connector
- Earth clamp with cable & dinse connector
- Hand held face mask
- Wire brush & chipping hammer





200 AMP INVERTER WELDER - MAT9055KD

These models are portable inverter DC arc welders. The robust format makes them versatile and effective for a variety of uses. The welder complies too current regulations and the optimum quality of materials used will ensure a long life with complete safety

Technical Data	200AMP MAT9055KD
Main Voltage	220V
Duty Cycle %	60%
Welding Current Range	20-200amps
Minimum Electrode	2mm
Maximum Electrode	4mm
Weight	5.4 Kg
Protection class:	IP21S

ACCESSORIES:

- Electrode holder with cable & dinse connector
- Earth clamp with cable & dinse connector
- Hand held face mask
- Wire brush & chipping hammer



*** INDUSTRIAL MACHINE**

200 AMP SINGLE PHASE 220V DC INVERTERS MAT9055K MMA / TIG

- Compact and lightweight
- Stable Arc with excellent striking capabilities
- Hot Start MMA
- Over Voltage and Over Current protection
- Carry Handle and Convenient Shoulder strap
- Suitable for Scratch Start TIG welding
- **Supplied with welding cables**

TECHNICAL DATA	ARC 200 MAT9055K
Input Power Voltage	Single Phase AC 220V $\pm$ 10%
Rated Input Power Capacity	5.3 KVA
No Load Voltage	63V
Output Current Range	20-200A
Rated Output Voltage	26.2
Duty Cycle %	60%
Weight	8Kg
Dimensions (LWH)	371 x 155 x 295mm



*** INDUSTRIAL MACHINE**





200 AMP SINGLE PHASE 220V DC INVERTERS MMA / TIG - 200A WITH VRD - MAT9055VRD

VRD stands for Voltage Reduction Device

A VRD reduces the maximum open circuit voltage across the output terminals to below 15 volts

This is a safety requirement of most mines in South Africa when the unit is to be operated underground or in damp conditions. The presence of a VRD can however cause difficulty in the striking and re-striking of the arc with less skilled operators. This is because the machine has to rapidly change from the reduced open circuit voltage of below 15 volts to the open circuit voltage of around 56 volts necessary to strike the arc.

- Compact and lightweight
- Stable Arc with excellent striking capabilities
- Hot Start MMA
- Over Voltage and Over Current protection
- Carry Handle and Convenient Shoulder strap
- Suitable for Scratch Start TIG welding
- Supplied with welding cables
- Please Note: All VRD Machines must be Built in and can't have an on/off function



TECHNICAL DATA	ARC 200 MAT9055VRD
Input Power Voltage	Single Phase AC 220V $\pm 10\%$
Rated Input Power Capacity	5.3 KVA
No Load Voltage	9V
Output Current Range	20 - 200A
Rated Output Voltage	26.2
Duty Cycle %	60%
Weight	8Kg
Dimensions (LWH)	371 x 155 x 295mm

230 AMP WELDER PROFESSIONAL INVERTER MMA / TIG STICK - MAT9065

- Compact and lightweight
- Stable Arc with excellent striking capabilities
- Hot Start MMA
- Over Voltage and Over Current protection
- Carry Handle and Convenient Shoulder strap
- Suitable for Scratch Start TIG welding
- Supplied with welding cables



TECHNICAL DATA	MAT9065
Main Voltage	1PH/220V
Frequency	50/60hz
Input Capacity KVA	6.8KVA
No Load Voltage ($\pm 5\%$)	65V
Welding Current	20-230A
Duty Cycle	60%
Connector Size	35-50
Over Load Protection	✓
Min Electrode	1.6mm
Max Electrode	5.0
Protection Degree	IP21S
Net Weight	6.95
Packaging Dimensions	52.5*17.5*39

*** INDUSTRIAL MACHINE**



300 AMP THREE PHASE 380V DC INVERTERS MMA / TIG - 300A - MAT9059N

- Stable Arc with excellent striking capabilities
- Hot Start MMA
- Over Voltage and Over Current protect
- Adjustable Arc Force
- Suitable for Scratch Start TIG welding
- Digital display
- Supplied with welding cables
- With VRD Function

TECHNICAL DATA

ZX7-300 VRD MAT9059N

KVA	12
Input Voltage & HZ	50HZ/60HZ
Input Voltage V	380V
No Load Voltage ($\pm 5\%$)	20V
Output ($\pm 5\%$)	20-300A
Rated Output Voltage	32V
Duty Cycle	60%
Dia for Electrode	1.6-5.0
Protection Degree	IP21S



400 AMP THREE PHASE 380V DC INVERTERS - MMA/TIG - 400A MAT9060N

- Stable Arc with excellent striking capabilities
- Hot Start MMA
- Over Voltage and Over Current Protect
- Adjustable Arc Force
- Suitable for Scratch Start TIG Welding
- Digital Display
- Supplied with Welding Cables
- With VRD Function

TECHNICAL DATA

ZX7-400 VRD MAT9060N

KVA	18
Input Voltage & HZ	50HZ/60HZ
Input Voltage V	380V
No Load Voltage ($\pm 5\%$)	20V
Output ($\pm 5\%$)	20-400A
Rated Output Voltage	34.8V
Duty Cycle	60%
Dia for Electrode	1.6-6.0
Protection Degree	IP21S





500 AMP THREE PHASE 380V DC INVERTERS - MMA/TIG - 500A MAT9061N

- Stable Arc with excellent striking capabilities
- Hot Start MMA
- Over Voltage and Over Current Protect
- Adjustable Arc Force
- Suitable for Scratch Start TIG Welding
- Carbon Arc Gouging Capabilities with 500 Amp Unit
- Digital Display
- Supplied with Welding Cables
- With VRD Function



TECHNICAL DATA	ZX7-500 VRD MAT9061N
KVA	25
Input Voltage & HZ	50HZ/60HZ
Input Voltage V	380V
No Load Voltage ($\pm 5\%$)	20V
Output ($\pm 5\%$)	20-500A
Rated Output Voltage	38.8V
Duty Cycle @35°C	60%
Dia for Electrode	1.6-8.0
Protection Degree	IP21S

TIG WELDING

200 AMP SINGLE PHASE 220V TIG / MMA WELDER - 200A MAT9051D

- Compact and lightweight
- Advanced Inverter based technology
- High Frequency start TIG Welding
- Pulsed TIG facility
- Adjustable ARC Force in MMA welding
- Not suitable for Aluminium TIG Welding
- Digital display
- Supplied with ARC cables and TIG torch



TECHNICAL DATA	MATTIG 200 MAT9051D
Input Power Voltage	220 (220~240)V
Power Frequency	50/60Hz
Rate Input Capacity	7 KVA
Rate Input Current	30A
Output No Load Voltage	78V
Rated Working Voltage	TIG18V/MMA27.2V
TIG Welding Current	10~200A
Welding Current	10~200A
Base Value Current	10~95%
Current Rise Time	0~15S
Current Drop Time	0~25S
Pulse Frequency	0.2~200Hz
Duty Cycle	35%
Gas Pre-Flow Time	0~5S
Gas Post-Flow Time	1~15S
Cooling Type	Wind Cooling
Cover Protection Degree	IP21S
Weight	10Kg
Dimensions (LWH)	472 x 185 x 340mm





200AMP AC/DC TIG MACHINE INVERTER TYPE - MAT9053D



SUITABLE
FOR
ALUMINIUM
USE

VARIABLE
ADJUSTABLE AMP
TIG TORCH

* Accessories include TIG Torch and Earth and Electrode Cable Kit

The use of improved IGBT inverter technology, reducing the size of the main transformer and reactor, thereby reducing the size and weight of the power supply machine, greatly reducing the copper loss, improve the power efficiency and power factor, the energy saving effect is very significant.

- DC welding (DC - TIG)
- AC TIG welding (AC - TIG)
- AC pulse welding (DC - PTIG)
- AC pulse TIG (AC - PTIG)
- DC welding electrode manual welding (DC - MMA)

A variety of welding functions can be applied to almost all welding materials, including a variety of nonferrous metals such as carbon steel, cast iron, stainless steel, copper and their alloys, as well as various aluminium and magnesium alloys for welding.

TECHNICAL DATA	WAVE 200KE MAT9053D
Rated Input Voltage	220V±15%, 50/60Hz
Maximum Input Current	31A
Rated Input Capacity	6.82kVA
Output No-load Voltage	62V
Rated load Sustained Rate	35% (@40°C)
Power Factor	≥0.80
Effectiveness	80%
Insulation Level	F
Enclosure Rating	IP21S
Cooling Method	Cold wind
Dimensions	500*240*410mm
Net Weight	19.4Kg
MMA	
Rated Current	20~160A
TIG	
Arc Way	HF
DC TIG	
Rated Current	10A~200A
DC PULSE TIG	
Peak Current	10A~200A
Base Current	50% Peak current
Pulse Frequency	0.2Hz~200Hz
Duty Cycle	AC TIG 50%
Rated Current	20A~200A
AC Frequency	50Hz~150Hz
AC Balance	50%~85%
AC PULSE TIG	
Peak Current	20A~200A
Base Current	50% Peak Current
AC Frequency	50Hz~150Hz
AC Balance	50%~85%
Pulse Frequency	0.2Hz~20Hz
Duty Cycle	50%

315 AMP THREE PHASE 380V TIG/MMA AC/DC WELDER - MAT9054K

- Compact and lightweight
- Advanced inverter based technology
- High frequency start TIG welding
- Pulsed TIG facility
- Adjustable Arc force in MMA welding
- Suitable for aluminium TIG welding
- Supplied with Arc cable, TIG torch and foot control
- Adjustable gas pre and post-flow
- Adjustable up and down slope
- 2T - 4T trigger function
- Water cooled TIG torch
- Requires water cooler MAT9010



SUITABLE
FOR
ALUMINIUM
USE

TECHNICAL DATA	MATTIG 315P MAT9054K
Frequency	50/60HZ
Rate Input Power Capacity	9.0 KVA
No Load Voltage	45V
Output Current Range	10 - 315A
Rated Output Voltage	22.6V
Duty Cycle 10%	60%
Arc Initiation	HF
Welding Thickness	0.5-12.0mm
Post-Gas	0 - 10 Sec
Decline Time	0 - 10 Sec
Pre-flow Time	0 - 10 Sec
Remote Control	Yes
Pulse Frequency	0.5 - 300hz

* Due to continuous product development and improvement, Matweld reserves the right to modify product design, specifications and materials without prior notice.





MINI MIG/STICK INVERTER 160 AMP 220 VOLT - MAT9150

These models are portable inverter DC arc welders. The robust format makes them versatile and effective for a variety of uses. The welder complies too current regulations and the optimum quality of materials used will ensure a long life with complete safety

TECHNICAL DATA	MAT9150
Input Voltage	220V
Input current	31A
Output current	30 -160 AMP
Duty cycle	60%
Wire dia	0.8/0.9mm
Power capacity	6,9KVA
Insulation	IP21S
Machine size	320X140X240

- An entry level dual purpose mig / mma inverter welder ideally suited for the diy enthusiast or hobbyist.
- Advanced igbt technology.
- Includes mig torch and cable kit.
- 1 kg spool wire 0.8mm and flux corded 0.9mm
- Top wire feeder.
- Light weight and portable.
- Convenient carry strap.



* MAT3345EN Sold Separately

180 AMP MIG/STICK WELDER EXTREME MIG MULTI PRESS - MAT9100

- An entry level multi process welder ideally suited to the DIY enthusiast or hobbyist
- Includes MIG torch and cable kit
- Excludes argon flow meter MAT3345EN sold separately
- MIG and MMA stick welding + TIG
- 5 kg MIG wire spool
- Can weld with gasless flux cored wire
- Convenient 220 volt
- Light weight

Technical Data	MAT9100
Input Power Voltage	220 Volt
Duty Cycle	20%
MIG Welding Current	30 - 180 Amp
MMA (stick) Welding Current	180 Amp
Weight	15.6 Kg
Dimensions (LWH)	554 x 242 x 436mm



* MAT3345EN Sold Separately





200 AMP CARIMIG 200 LCD INVERTER WELDER - MAT9079

- The Carimig 200 LCD is a multiprocess DC inverter welder with LCD screen.
- The Carimig series is ideal for Do-It-Yourself projects or for light maintenance

ACCESSORIES:

- Electrode holder with cable & dinse connector
- Earth Clamp with cable & Dinse connector
- MIG Torch

Technical Data	CARIMIG MAT9079
Main Voltage	220 Volt
Duty Cycle	20% @40 degrees
Welding Current Range	20 - 200 Amp
MMA Welding Current	10 - 180 Amp
TIG Welding Current	10 - 180 Amp
MIG Welding Current	40 - 200 Amp
Weight	18 Kg
Protection Class	IP21S

* MAT3345EN Sold Separately



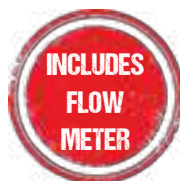
* **SYNERGIC**



200 AMP SINGLE PHASE 220V INVERTER 200A MIG WELDER - MAT9080N

- Compact and lightweight
- Inverter based technology
- Industrial quality in convenient 220V single phase
- For welding carbon and stainless steel as well as aluminium
- High 60% Duty Cycle
- Wire diameters from 0.8mm to 1.0mm
- Accessories Included

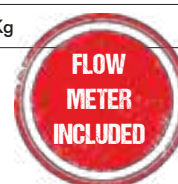
Technical Data	MATMIG 200 MAT9080N
Input Power Voltage	Single Phase AC 220V $\pm 15\%$
Rated Input Power Capacity	5.1 KVA
No Load Voltage	42V
Output Current Range	50 - 200A
Rated Output Voltage	20.0
Duty Cycle%	60%
Weight	34 Kg
Dimensions (LWH)	655 x 295 x 610mm



250 AMP SINGLE PHASE 220V INVERTER 250A MIG WELDER - MAT9081N

- Compact and lightweight
- Inverter based technology
- Industrial quality in convenient 220V single phase
- For welding carbon and stainless steel as well as aluminium
- High 60% Duty Cycle
- Wire diameters from 0.8mm to 1.0mm
- Accessories Included

Technical Data	MATMIG 250 MAT9081N
Input Power Voltage	Single Phase AC 220V $\pm 15\%$
Rated Input Power Capacity	7.1 KVA
No Load Voltage	42V
Output Current Range	50 - 250A
Rated Output Voltage	22.5
Duty Cycle %	60%
Weight	35Kg





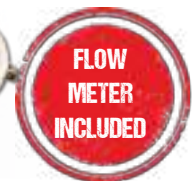
250 AMP SINGLE PHASE 220V MULTI-PROCESS IGBT - MAT9105

- Advanced IGBT inverter technology
- Constant current, constant voltage CC/CV
- Convenient 220V
- High 60% duty cycle at 40°C
- Three welding processes in one machine
- MIG Welding
- 250A MIG (30 to 250 Amps)
- 2T - 4T trigger function
- Built-in wire feeder with 2 roll driver
- Wire inching facility
- 15kg spool capacity
- 0,8 - 1,0mm wires
- Suitable for mild steel, aluminium and stainless steel MIG welding
- TIG Welding
- 220A TIG (10 to 220 Amps)
- Lift Arc TIG function
- One piece TIG torch (sold separately - see below)
- Trigger controlled gas solenoid
- Not suitable for aluminium TIG welding
- MMA Stick Welding
- 220A MMA (10 to 200 Amps)
- DC stick welding
- Up to 4mm electrode



ACCESSORIES:

- MIG TORCH
- Earth & Electrode cable kit
- MAT4610 TIG Torch sold separately



Technical Data	MIG/TIG/MMA MAT9105
Input Power Voltage	220V ±15%
Frequency	50/60HZ
Rated Input Power A	45
No Load Voltage	60V
Output Current Range	MMA 20 - 200A TIG 15 - 250A MIG 30-250A
Rated Work Voltage	28
Duty Cycle%	35%
Suitable Welding Wire	0.8/1.0mm
Type of Wire Feeder	Internal
Protection Class	IP21S

PULSE MIG

250 AMP SINGLE PHASE 220V MULTI-PROCESS IGBT - MAT9075

ITEM	INVERMATRIX 251
Input Voltage	220V ±15% (50 - 60Hz)
Fuse Capacity	55A
Rated Output	250A/26.5V
Rated No-Load Voltage	77 ± 3V
Duty Cycle (@40°C)	60%,250A26.5V
Power Factor	COSφ≥ 0.80
Frequency	n≥ 80%
Cooling Method	Air cooling
Insulation Level	F
Shell Protection Class	IP21S
MMA Welding Current	20 - 250A
MMA Thurst Power	0 - 100%
MMA Start Arc Current	20 - 300A
MMA Start Arc Time	0-0.99 seconds
MMA Breaking Arc Voltage Adjustable Range	40.0 - 80.0V
TIG/MIG/MAG Pre-flow Time	0 - 9.9 seconds
TIG/MIG/MAG Post-flow Time	0 - 9.9 seconds
TIG/MIG/MAG Operation Modes	6 Modes
TIG/MIG/MAG Pre-flow Up/Down Time	0.1 - 9.9 seconds
TIG/MIG/MAG Arc Force	±15%
MIG/MAG Current	30 - 250A
MIG/MAG Welding Voltage	12.0 - 33.0V
TIG Start Arc Method	Lift - Arc
TIG Current	10 - 250A

ITEM	INVERMATRIX 251
TIG Pulse Frequency	0.1 - 400Hz
TIG Pulse Duty Cycle	10% - 90%
Welding Torch Connection Method	European Style
Max Diameter of the Welding spool (mm)	300
Welding Electrode Diameter (mm)	0.6/0.8/0.9/1.0/1.2
Package Size (LxWxH) (mm)	880*480*680
Gross Weight (Kg)	48





315 AMP WELDER PROFESSIONAL INVERTER MIG AND STICK - 315A - MAT9086

- A fully industrial professional series multi process welder
- Advanced IGBT technology
- Constant current cc constant voltage cv
- MIG and MMA stick welding
- 15 kg MIG wire spool
- High 60% duty cycle
- 2T 4T trigger function



Technical Data

315A MAT9086

Duty Cycle %

High 60%

NOW
WITH
FLUX CORD
OPTION

350 AMP INVERMIG SERIES 380 VOLT SEPARATE WIRE FEEDER MACHINE - MAT9076

INVERMIG series IGBT inverter welder is a semi-automatic DC machine. Which is widely used in metal furniture manufacturing, shipyard and steel construction industries. The continuous output voltage adjustment can ensure accurate match up to the different welding currents. INVERMIG is characterized by little spatter and a good quality weld.

ACCESSORIES:

- Electrode holder with cable & dinse connector
- Earth Clamp with cable & dinse connector
- MIG torch
- Interconnecting cable



NOW
WITH
FLUX CORD
OPTION



Technical Data

350 MAT9076

Main Voltage

380V

Duty Cycle

60%

Welding Current Range

40 - 350 Amps

Wire Diameter

0.8 - 1.2mm

Weight

40 Kg

Protection Class

IP21S

Dimension L x W x H

654-322-671

500 AMP INVERMIG SERIES 380 VOLT SEPARATE WIRE FEEDER MACHINE - MAT9078

INVERMIG series IGBT inverter welder is a semi-automatic DC machine. Which is widely used in metal furniture manufacturing, shipyard and steel construction industries. The continuous output voltage adjustment can ensure accurate match up to the different welding currents. INVERMIG is characterized by little spatter and a good quality weld.

ACCESSORIES:

- Electrode holder with cable & dinse connector
- Earth Clamp with cable & dinse connector
- MIG torch
- Interconnecting cable

Technical Data

350 MAT9078

Main Voltage

380V

Duty Cycle

60%

Welding Current Range

40 - 500 Amps

Wire Diameter

0.8 - 1.6mm

Weight

50 Kg

Protection Class

IP21S

Dimension L x W x H

654-322-671





350 AMP 380 VOLT TRANSFORMER MIG WELDERS - MAT9072

- Fully Industrial Silicon rectifier type welders
- Heavy Duty applications
- Digital Volt and Current meters
- 350 & 500 Amp Separate feeder models with 5m interconnecting cable
- Available in 380V
- 2T - 4T trigger function
- Wire inching

ACCESSORY KIT SOLD SEPERATELY



Technical Data	MATMIG 350 MAT9072
Input Power Voltage	Three Phase AC 380V $\pm$ 10%
Rated Input Power Capacity	15.9KVA
No Load Voltage	19 - 40V
Output Current Range	60 - 360A
Duty Cycle	60%
Wire Feed Speed	1.5 - 15 m/min
Wire Diameters	1.0 - 1.6mm
Weight	143kg
Dimensions (LWH)	725 x 460 x 790mm

500 AMP THREE PHASE 380 VOLT TRANSFORMER MIG WELDERS - MAT9073

- Fully Industrial Silicon rectifier type welders
- Heavy Duty applications
- Digital Volt and Current meters
- 350 & 500 Amp Separate feeder models with 5m interconnecting cable
- Available in 380V
- 2T - 4T trigger function
- Wire inching



Technical Data	MATMIG 500 MAT9073
Input Power Voltage	Three Phase AC 380V $\pm$ 10%
Rated Input Power Capacity	32.6 KVA
No Load Voltage	21 - 53V
Output Current Range	110 - 540A
Duty Cycle %	60%
Wire Feed Speed	1.5 - 15 m/min
Weight	191Kg
Dimensions (LWH)	790 x 500 x 840mm

Air Cooled Configuration requires Accessory kit sold separately. Water Cooled Configuration requires MAT9073KWC
Accessory kit and MAT9010 Water Cooler sold separately





PLASMA MACHINES & TORCHES





PROFESSIONAL PLASMA CUTTER 40H - MAT9200



* Supplied with Filter and Regulator

TECHNICAL DATA	CUT40H MAT9200
Rated Input Voltage	1P - 220V
Frequency	50/60HZ
Rated Input Power (KW)	5
Rated Input Current (A)	31
Duty Cycle	60% 40A
No Load Voltage (V)	230
Welding Current Range (A)	15 - 40
Efficiency (%)	≥80
Power Factor	0.73
Protection Class	IP23
Cutting Thickness	10mm
Insulation Class	H
N.W.	13Kgs
Packing Size	50x24.5x45cm
Accessories	5M PT31 Cutting Torch, 3M Earth Clamp

PLASMA CUTTER 45 LCD - MAT9250

TECHNICAL DATA	MAT9250
Input Voltage	220V
Max input current	25,6AMP
Open circuit voltage	320V
Output current	15-45AMP
Duty cycle	60%
Max cut	20mm
PFC function	YES

- Latest technology lcd display screen
- Advanced igbt technology
- Portable power source for plasma cutting, very simple to use with colour lcd display and all adjustments on a single knob.
- 2t /4t mode selection.
- Grid cutting selection.
- Accessories: earth cable torch, built in regulator, filter



PROFESSIONAL PLASMA CUTTER 60H - MAT9205



* Built in Regulator
* Supplied with Filter

TECHNICAL DATA	CUT60H MAT9205
Rated Input Voltage	3P - 380V
Frequency	50/60HZ
Rated Input Power (KW)	7.8
Rated Input Current (A)	13
Duty Cycle	60% 60A
No Load Voltage (V)	260
Welding Current Range (A)	20 - 60
Efficiency (%)	≥85
Power Factor	0.93
Protection Class	IP23
Cutting Thickness	20mm
Insulation Class	H
N.W.	17.5Kgs
Packing Size	57x25.5x45cm
Accessories	5M P80 Cutting Torch, 3M Earth Clamp





PROFESSIONAL PLASMA CUTTER 80H - MAT9210



- * Built in Regulator
- * Supplied with Filter

TECHNICAL DATA	CUT80H MAT9210
Rated Input Voltage	3P - 380V
Frequency	50/60HZ
Rated Input Power (KW)	10.5
Rated Input Current (A)	17.2
Duty Cycle (40°C 10min)	60% 80A
No Load Voltage (V)	300
Welding Current Range (A)	30 - 80
Efficiency (%)	≥85
Power Factor	0.93
Protection Class	IP23
Insulation Class	H
Cutting Thickness	25mm
N.W.	28Kgs
G.W.	32.5Kgs
Packing Size	64x44x53.5cm
Accessories	5M P80 Cutting Torch, 3M Earth Clamp

PROFESSIONAL PLASMA CUTTER 100H - MAT9215



- * Built in Regulator
- * Supplied with Filter

TECHNICAL DATA	CUT100H MAT9215
Rated Input Voltage	3P - 380V
Frequency	50/60HZ
Rated Input Power (KW)	14.1
Rated Input Current (A)	23.1
Duty Cycle (40°C 10min)	60% 100A
No Load Voltage (V)	300
Welding Current Range (A)	30 - 100
Efficiency (%)	≥80
Power Factor	0.93
Protection Class	IP23
Cutting Thickness	30mm
Insulation Class	H
N.W.	28.5Kgs
G.W.	33Kgs
Packing Size	64x44x53.5cm
Accessories	5M P80 Cutting Torch, 3M Earth Clamp





PLASMA CONSUMABLES



PLASMA CONSUMABLES





PLASMA CONSUMABLES



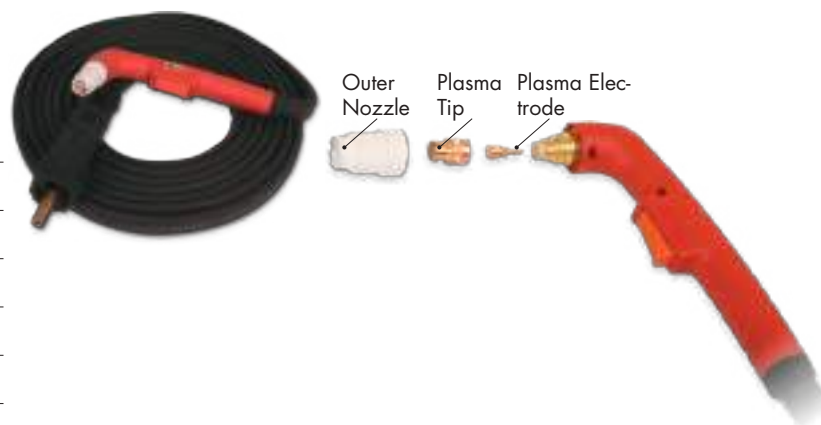
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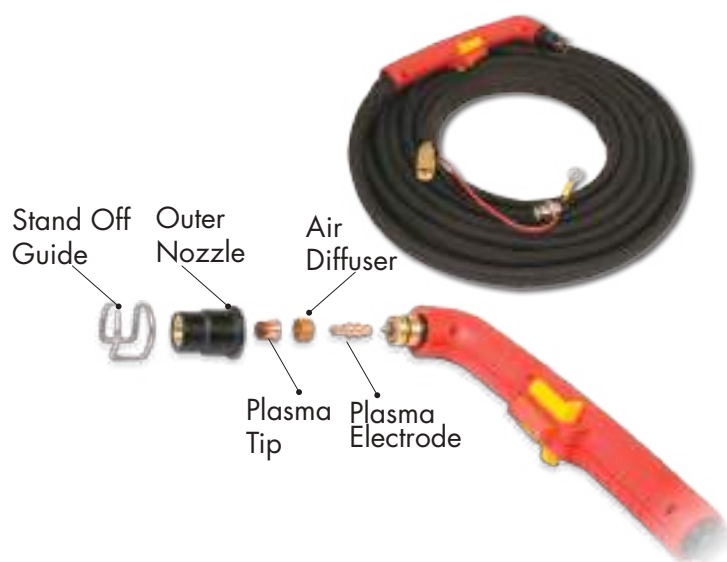
SINGLE PHASE 220V PLASMA TORCH & SPARES

PART NUMBER	DESCRIPTION	PACKING
MATPA1432	A51 Complete Torch	Each
MATPC0150	Outer Nozzle	5
MATPD0150-08	Plasma Tip 0,8mm	10
MATPD0150-10	Plasma Tip 1,0mm	10
MATPRO0150	Plasma Electrode	10



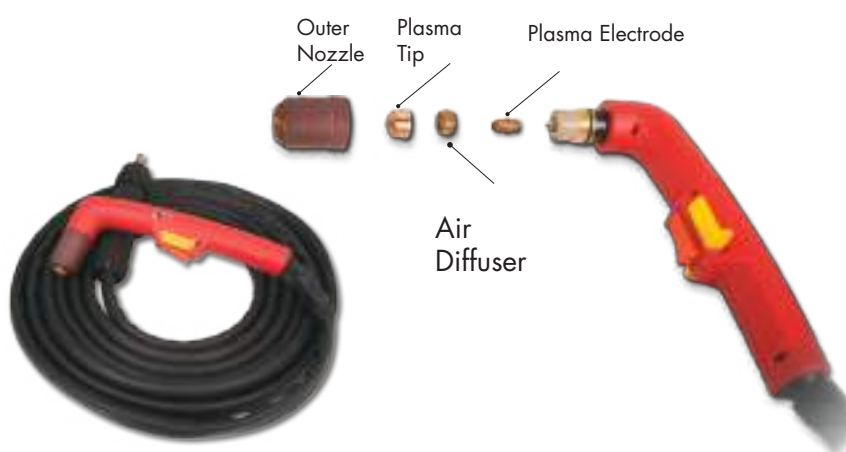
THREE PHASE 380V PLASMA TORCH & SPARES

PART NUMBER	DESCRIPTION	PACKING
MATPA1402	A81 Complete Torch	Each
MATCV0028	Stand Off Guide	10
MATPC0115	Outer Nozzle	10
MATPD105-10	Plasma Tip 1,0mm	10
MATPD105-12	Plasma Tip 1,2mm	10
MATPRO0150	Plasma Electrode	10
MATPE0107	Air Diffuser	5



SINGLE PHASE 220V PLASMA TORCH & SPARES

Part Number	Description	Packing
MATPA1452	A101 Complete Torch	Each
MATCV001	Stand Off Guide	10
MATPC0109	Outer Nozzle	10
MATPD0101-11	Plasma Tip 1,1mm	10
MATPD0101-14	Plasma Tip 1,4mm	10
MATPD0101-17	Plasma Tip 1,7mm	10
MATPD0101-19	Plasma Tip 1,9mm	10
MATPR0101	Plasma Electrode	10
MATPE0101	Air Diffuser	5





AUTO-DARKENING WELDING/GRINDING (HELMET)

ANSI APPROVED

CODE
HON3002
HON3004
HON3006
HON3008

- Suitable for MIG & stick welding
- Quick change from welding to grinding applications
- Solar powered Auto-Darkening lens is ANSI approved
- Ideal for fabrication shops & construction
- Lightweight well-balanced design
- Fully adjustable headgear provides comfort and reduces fatigue
- Light to dark time 0.00004 Sec
- Shade state: #9 - #13
- Can be adjusted continuously
- UV/IR protection: DIN16
- Sensitivity adjustable
- Delay time adjustable
- Auto On/Off power
- Includes replacement cover lenses
- Power supply: Solar cell and lithium battery
- Polycarbonate construction
- Battery powered with solar-assist for long life
- Two independent Arc sensors
- Lens change from dark to light: 0.1 - 1.0sec
- Working temperature
- -5°C - 55° (23°F - 130°F)



* Due to continuous product development and improvement, Matweld reserves the right to modify product design, specifications and materials without prior notice.



AUTO-DARKENING ADJUSTABLE WELDING & GRINDING HELMET

- Solar powered auto-darkening lens is ANSI approved
- Light to dark time 0.0002 sec
- Polycarbonate construction
- Battery powered with solar-assist for long life
- Two independent Arc sensors
- Lens dark to lens light 0.25 - 0.45sec
- Working temperature: -5°C - 55°C (23°F - 130°F)
- Lightweight well-balanced design
- Fully adjustable headgear provides comfort and reduces fatigue
- Shade state: #9-#13. Can be adjusted continuously
- UV/IR Protection: DIN16
- Auto On/Off power
- Includes replacement cover lenses
- Power supply: Solar cell

ANSI APPROVED

CODE

HON3010

HON3014C



AUTO-DARKENING WELDING NON ADJUSTABLE HELMET

- Solar powered auto-darkening lens is ANSI approved
- Light to dark time 0.0002 sec
- Polycarbonate construction
- Battery powered with solar-assist for long life
- Two independent Arc sensors
- Lens dark to lens light 0.25 - 0.45sec
- Working temperature: -5°C - 55°C (23°F - 130°F)
- Lightweight well-balanced design
- Fully adjustable headgear provides comfort and reduces fatigue
- UV/IR Protection: DIN16
- Includes replacement cover lenses
- Power supply: Solar cell

ANSI APPROVED

CODE

HON3012



FLIP FRONT WELDING HELMET

- Standard flip front welding helmet
- Adjustable head strap
- Spare head strap and front lens are available

Part Number	Description
HON3030	Helmet
HON3032	Spare head strap
HON3033	Spare front lens



SPARE LENSES ARE AVAILABLE FOR SELECTED HELMETS & GOGGLES

- Spare lenses are available for selected helmets & goggles



Part Number	Size	% Silver	Grade	Weight
SCO0500	Clear	-	Polyclear	108 x 51mm
SCO0600	Clear	-	Proclear	108 x 51mm
SCO0610	Clear	-	Proclear	50mmØ
SCO0625	Shaded	T5	Protane	50mmØ
SCO0630	Shaded	T6	Protane	108 x 51mm
SCO0640	Shaded	T7	Protane	108 x 51mm
SCO0650	Shaded	T8	Protane	108 x 51mm
SCO0660	Shaded	T9	Protane	108 x 51mm
SCO0700	Shaded	T10	Protane	108 x 51mm
SCO0800	Clear	C839	Protac	108 x 51mm
SCO0890	Shaded	T11	Protane	108 x 51mm
SCO0900	Shaded	T12	Protane	108 x 51mm





SINGLE PHASE 220V HOT BOX - 8.5KG CAPACITY

USED TO KEEP ELECTRODES DRY ON SITE AFTER REBAKING IN AN ELECTRODE OVEN

- Manufactured from the highest grade steel and insulation ensures constant temperature
- Incorporates a highly efficient heater and thermostat
- For electrodes up to 450mm in length
- With convenient pull out handle and wheels for easy mobility

TECHNICAL DATA	MAT9020
Input Voltage	220V
Temperature	50 - 300°C
Weight	14.2Kg
Capacity	8.5Kg
Outer Dimensions (LWH)	190 x 235 x 645mm
Inner Dimensions (LWH)	110 x 160 x 530mm



SINGLE PHASE 220V WATER COOLER

- 220 Volt Single Phase
- Suitable for MIG and TIG applications
- Compact Robust Design

TECHNICAL DATA	MAT9010
Input Power Voltage	220V $\pm$ 10%
Volume	8 Litre
Rated Power	150W
Rated Input Current	2.4A
Maximum Flow in L/Min	1.5 - 5.3





GAS WELDING TORCHES & ACCESSORIES



GAS WELDING EQUIPMENT

EN ISO 2503 : 200

*Pressure regulators and pressure regulators with flow-metering devices for gas cylinders used in welding, cutting and allied processes up to 300 bar (30 MPa)

5.2.6 PRESSURE - ADJUSTING DEVICE

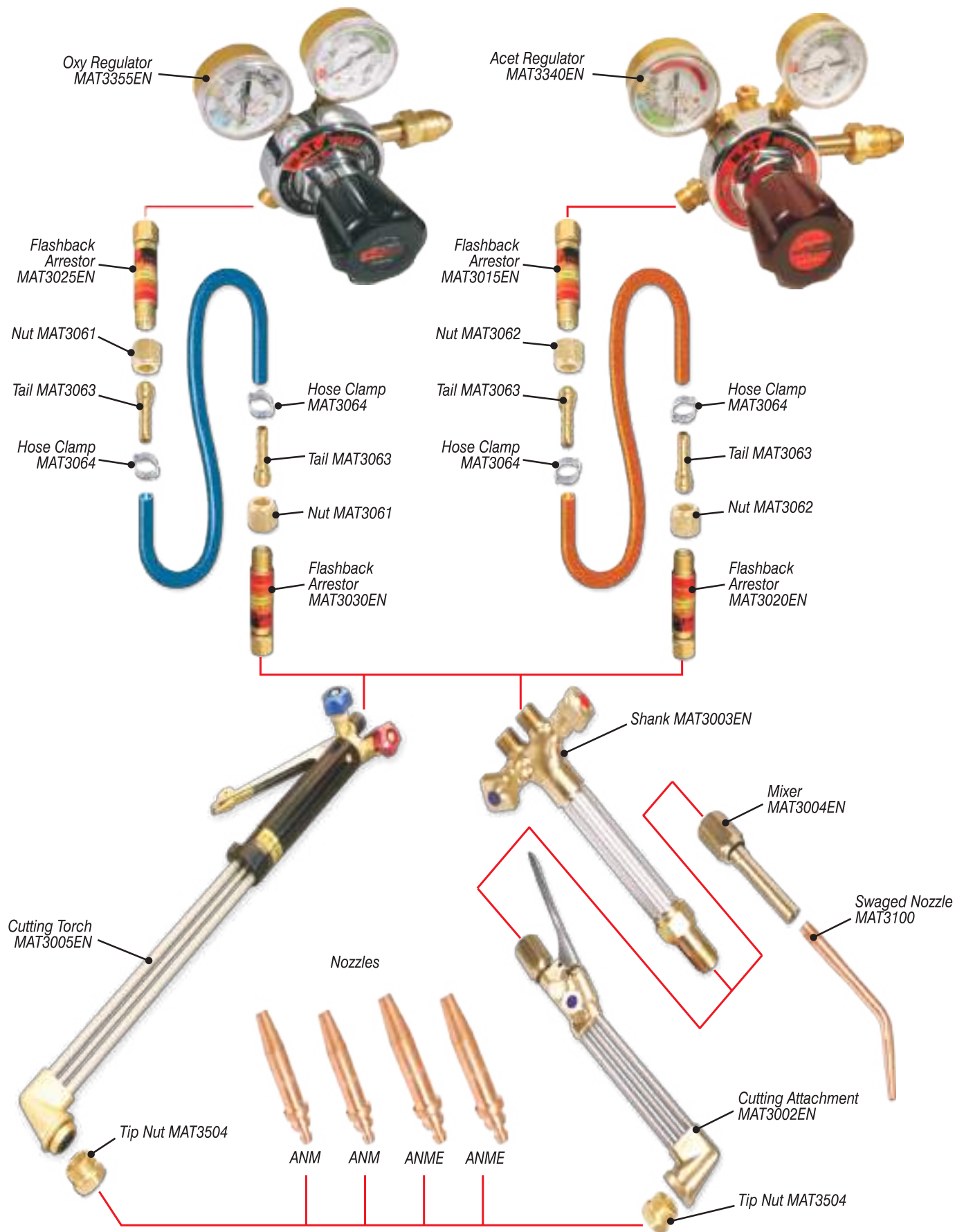
This device shall be designed in such a way that it is not possible for the pressure-regulator valve to be held in the open position, for example, as a consequence of the spring being compressed fully (to its solid length).

If prevention of the spring becoming fully compressed depends on the dimensions of the pressure-adjusting screw, then the **SCREW SHALL NOT BE REMOVEABLE**.

Using the pressure-adjusting device, it shall not be possible to set a pressure at which the pressure-relief valve opens.

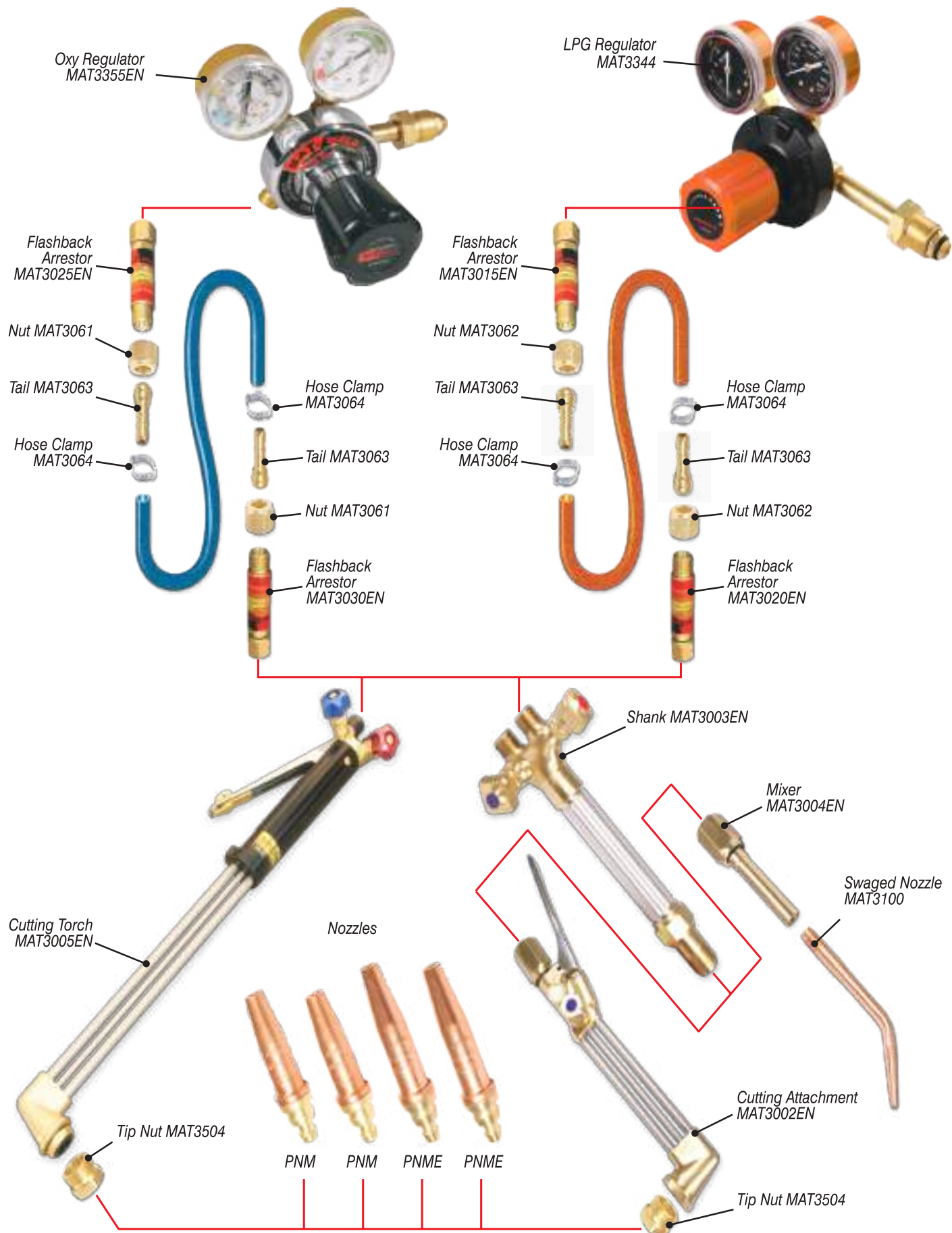


OXY/ACETYLENE GAS WELDING & CUTTING



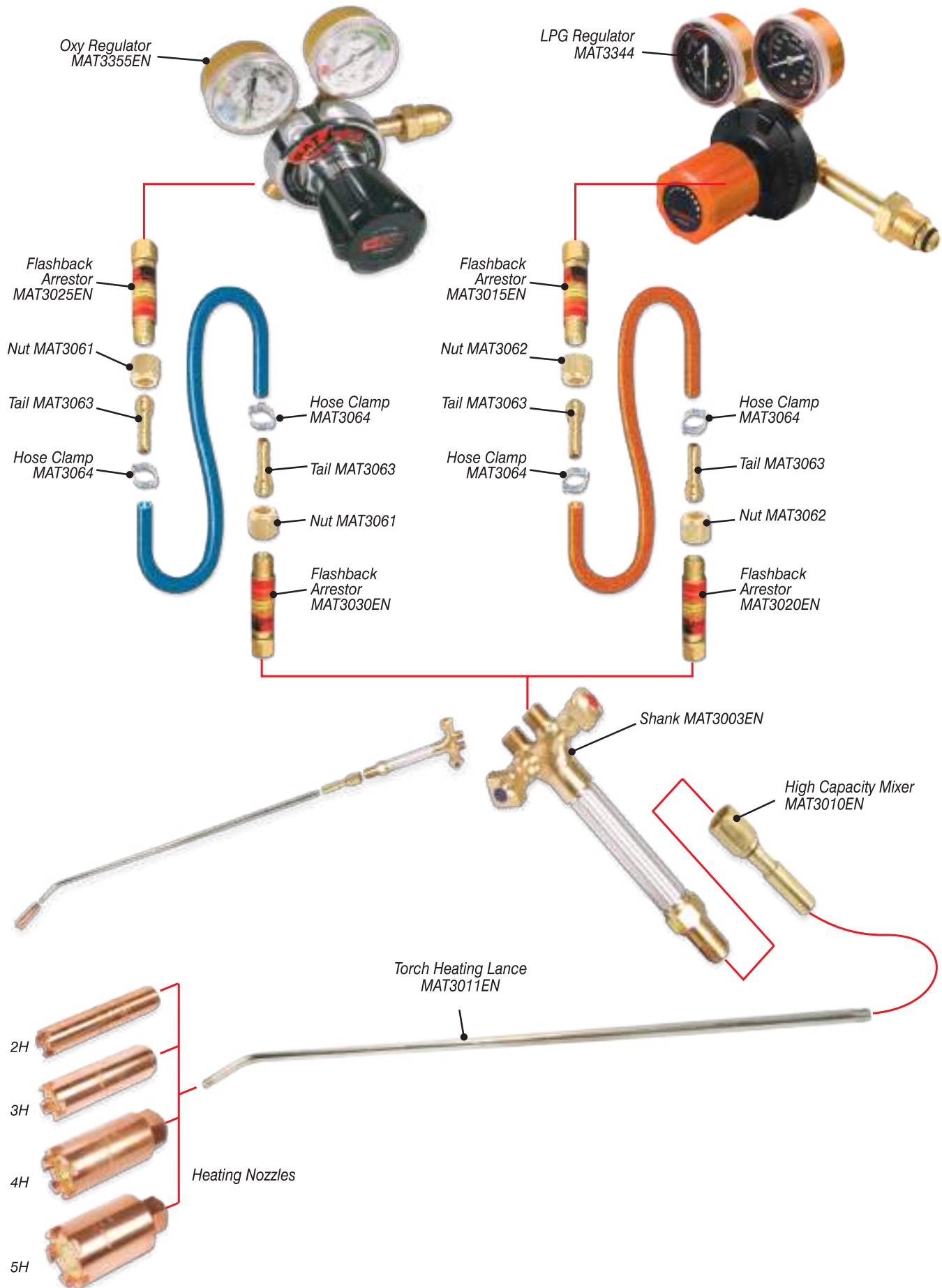


OXY/LPG GAS WELDING & CUTTING





OXY/LPG HEATING





SINGLE VS. MULTI-STAGE REGULATORS



A single-stage regulator reduces the cylinder pressure to delivery or outlet pressure in one step while a multi-stage regulator performs this process in two. The performance of each is influenced by mechanical characteristics and the choice of regulator thus depends on the requirements of the application.

The two most important variables to be considered are droop and supply pressure effect.

Droop is the difference in delivery pressure between zero flow conditions and the regulator's maximum flow capacity or the change in delivery pressure as flow is initiated and increased through the regulator

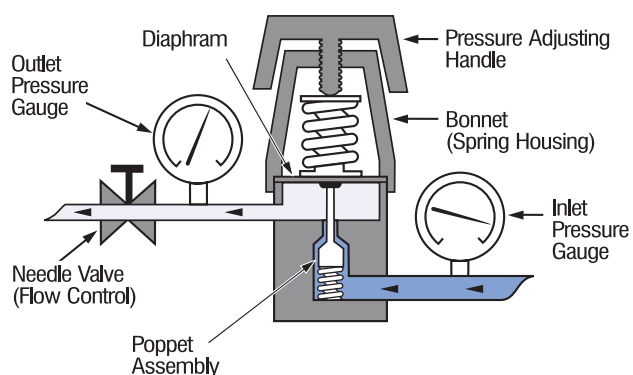
Supply pressure effect is the variation in delivery pressure as supply pressure decreases

while the cylinder empties. In most regulators, a decrease in inlet pressure causes the delivery pressure to increase.

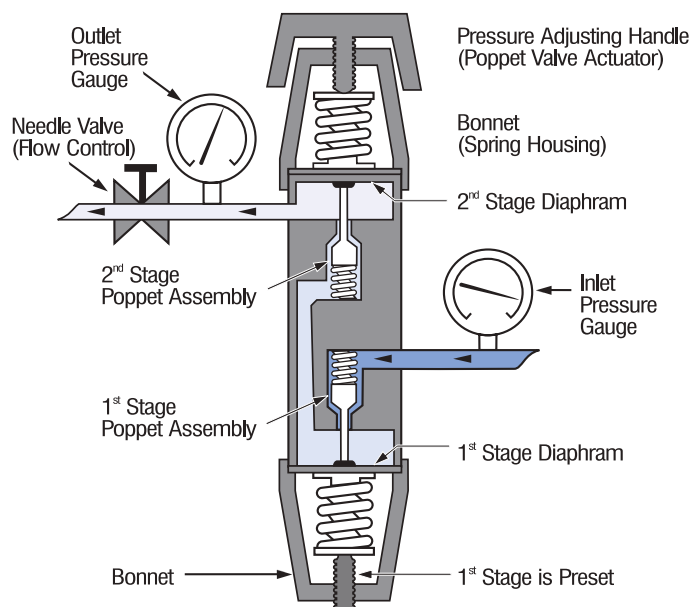
The single-stage regulator shows little droop with varying flow rates, but a relatively large supply pressure effect. This means that the regulator will have to be continuously adjusted as the cylinder empties to maintain the desired working pressure. Generally a single-stage regulator is good for short duration applications. The multi-stage regulator shows a considerable droop, but only small supply pressure effects. A multi-stage regulator, however, provides constant delivery pressure without the need for periodic readjustment. The multi-stage regulator is better suited for long duration applications.

While both regulators are safe to use when operated correctly single stage regulators are more prone to failure owing to operator error. This is primarily because the operator forgets to release the pressure on the regulator after changing cylinders.

SINGLE-STAGE REGULATOR



MULTI-STAGE REGULATOR





BLACK HANDLE CUTTING TORCH

- A streamlined cutting torch designed to ensure operator comfort
- Heavy duty cutting up to 300mm
- Top cutting lever with hold down button
- Stainless steel tubes for greater heat resistance
- Die forged 90° brass head for strength and durability
- For use with Acetylene or Propane
- Uses ANM / ANME / PNM and PNME cutting tips
- Hose connection BSP 3/8" thread



Code

MAT3005EN

CONFORMS TO EN ISO 5172

HANDLE

- Heavy duty handle for cuts up to 200mm and welds up to 9mm
- Extruded aluminium handle
- Stainless steel needle valves for fast accurate flame adjustment
- Hose connection BSP 3/8"

Code

MAT3003EN

CONFORMS TO EN ISO 5172



BRASS HANDLE CUTTING TORCH

- A streamlined cutting torch designed to ensure operator comfort
- Heavy duty cutting up to 300mm
- Top cutting lever
- Stainless steel tubes for greater heat resistance
- Die forged 90° brass head for strength and durability
- Uses ANM / ANME / PNM and PNME cutting tips
- For use with Acetylene or Propane
- Hose connection BSP 3/8" thread

Code

MAT3006EN

CONFORMS TO EN ISO 5172



MIXER

- For connection to MAT3003EN torch handle
- Medium pressure mixer
- Uses swaged welding nozzles (see page 621)
- Hose connection BSP 3/8"

Code

MAT3004EN





CUTTING ATTACHMENT

- Heavy duty cutting attachment for cuts up to 200mm
- Top cutting lever
- Stainless steel tubes for greater heat resistance
- Die forged 90° brass head for strength and durability
- Uses ANM / ANME / PNM and PNME cutting tips (see page 621)
- For use with Acetylene or Propane

CONFORMS TO EN ISO 5172

Code

MAT3002EN



TORCH MIXER - HIGH CAPACITY

- For connection to MAT3003EN torch handle
- High pressure mixer
- Uses heating lance (below) and heating nozzles

Code

MAT3010EN



SINGLE STAGE REGULATORS

- Forged brass body for maximum strength
- Chrome bonnet
- Non removable adjustment knob
- Sintered metal filter to trap impurities
- 3/8" right hand thread outlet for oxygen
- 3/8" left hand thread outlet for acetylene
- Easy to read gauges

CONFORMS TO EN ISO 2503

Code	Type
MAT3355EN	Oxygen
MAT3340EN	Acetylene



TORCH MIXER - HIGH CAPACITY

- For connection to MAT3010EN high capacity torch mixer
- Uses heating nozzles (see page 621)

Code

MAT3011EN

CONFORMS TO EN ISO 5172



- Flashback arrestors
- For the prevention of flashback and gas reverse flow. These arrestors are available in both regulator and torch 3/8" and 9/16 mount fittings.
- Fitted with both a spring loaded non-return valve to prevent gas reverse flow and a sintered stainless flame arrestor to stop and extinguish a flashback



Part No.	Size	Type	Mount
MAT3015EN	3/8"	British	Acetylene Reg
MAT3020EN	3/8"	British	Acetylene Torch
MAT3025EN	3/8"	British	Oxygen Reg
MAT3030EN	3/8"	British	Oxygen Torch

MULTI STAGE REGULATORS

- Two regulators in one forged brass body for maximum strength
- First Stage reduces full cylinder pressure by approximately 90%
- Second stage accurately controls flow and delivery pressure
- Chrome bonnet
- Non removable adjustment knob
- Sintered metal filter to trap impurities
- 3/8" right hand thread outlet for oxygen
- 3/8" left hand thread outlet for acetylene
- Easy to read gauges

CONFORMS TO EN ISO 2503

Code	Type
MAT3350EN	Oxygen
MAT3335EN	Acetylene





WELDING AND CUTTING KIT

- A professional welding and cutting kit presented in a strong polypropylene carry case
- Cutting capacity of up to 200mm and a welding capacity of 9mm this is the ideal kit for precise welding, soldering, brazing and cutting

- 1 - Torch handle
- 1 - Cutting attachment
- 1 - Mixer
- 1 - Single stage oxygen regulator
- 1 - Single stage acetylene regulator
- 2 - Torch mounted flashback arrestors
- 1 - ANM 0.8mm cutting nozzle
- 3 - Swaged welding nozzles (3,5,7)
- 1 - 6 metre twin hose with 3/8" fittings
- 1 - Goggles
- 1 - Flint lighter
- 1 - Nozzle cleaner



Code

MAT3000EN

REGULATORS CONFORM TO EN ISO 2503 CUTTING TORCH CONFORMS TO EN ISO 5172 FLASHBACK ARRESTORS CONFORM TO EN 730 - 1:2002

'Y' PIECES

- For connecting two hoses to the same regulator
- Suitable for use on Matweld flow meters when TIG purging
- Two needle valves for independent or dual control
- 3/8" right hand thread outlet for oxygen
- 3/8" left hand thread outlet for acetylene

Code	Type
MAT3501	Oxygen
MAT3502	Acetylene

CONFORMS TO EN ISO 5172



ARGON FLOW METER

- Forged brass body and bonnet for maximum strength
- Precision engineered pressure compensated design for precise flow
- Sintered metal filter to trap impurities
- 3/8" right hand thread outlet
- Easy to read gauge
- Easy to read flow tube with 360° visibility
- Suitable for MIG and TIG applications

CONFORMS TO EN ISO 5172

Code

MAT3345EN



LPG REGULATOR

- Forged brass body and bonnet for maximum strength
- Precision engineered pressure compensated design for precise flow
- Sintered metal filter to trap impurities
- 3/8" left hand thread outlet
- Easy to read gauge
- Suitable for Oxy/LPG applications
- Maximum inlet pressure 400 PSI
- Delivery pressure 2-20 PSI

Code

MAT3344





WELDING NOZZLES

- Tips are swaged and are machined from copper
- Tip size stamped on each tip
- Tips show excellent flame shape
- For use with MAT3004EN mixer & MAT3003EN handle



Code	Tip Size	Material Thickness	Oxygen Pressure (Bar)	Acetylene Pressure (Bar)	Nozzle Length
MAT3100	3	2.0mm	1	0.15	130mm
MAT3110	5	2.6mm	1	0.15	130mm
MAT3120	7	3.2mm	1	0.15	175mm

ANM CUTTING NOZZLES (SHORT)

- Oxy acetylene cutting Nozzles
- For use with MAT3005EN, MAT3006EN & MAT3002EN cutting attachment



Code	Nozzle Size	Cutting Thickness (mm)	Oxygen Pressure (Bar)	Acetylene Pressure (Bar)	Nozzle Length
MAT3130	0.8mm 1/32 #1	1 to 5	1.5	0.5	88mm
MAT3131	1.2mm 3/64 #2	5 to 10	2	0.5	88mm
MAT3132	1.6mm 1/16 #3	10 to 30	2.5	1	88mm
MAT3133	2.0mm 5/64 #4	30 to 60	3	1	88mm
MAT3134	2.4mm 3/32 #5	60 to 100	3.5	1.5	88mm

HEAT NOZZLES

- Specially designed flame release slots prevent flashbacks
- For use with oxy propane
- For efficient heating of metals prior to welding or bending



HARRIS STYLE CUTTING NOZZLE



Code	Nozzle Size	Cutting Thickness (mm)	Oxygen Pressure (Bar)	Acetylene Pressure (Bar)	Nozzle Length
MAT3190	NX00	5 - 10mm	1.5	0.5	57mm
MAT3191	NX0	10 - 15mm	2	1	57mm
MAT3192	NX1	15 - 25mm	2.5	1	57mm
MAT3193	NX2	25 - 50mm	3	1	57mm
MAT3195	NX4	199 - 175mm	4	1.5	57mm
MAT3197	NX6	250 - 300mm	6	1.5	57mm

PNM CUTTING NOZZLES (SHORT)

- Oxy propane cutting nozzles
- Two piece cutting nozzles
- For use with MAT3005EN, MAT3006EN & MAT3002EN cutting attachment



Code	Nozzle Size	Cutting Thickness (mm)	Oxygen Pressure (Bar)	Propane Pressure (Bar)	Nozzle Length	#
MAT3155	0.8mm 1/32"	1 to 5	1.5	0.5	75mm	1
MAT3156	1.2mm 3/64"	5 to 10	2	0.5	75mm	2
MAT3157	1.6mm 1/16"	10 to 30	2.5	1	75mm	3
MAT3158	2.0mm 5/64"	30 to 60	3	1	75mm	4
MAT3159	2.4mm 3/32"	60 to 100	3.5	1.5	75mm	5
MAT3160	3.2mm 1/8"	100 to 200	3.5	1.5	75mm	6





ANME CUTTING NOZZLES (LONG)

- Oxy acetylene cutting nozzles
- For use with MAT3005EN, MAT3006EN & MAT3002EN cutting attachment



Code	Nozzle Size	Cutting Thickness (mm)	Oxygen Pressure (Bar)	Acetylene Pressure (Bar)	Nozzle Length	#
MAT3138	0.8mm 1/32"	1 to 5	1.5	0.5	88mm	1
MAT3139	1.2mm 3/64"	5 to 10	2	0.5	88mm	2
MAT3140	1.6mm 1/16"	10 to 30	2.5	1	88mm	3
MAT3141	2.0mm 5/64"	30 to 60	3	1	88mm	4
MAT3142	2.4mm 3/32"	60 to 100	3.5	1.5	88mm	5

PNME CUTTING NOZZLES

- Oxy propane cutting nozzles
- Two piece cutting nozzles
- For use with MAT3005EN, MAT3006EN & MAT3002EN cutting attachment



Code	Nozzle Size	Cutting Thickness (mm)	Oxygen Pressure (Bar)	Propane Pressure (Bar)	Nozzle Length	#
MAT3165	0.8mm 1/32"	1 to 5	1.5	0.5	92mm	1
MAT3166	1.2mm 3/64"	5 to 10	2	0.5	92mm	2
MAT3167	1.6mm 1/16"	10 to 30	2.5	1	92mm	3
MAT3168	2.0mm 5/64"	30 to 60	3	1	92mm	4
MAT3169	2.4mm 3/32"	60 to 200	3.5	1.5	92mm	5
MAT3170	3.2mm 1/8"	100 to 100	4	1.5	92mm	6

CIRCLE CUTTING ATTACHMENT & RADIUS CUTTER

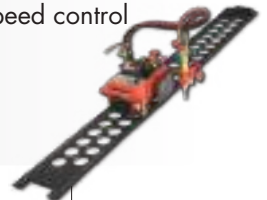
- For use with ANM or PNM nozzles
- Cutting radius of 300mm allowing for 600mm cuts



Code	Size
MAT3503	300mm Radius

STRAIGHT LINE CUTTER

- Portable oxy-fuel cutting machine
- Cutting range 6-90mm
- For use with oxy/acetylene or oxy/propane
- Lightweight aluminium construction
- High quality motor with variable speed control
- Forward reverse action
- Reduces cutting times
- Supplied with 2 x 1,8 metre tracks
- Additional tracks are available



Code	Cutting Thickness	Cutting Speed	Power	Weight	Size
MAT3550	6-90mm	150-800 mm/min	220V AC	9,5kg	350 X 140 X 175mm

STRAIGHT LINE CUTTER ADD ON TRACK

- 1,8 metre long
- Interlocking
- Lightweight aluminium construction



Code
MAT3551

TIP NUTS

- Replacement tip nut for Matweld cutting torches
- Used to secure the cutting nozzle to the cutting torch or cutting attachment



MAT3504



MAT3505



MAT3506

Code	Torch
MAT3504	MAT3005EN-MAT3006EN
MAT3506	MAT3009



NUTS AND TAILS

- Replacement nut and tails for oxygen and acetylene hose
- 3/8" thread size (British)
- 9/16" thread size (American)
- Oxygen thread right hand
- Acetylene thread left hand **MAT3063/MAT3066**
- Tail pieces for use with 8mm ID hoses
- Use MAT3064 hose 'O' clips to secure hose to tail piece
- Care must be taken to ensure that the correct nuts are affixed to the correct hose



MAT3063/MAT3066

Code	Size/Type
MAT3061	3/8" Oxy R/H
MAT3062	3/8" Acet L/H
MAT3063	3/8" Tail Piece
MAT3066	9/16" Tail Piece
MAT3067	9/16" Oxy R/H
MAT3068	9/16" Acet L/H



MAT3061/MAT3062



MAT3061/MAT3062

BULL NOSE STEM & NUTS

- MAT3056 Bull Nose Stem universal, can be used with both Bull Nose nuts
- MAT3057 Acetylene Bull nose nut
- MAT3058 Oxygen Bull Nose nut can be used on Argon flowmeters



MAT3056



MAT3057



MAT3058

Code

MAT3056

MAT3057

MAT3058

LPG REGULATOR LOW PRESSURE - MAT3250

- The body and bonnet are formed in a sealed unit with aluminium alloy & zinc alloy
- Inlet Diameter: Ø22.35, W14-L
- Outlet Diameter: Ø10mm for 8mm I.D. hose
- Inlet Pressure (P): 0.7~15.6 kg/cm²
- Outlet Pressure (R): 280mmH₂O
- Flow Capacity (Q): 1.0kg/hr



Code	Description
MAT3250	Regulator LPG Low Pressure

OXYGEN AND ACETYLENE HOSE

- Heavy duty reinforced hose
- 8mm internal diameter
- Oxygen hose blue
- Acetylene hose red



Code	Type	Size
MAT3401H	Acetylene	8mm x 100mm
MAT3400H	Oxygen	8mm x 100mm

HOSE CLAMP

- Used to secure hose to tail pieces



Code

MAT3064

8MM PARALLEL HOSE CLAMPS

- Used to hold oxygen and acetylene hoses side by side



Code

MAT3365





LPG TORCH HANDLE WITH ECONOMISER MAT3255

- Equipped with an economiser valve with separate control knob
- A suitable pilot flame is adjusted with this knob while the trigger is released
- When the trigger is depressed, the burner returns to the working flame previously adjusted with the standard valve
- control knob
- The trigger is easily locked in position and can be operated with one hand
- The economiser valve saves both time and gas, especially when working a long operation with frequent breaks using large burners with heavy gas consumption



Code

MAT3255

LPG TORCH HANDLE - NO ECONOMISER

- These torch handles are ergonomically designed which fits comfortably and securely into the hand

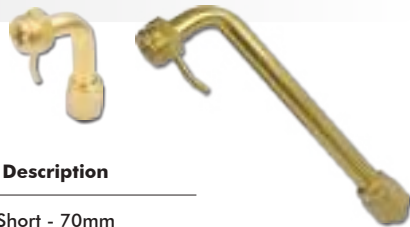


Code

MAT3260

LPG NECK TUBES FOR LPG TORCHES

- Use with LPG Torch handles
- Designed for use with the range of burners
- Longer lengths are available to increase the distance between the burner and the handle reducing the effect of radiant heat back onto the hand during operation



Code	Description
MAT3270	Short - 70mm
MAT3265	Long - 180mm

OXYGEN AND ACETYLENE HOSE

- Heavy duty reinforced hose
- 8mm internal diameter
- Oxygen hose blue
- Acetylene hose red

Code	Type	Size
MAT3401H	Acetylene	8mm x 100mm
MAT3400H	Oxygen	8mm x 100mm

LPG NECK TUBES FOR LPG TORCHES

- Extra Long - 750mm



Code

MAT3275

LPG NECK TUBES FOR LPG TORCHES

- Burners are designed for high-pressure operation (200kPa) and all of them can be connected to the universal handles by means of the neck tubes
- The special design ensures that cool primary air forms a cooling air gap between flame and burner tube, thus ensuring a very long burner lifetime
- Powerful, wind proof flames, suitable for outdoor work



Code

MAT3284



Code

MAT3285



Code

MAT3286



Code

MAT3287



Code

MAT3288





ARC WELDING ACCESSORIES

DINSE TYPE 10/25

- Dinse type
- Solid brass connectors
- Rubber insulation
- For use with 10 and 25mm² cables
- Can be used to connect cables to welding machines using MAT1026 panel socket (below)

Code	Type	Rating
MAT1016	10/25 Female	200 Amp
MAT1017	10/25 Male	200 Amp



DINSE TYPE 50/70

- Dinse type
- Solid brass connectors
- Rubber insulation
- For use with 50 and 70mm² cables
- Can be used to connect cables to welding machines using MAT1025

Code	Type	Rating
MAT1021	50/70 Female	500 Amp
MAT1022	50/70 Male	500 Amp



DINSE TYPE 35/50

- Dinse type
- Solid brass connectors
- Rubber insulation
- For use with 35 and 50mm² cables
- Can be used to connect cables to welding machines using MAT1025 panel socket (below)

Code	Type	Rating
MAT1015	35/50 Female	300 Amp
MAT1020	35/50 Male	300 Amp



BAYONET TYPE

- Solid brass connectors
- Rubber insulation
- For joining up to 70mm² cables
- Rated 500 Amp
- **Not for connecting cables to welding machines**

Code	Type	Rating
MAT1000	Female	500 Amp
MAT1005	Male	500 Amp



PLATED CROCODILE TYPE

- Suitable for use up to 200 Amps at 60% duty cycle
- Light to medium duty

Code	Type	Rating
MAT1030	Crocodile	200 Amp



PLATED CROCODILE TYPE

- Suitable for use up to 400 Amps at 60% duty cycle
- Medium to heavy duty

Code	Type	Rating
MAT1035	Crocodile	400 Amp



PLATED CROCODILE TYPE

- Suitable for use up to 600 Amps at 60% duty cycle
- Heavy duty

Code	Type	Rating
MAT1045	Crocodile	600 Amp



HEAVY DUTY BRASS G-CLAMP TYPE

- Suitable for use up to 600 Amps
- Heavy duty applications

Code	Type	Rating
MAT1050	Crocodile	600 Amp



PANEL SOCKETS

- Replacement panel sockets for welding machines and generators
- Small size for 10/25 Dinse type cable connectors
- Large size for 35/50 and 50/70 cable connectors

Code	Type	Rating
MAT1026	10/25	200 Amp
MAT1025	35/50 & 50/70	500 Amp





KD

- Entry level DIY electrode holder
- Available in 300 & 500 Amp
- Suitable for home and light industrial use



Code	Type	Rating
MAT1070	KD Style	300 Amp
MAT1080	KD Style	500 Amp

K5 TYPE

- Heavy duty carbon arc air gouging torch
- Gouging, cutting, beveling & piercing metal
- Heavy duty foundry application
- 2 metre swivel cable
- Requires compressed air at 80 to 100 psi
- Weight 2.4kg



Code	Type	Rating
MAT1275	K4 Type	800 Amp
MAT1280	K5 Type	1000 Amp

OPTIMUS STYLE

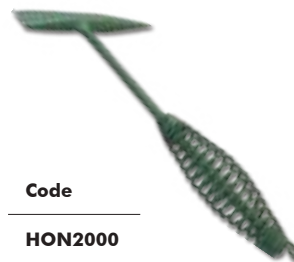
- Fully industrial collet type electrode holder
- Available in 300, 400 and 600 Amp
- Fully insulated jaws
- Ribbed handles for better grip and optimal cooling



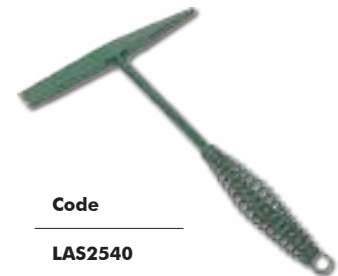
Code	Type	Rating
MAT1085	Optimus Style	300 Amp
MAT1090	Optimus Style	400 Amp
MAT1095	Optimus Style	600 Amp

CHIPPING HAMMER

- Chisel & point end
- Comfortable spring handle
- All steel
- Chisel and pick point
- Spring type wire handle.
- Used for cleaning welding slag



Code
HON2000



Code
LAS2540

JAW TYPE

- Fully industrial jaw type electrode holder
- Available in 300 and 500 Amp



Code	Type	Rating
MAT1110	Jaw Type	300 Amp
MAT1115	Jaw Type	500 Amp

TWIST-LOCK TYPE

- Heavy industrial screw type electrode holder
- Available in 400 and 600 Amp
- Knurled handles for better grip and optimal cooling
- Screw type clamping mechanism ensures proper connection with electrode



Code	Type	Rating
MAT1100	Twist	300 Amp
MAT1105	Twist	500 Amp





WELDER'S WIRE BRUSH

- Heavy duty steel bristles
- Wooden handle
- For cleaning mild steel before and after welding or brazing



Code	Type
SPR2070	5 Row S/Steel
SPR2060	4 Row Steel

WELDERS' MAGNETS

- Strong, powerful magnets can hold up to 25-75lb
- Hold sheet metal, pipes etc. when welding and fitting at angles of 45°, 90° and 135°
- Baked enamel finish



Code	Type
HON0835	Small

PICKLING PASTE



Code	Size
MAT0855	2kg
MAT0860	1kg

CABLE LUGS



Code	Hole Ø (A)	Cable Ø (B)
MAT1300	16mm	16 ²
MAT1305	25mm	25 ²
MAT1310	35mm	35 ²
MAT1315	50mm	50 ²
MAT1320	70mm	70 ²





TEMPERATURE CRAYONS

- Calibrated at $\pm 1\%$ Accuracy
- Lead and Sulphur free
- Compliance with European RoHS regulations
- Simple to use; mark surface of metal with the required crayon
- Once the surface reaches the rated temperature of the crayon, the mark



Part No.	°C/°F	Pack	Part No.	°C/°F	Pack	Part No.	°C/°F	Pack	Part No.	°C/°F	Pack
MAT1500	38/100	Box 5	MAT1507	107/225	Box 5	MAT1514	191/375	Box 5	MAT1521	274/525	Box 5
MAT1501	52/125	Box 5	MAT1508	110/231	Box 5	MAT1515	204/400	Box 5	MAT1522	288/550	Box 5
MAT1502	59/138	Box 5	MAT1509	121/250	Box 5	MAT1516	218/425	Box 5	MAT1523	302/575	Box 5
MAT1503	66/150	Box 5	MAT1510	135/275	Box 5	MAT1517	232/450	Box 5	MAT1524	316/600	Box 5
MAT1504	79/175	Box 5	MAT1511	149/300	Box 5	MAT1518	246/475	Box 5	MAT1525	343/650	Box 5
MAT1505	93/200	Box 5	MAT1512	163/325	Box 5	MAT1519	253/488	Box 5	MAT1526	371/700	Box 5
MAT1506	101/213	Box 5	MAT1513	177/350	Box 5	MAT1520	260/500	Box 5	MAT1527	399/750	Box 5

PAINT MARKERS

- Each marker has a high quality reversible nib
- Permanent marking, lettering, coding or numbering can be made using these marker pens
- Low Chloride, Fast Drying
- Weather Resistant Marks
- Suitable for marking on metal, glass, wood, rubber, plastic etc
- The mark will withstand temperatures up to 400° C

Code	Size
MAT1530	White
MAT1531	Yellow



PASSIVATING GEL

- It is a popular misconception that Pickling Paste can also perform a Passivating role
- Stainless Steel owes its corrosion resistance to a microscopic Passive Layer
- This Passive Layer needs to be restored after Pickling
- Pickling paste cannot both Pickle and Passivate



Code	Size
MAT0865	2kg

SURFACE CLEANER

- Removes annealing colours, welding scale and corrosion, traces of oil and grease from stainless steel surfaces
- Surfaces are brightened and show a brilliant optical effect
- The indicator achieves controllable spraying and reduction of the emission of poisonous and nitrous gases
- Cleaning of slightly greasy surfaces
- Control of reaction (decolorization)



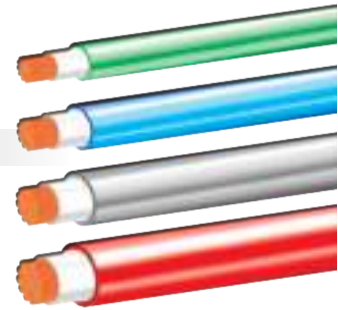
Code	Size
MAT0875	2kg

ALUMINIUM CLEANER

- A Highly effective Pickling Agent for Aluminum surfaces
- Also suitable for other metals and alloys (Brass)
- Odorless
- Removes Oxides, contaminations and Annealing colours
- Produces an evenly brightened surface

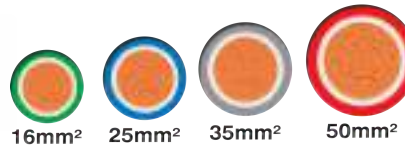


Code	Size
MAT0870	2kg



WELDING CABLE

- SABS approved
- Double insulated
- 1000V



Part No.	Packing / Coil (M)	Colour	Mass kg/m	Area mm²	Dia mm²	Current Rating / Duty Cycle (A)				
						100%	85%	60%	30%	10%
MAT1400	6	Green	0.203	16	0.203	0.203	0.203	0.203	0.203	0.203
MAT1405	30									
MAT1410	100									
MAT1415	6	Blue	0.283	25	0.203	0.203	0.203	0.203	0.203	0.203
MAT1420	30									
MAT1425	100									
MAT1430	10	Grey	0.384	35	0.203	0.203	0.203	0.203	0.203	0.203
MAT1435	30									
MAT1440	100									
MAT1445	10	Red	0.534	50	0.203	0.203	0.203	0.203	0.203	0.203
MAT1450	30									
MAT1455	100									



ACID RESISTANT BRUSHES

- Special Acid resistant brushes for applying Pickling & Passivating products

Code	Size
MAT0886	1,0"
MAT0885	1,5"
MAT0887	Small



ANTI SPATTER WELDING AEROSOL

- Specially formulated to prevent welding spatter
- For use with MIG / MAG welding
- Minimises clean up
- Enhances gas flow
- Available in SILICONE & NON-SILICONE

Code	Type	Size
MAT0800	Non-Silicone	400ml
MAT0805	Silicone	400ml
MAT0810	Silicone	500ml



COLD ZINC GALVANISING SPRAY

- Deposits a flexible, hard, 95% pure zinc coating used for the protection of steel surfaces
- Especially useful in cases where the galvanized coating on steel has been disturbed due to welding, drilling, etc

Code	Size
MAT0815	350ml





BNZ STYLE MIG TORCH - BNZ 15

- Matweld's BNZ 15 MIG/MAG torch combines quality, design and performance to ensure optimum hassle-free operation. Quality Italian designed and manufactured power cables ensure maximum flexibility and abrasion resistance. Cable design allows for optimal cooling thus ensuring maximum duty cycles.
- The BNZ 15 is ideally suited for light engineering applications. Its compact design finds favour with those in the automotive and panel repair industries who require ease of access.

FEATURES

- High duty cycle
- Ergonomic design
- Lightweight for maximum operator comfort
- Compact design allows for easy access to hard to reach areas

APPLICATIONS

- Light engineering
- Exhaust shops
- Panel beaters
- Sheet metal fabricators
- Burglar bar & security door manufacturers

- Duty Cycle: 60%
- Wire Ø: 0.6 - 1.0mm
- Rating: 150 Amp Mixed Gas
- Length: 4 Meters



Code	Rating
MAT5300	150A

MATWELD BNZ 15 SHROUD



Code	Rating/Size
MAT5100	-

MATWELD BNZ 15 CONTACT TIPS

Code	Rating/Size
MAT5180	M6 x 0.8mm
MAT5185	M6 x 0.9mm
MAT5190	M6 x 1.0mm



MATWELD BNZ 15 TIP ADAPTOR

Code	Rating/Size
MAT5140	M6



MATWELD BNZ 15 SWAN NECK



Code	Rating/Size
MAT5250	-

MATWELD BNZ 15 HANDLE & SWITCH



Code	Rating/Size
MAT5010	Handle & Switch
MAT5015	Switch Only

MATWELD BNZ 15 POWER CABLE



Code	Rating/Size
MAT5360	4m

MATWELD BNZ 15 LINER



Code	Rating/Size
MAT5050	4m 0.9 - 1.2mm





BNZ STYLE MIG TORCH - BNZ 25

- Matweld's BNZ 25 MIG/MAG torch combines quality, design and performance to ensure optimum hassle-free operation. Quality Italian designed and manufactured power cables ensure maximum flexibility and abrasion resistance. Cable design allows for optimal cooling thus ensuring maximum duty cycles.
- The BNZ 25 is ideally suited for light to medium duty engineering applications. It's compact design finds favour with those in the automotive and panel repair industries who require ease of access.

FEATURES

- High duty cycle
- Ergonomic design
- Lightweight for maximum operator comfort
- Compact design allows for easy access to hard to reach areas

APPLICATIONS

- Light engineering
- Exhaust shops
- Panel beaters
- Sheet metal fabricators
- Burglar bar & security door manufacturers
- Duty Cycle: 60%
- Wire Ø: 0.8 - 1.2mm
- Rating: 230 Amp Mixed Gas
- Length: 4 Metres



Code	Rating
MAT5305	230A

MATWELD BNZ 25 SWAN NECK

Code	Rating/Size
MAT5255	-



MATWELD BNZ 25 HANDLE & SWITCH

Code	Rating/Size
MAT5010	Handle & Switch
MAT5015	Switch Only



MATWELD BNZ 25 POWER CABLE

Code	Rating/Size
MAT5365	4m



MATWELD BNZ 25 SHROUD

Code	Rating/Size
MAT5105	-



MATWELD BNZ 25 LINER

Code	Rating/Size
MAT5050	4m 0.9 - 1.2mm



MATWELD BNZ 25 CONTACT TIPS

Code	Rating/Size
MAT5180	M6 x 0.8mm
MAT5185	M6 x 0.9mm
MAT5190	M6 x 1.0mm
MAT5195	M6 x 1.2mm



MATWELD BNZ 25 CENTRAL ADAPTOR

Code	Rating/Size
MAT5000	-



MATWELD BNZ 25 TIP ADAPTOR

Code	Rating/Size
MAT5145	M6



MATWELD BNZ 25 GUN BODY/PLUG NUT

Code	Rating/Size
MAT5005	Gun Body



BNZ STYLE MIG TORCH - BNZ 36

- Matweld's BNZ 36 MIG/MAG torch combines quality, design and performance to ensure optimum hassle-free operation. Quality Italian designed and manufactured power cables ensure maximum flexibility and abrasion resistance. Cable design allows for optimal cooling thus ensuring maximum duty cycles.
- The BNZ 36 offers the versatility of both M6 and M8 contact tips and is the perfect intermediate torch for both medium and heavy duty applications.

FEATURES

- High duty cycle
- Ergonomic design
- Lightweight for maximum operator comfort

APPLICATIONS

- Medium to heavy engineering
- Truck builders
- Ship building
- Construction



Code	Rating
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- Duty Cycle: 60%
- Wire Ø: 0.8 - 1.2mm
- Rating: 270 Amp Mixed Gas
- Length: 4 Metres

Code	Rating
MAT5310	270A

MATWELD BNZ 36 SHROUD

Code	Rating/Size
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MAT5110	-
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MATWELD BNZ 36 CONTACT TIPS

Code	Rating/Size
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MAT5180	M6 x 0.8mm
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MAT5185	M6 x 0.9mm
----------------	------------

MAT5190	M6 x 1.0mm
----------------	------------

MAT5195	M6 x 1.2mm
----------------	------------



Code	Rating/Size
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MAT5200	M6 x 0.9mm
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MAT5205	M6 x 1.0mm
----------------	------------

MAT5210	M6 x 1.2mm
----------------	------------

MATWELD BNZ 36 TIP ADAPTORS

Code	Rating/Size
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MAT5150	M6
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MAT5155	M8
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MATWELD BNZ 36 GAS DIFFUSER

Code	Rating/Size
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MAT5400	-
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MATWELD BNZ 36 POWER CABLE

Code	Rating/Size
------	-------------

MAT5260	-
----------------	---



MATWELD BNZ 36 POWER CABLE

Code	Rating/Size
------	-------------

MAT5370	4m
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MATWELD BNZ 36 LINER

Code	Rating/Size
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MAT5050	4m 0.9 1.2mm
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MAT5051	Teflon 1.5mm
----------------	--------------

MAT5055	4m 1.2-2.0mm
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Code	Rating/Size
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MAT5056	Teflon 2.5mm
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MAT5060	4.5m 2.4mm
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BNZ STYLE MIG TORCH - BNZ 40

Matweld's BNZ 40 MIG/MAG torch combines quality, design and performance to ensure optimum hassle-free operation. Quality Italian designed and manufactured power cables ensure maximum flexibility and abrasion resistance. Cable design allows for optimal cooling thus ensuring maximum duty cycles. The BNZ 40 is ideally suited to heavy duty applications in engineering shops.

FEATURES

- High duty cycle
- Ergonomic design
- Lightweight for maximum operator comfort

APPLICATIONS

- Heavy engineering
- Truck builders
- Ship building
- Construction



	Code	Rating
• Duty Cycle:	60%	MAT5311
• Wire Ø:	1.0 - 2.4mm	400A
• Rating:	320 Amp Mixed Gas	
• Length:	4 Metres	

MATWELD BNZ 40 GAS DIFFUSER

Code	Rating/Size
MAT5405	-



MATWELD BNZ 40 SWAN NECK

Code	Rating/Size
MAT5261	-



MATWELD BNZ 40 POWER CABLE

Code	Rating/Size
MAT5375	4m



MATWELD BNZ 40 SHROUD

Code	Rating/Size
MAT5120	-



MATWELD BNZ 40 CONTACT TIPS

Code	Rating/Size	Code	Rating/Size
MAT5200	M8 x 0.9mm	MAT5215	M8 x 1.6mm
MAT5205	M8 x 1.0mm	MAT5220	M8 x 2.0mm
MAT5210	M8 x 1.2mm	MAT5225	M8 x 2.4mm



MATWELD BNZ 40 TIP ADAPTOR

Code	Rating/Size
MAT5120	M8



MATWELD BNZ 36 HANDLE & SWITCH

Code	Rating/Size
MAT5010	Handle & Switch
MAT5015	Switch Only



MATWELD BNZ 40 LINER

Code	Rating/Size
MAT5050	4m 0.9-1.2mm
MAT5051	Teflon 1.5mm
MAT5055	4m 1.2-2.0mm
MAT5056	Teflon 2.5mm
MAT5060	4.5m 2.4mm





BNZ STYLE MIG TORCH - BNZ 501

- WATER COOLED
- Matweld's BNZ 501 MIG/MAG torch combines quality, design and performance to ensure optimum hassle free operation. Quality Italian designed and manufactured power cables ensure maximum flexibility and abrasion resistance. This water cooled torch allows for optimal cooling thus ensuring the maximum duty cycle.
- The BNZ 501 is ideally suited to heavy duty applications in engineering shops.

FEATURES

- High duty cycle
- Ergonomic design
- Lightweight for maximum operator comfort
- Optimum cooling extends torch life

APPLICATIONS

- Heavy engineering
- Truck builders
- Ship building
- Construction

- Duty Cycle: 100%
- Wire Ø: 1.0 - 2.0mm
- Rating: 500 Amp Mixed Gas
- Length: 4 Metres

Code	Rating
MAT5315	500A



MATWELD BNZ 501 SHROUD

Code	Rating/Size
MAT5115	-



MATWELD BNZ 36 CONTACT TIPS

Code	Rating/Size
MAT5200	M8 x 0.9mm
MAT5205	M8 x 1.0mm
MAT5210	M8 x 1.2mm



Code	Rating/Size
MAT5215	M8 x 1.6mm
MAT5220	M8 x 2.0mm

MATWELD BNZ 501 TIP ADAPTOR

Code	Rating/Size
MAT5165	-



MATWELD BNZ 501 GAS DIFFUSER

Code	Rating/Size
MAT5410	-



MATWELD BNZ 501 SWAN NECK

Code	Rating/Size
MAT5265	-



MATWELD BNZ 36 POWER CABLE

Code	Rating/Size
MAT5380	BNZ 501 Power Cable
MAT5382	BNZ 501 Power Conduit
MAT5385	BNZ Power Gas
MAT5387	BNZ 501 Power Complete Assy



MATWELD BNZ 501 LINER

Code	Rating/Size
MAT5050	4m 0.9-1.2mm
MAT5051	Teflon 1.5mm
MAT5055	4m 1.2-2.0mm
MAT5056	Teflon 2.5mm
MAT5060	4.5m 2.4mm



TWC STYLE MIG TORCH - TWC NO.4

Matweld's TWC No. 4 MIG/MAG torch combines quality, design and performance to ensure optimum hassle free operation. Quality Italian designed and manufactured power cables ensure maximum flexibility and abrasion resistance.

This Heavy Duty torch is based on the original American TWC MIG gun and all Matweld parts are fully interchangeable. The TWC No. 4 is ideally suited to heavy duty applications in engineering shops and is available with either the European style central adaptor or original TWC type connection.

FEATURES

- High duty cycle
- Ergonomic design
- Lightweight for maximum operator comfort

APPLICATIONS

- Heavy engineering
- Truck builders
- Ship building
- Construction

- Duty Cycle: 60%
- Wire Ø: 0.8 - 1.6mm
- Rating: 360 Amp
- Length: 4 Metres



Code	Rating
MAT5312	Euro/360A

MATWELD TWC NO4 NOZZLES



Code	Rating/Size
MAT5517	24CT75 #4
MAT5540	23,62 #4
MAT5545	24CT62 #4

MATWELD TWC NO4 NOZZLE INSULATOR



Code	Rating/Size
MAT5543	34CT #4

MATWELD TWC NO4 SWAN NECK



Code	Rating/Size
MAT5575	64A60 #4

MATWELD TWC NO.4 CONTACT TIPS



Code	Rating/Size
MAT5500	0.9 #4
MAT5501	1.0 #4
MAT5502	1.2 #4

Code	Rating/Size
MAT5503	1.4 #4
MAT5504	1.6 #4

MATWELD TWC NO.4 GAS DIFFUSER



Code	Rating/Size
MAT5570	54A #4

MATWELD TWC NO.4 NOZZLES

Code	Rating/Size
MAT5517	24CT75 #4
MAT5540	23,62 #4
MAT5545	24CT62 #4



MATWELD BNZ 40 LINER



Code	Rating/Size
MAT5580	4,5m 2.1 #4



TWC STYLE MIG TORCH - TWC NO.5

- Matweld's TWC No.5 MIG/MAG torch combines quality, design and performance to ensure optimum hassle free operation. Quality Italian designed and manufactured power cables ensure maximum flexibility and abrasion resistance.
- This heavy duty torch is based on the original American TWC MIG gun and all Matweld parts are fully interchangeable. The TWC No.5 is ideally suited to heavy duty applications in engineering shops and is available with either the European style central adaptor or original TWC type connection.

FEATURES

- High duty cycle
- Ergonomic design
- Lightweight for maximum operator comfort

APPLICATIONS

- Heavy engineering
- Truck builders
- Ship building
- Construction

- Duty Cycle: 60%
- Wire Ø: 1.0 - 2.4mm
- Rating: 420 Amp



Code	Rating
MAT5314	Euro/420A

BNZ SHROUDS

Code	Type	Pack
MAT5100	BNZ 15	5
MAT5105	BNZ 25	5
MAT5110	BNZ 36	5
MAT5120	BNZ 40	5
MAT5115	BNZ 501/38	5



BNZ TIP ADAPTORS

Code	Type	Pack
MAT5140	BNZ 15 M6	10
MAT5145	BNZ 25 M6	10
MAT5150	BNZ 36 M6	10
MAT5155	BNZ 36 M8	10
MAT5160	BNZ 40 M8	10
MAT5165	BNZ 501 M8	10



MATWELD TWC NO5 CONTACT TIPS



Code	Rating/Size	Code	Rating/Size
MAT5520	1.0 #5	MAT5523	1.6 #5
MAT5521	1.2 #5	MAT5524	2.0 #5
MAT5522	1.4 #5	MAT5525	2.4 #5

BNZ CONTACT TIPS



Code	Type	Size	Pack	Code	Type	Size	Pack
MAT5180	BNZ	M6 x 0.8	10	MAT5210	BNZ	M8 x 1	10
MAT5185	BNZ	M6 x 0.9	10	MAT5205	BNZ	M8 x 1.2	10
MAT5190	BNZ	M6 x 1.0	10	MAT5215	BNZ	M8 x 1.6	10
MAT5195	BNZ	M6 x 1.2	10	MAT5220	BNZ	M8 x 2.0	10
MAT5200	BNZ	M8 x 0.9	10	MAT5225	BNZ	M8 x 2.4	10

MATWELD TWC NO5 GAS DIFFUSER



Code	Rating/Size
MAT5557	55 #5
MAT5558	55H #5

BNZ GAS DIFFUSERS

Code	Type	Colour
MAT5400	BNZ 36	White
MAT5405	BNZ 40	Black
MAT5410	BNZ 501/38	White



TWC CONTACT TIPS

Matweld's TWC No. 4 MIG/MAG torch combines quality, design and performance to ensure optimum hassle free operation. Quality Italian designed and manufactured power cables ensure maximum flexibility and abrasion resistance.

This Heavy Duty torch is based on the original American TWC MIG gun and all Matweld parts are fully interchangeable. The TWC No. 4 is ideally suited to heavy duty applications in engineering shops and is available with either the European style central adaptor or original TWC type connection.



Code	Description	Pack	Code	Description	Pack
MAT5500	14H35 0,9 #4	10	MAT5520	15H40 1,0 #5	10
MAT5501	14H40 1,0 #4	10	MAT5521	15H45 1,2 #5	10
MAT5502	14H45 1,2 #4	10	MAT5522	15H52 1,4 #5	10
MAT5503	14H52 1,4 #4	10	MAT5523	15H116 1,6 #5	10
MAT5504	14H116 1,6 #4	10	MAT5524	15H564 2,0 #5	10
MAT5505	14H564 2,0 #4	10	MAT5525	15H332 2,4 #5	10

GAS DIFFUSERS



Code	Rating/Size
MAT5570	54A MOD 4
MAT5557	55 MOD 5
MAT5558	55H MOD 5

NOZZLES / SHROUDS



Code	Rating/Size	Code	Rating/Size
MAT5517	24CT75 #4	MAT5550	35CT #5
MAT5540	23,62 #4	MAT5552	25CT62 #5
MAT5543	Insul. 34CT #4	MAT5555	25CT75 #5
MAT5545	24CT62 #4		

MODES OF GMAW TRANSFER

SHORT CIRCUIT TRANSFER

In this process the wire actually short circuits or touches the base metal usually between 90 - 200 times per second.

When in short circuit transfer the wire feed speeds, voltages, and deposition rate is usually lower than with other types of metal transfer. Short circuit transfer is very versatile process allowing the welder to weld on thin or thick metals in any position.

Its limitations are a relatively low deposition rate, lack of fusion on thicker metals and increased weld spatter

A) The MIG wire is short circuited to base metal. There is no current and thus no arc.

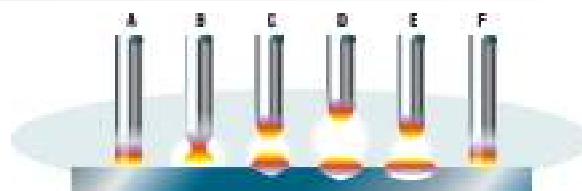
B) There is an increase in resistance resulting in the heating of the wire. This results in the wire melting and the bottle neck effect

C) The wire separates from weld pool, creating the arc. A small piece of wire is deposited which forms a weld pool.

D) Arc length and voltage are at their maximum while the resulting heat generated by the arc is flattens the pool.

E) Wire feed speed overcomes the heat of the arc and wire approaches base metal again.

F) Arc is off and the short circuit cycle starts again.



GLOBULAR TRANSFER

Globular transfer is the state of transfer between short-circuiting and spray arc transfer. Large globules of wire are ejected off the end of the wire and enter the weld pool.

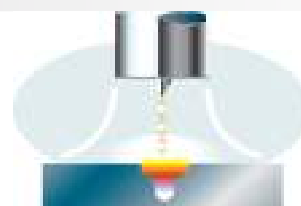
Globular transfer requires that the voltage, amperage and wire feed speed are higher than the settings for short circuit transfer.

The limitations of globular transfer are the presence of spatter. Welding is limited to flat positions and horizontally fillet welds and only for material thicker than 3mm.



SPRAY ARC TRANSFER

Spray arc transfer "sprays" a stream of tiny molten droplets across the arc, from the wire to the base metal. Spray arc transfer uses higher voltage, wire feed speeds and amperage values in relation to the above mentioned transfer modes. It also requires an Argon rich shielding gas mixture. The advantage of spray arc transfer is a high deposition with good fusion and penetration. A good weld bead appearance with very little spatter. Its limitations are that it can only be used on thicker materials in the flat and horizontal positions.





OS control
www.oscontrol.com





MATWELD TIG TORCHES - 17 SERIES

17 Series torches are supplied with a 1.6 mm Collet, Collet body, tungsten, alumina cup and long back cap. Power cables are fitted with a 10/25 male Dinse type cable connector for easy connection to a small panel socket such as found on the MAT9050K Inverter. The gas hose is fitted with a 3/8" right hand thread female nut and tail which connects to the MAT3345EN Argon Flowmeter or the MAT3501 'Y' piece. Rated 150 Amps. Available in either 4 or 8 metre lengths, Matweld offers the right torch for the job every time.

Code	Rating
MAT4600	17V/150AMP 4m
MAT4605	17V/150AMP 8m

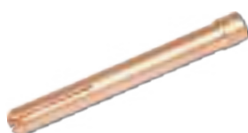


MATWELD ACCESSORIES BELOW ARE FOR TORCHES ABOVE

Matweld Alumina Cup Nozzles MAT4000 - 4025



Matweld Collets MAT4100/05



Matweld Oetiger Clamp MAT4360



Matweld Torch Head MAT4280



Matweld Collet Bodies MAT4130/35



Matweld Valve MAT4240



Matweld Tungstens MAT4400 - 4430



Matweld Nut, Tail & Nipple MAT4355



Matweld Hose & Cable Connector MAT4361



Matweld Black Caps MAT4220 (Long) MAT4225 (Short)



Matweld Torch Handles MAT4250/60



Matweld Switch MAT4335

Matweld Switch Boots MAT4337



Matweld Tungstens

Code	Description	Ref	Rating/Size	Code	Description	Ref	Rating/Size
MAT4000	Alumina Cup No 4	10N50	6mm	MAT4335	Switch	SW-1F	-
MAT4005	Alumina Cup No 5	10N49	8mm	MAT4337	Switch Boot Rubber	-	Small
MAT4010	Alumina Cup No 6	10N48	9mm	MAT4355	Nut & Nipple Female	-	R/H 3/8
MAT4015	Alumina Cup No 7	10N47	11mm	MAT4360	Clamp Oetiger	-	9.5mm
MAT4020	Alumina Cup No 8	10N46	13mm	MAT4361	Tig Connector Cable/Hose 2 Pc	-	2 Pc
MAT4025	Alumina Cup No 10	10N45	16mm	MAT4280	Torch Body C/W Handle	WP17V	-
MAT4100	Collet 1.6	10N23	1.6mm	MAT4400	Tungsten Thoriated 1.6mm Red	-	1.6mm
MAT4105	Collet 2.4	10N24	2.4mm	MAT4410	Tungsten Zirconiated 3.2mm Red	-	3.2mm
MAT4130	Collet Body 1.6	10N31	1.6mm	MAT4405	Tungsten Thoriated 2.4mm Red	-	2.4mm
MAT4135	Collet Body 2.4	10N32	2.4mm	MAT4415	Tungsten Zirconiated 1.6mm White	-	1.6mm
MAT4220	Back Cap Long	57Y02	Long	MAT4420	Tungsten Zirconiated 2.4mm White	-	2.4mm
MAT4225	Back Cap Short	57Y04	Short	MAT4425	Tungsten Zirconiated 3.2mm Red	-	3.2mm
MAT4235	Cup Gasket All Torch Front	-	Front	MAT4430	Tungsten Zirconiated 4.0mm White	-	4.0mm
MAT4240	Valve	VS2	17V				
MAT4250	Handle Ribbed						



MATWELD TIG TORCHES - 26 SERIES

26 Series torches are supplied with a 2.4mm Collet, Collet body, tungsten, alumina cup and long back cap.
Power cables are fitted with a 35/50 male Dinse type cable connector for easy connection to a large panel socket.
The gas hose is fitted with a 3/8th right hand thread female nut and tail which connects to the MAT3345EN Argon Flow Meter or the MAT3501 Y piece
Rated 200 AMPS
Available in either 4 or 8 metre lengths



Code	Rating
MAT4610	26V/200AMP 4m
MAT4615	26V/200AMP 8m

Matweld Alumina Cup Nozzles MAT4000 - 4025



Matweld Collets MAT4100/05



Matweld Oetiger Clamp MAT4360



Matweld Torch Head MAT4280



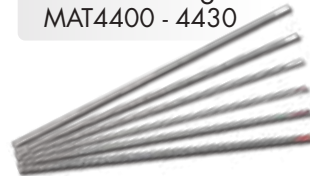
Matweld Collet Bodies MAT4130/35



Matweld Valve MAT4240



Matweld Tungstens MAT4400 - 4430



Matweld Nut, Tail & Nipple MAT4355

Matweld Hose & Cable Connector MAT4361

Matweld Black Caps MAT4220 (Long) MAT4225 (Short)



Matweld Torch Handles MAT4250/60



Matweld Switch MAT4335



Matweld Switch Boots MAT4337

Matweld Tungstens

Code	Description	Ref	Rating/Size	Code	Description	Ref	Rating/Size
MAT4000	Alumina Cup No 4	10N50	6mm	MAT4335	Switch	SW-1F	-
MAT4005	Alumina Cup No 5	10N49	8mm	MAT4337	Switch Boot Rubber	-	Small
MAT4010	Alumina Cup No 6	10N48	9mm	MAT4355	Nut & Nipple Female	-	R/H 3/8
MAT4015	Alumina Cup No 7	10N47	11mm	MAT4360	Clamp Oetiger	-	9.5mm
MAT4020	Alumina Cup No 8	10N46	13mm	MAT4361	Tig Connector Cable/Hose 2 Pc	-	2 Pc
MAT4025	Alumina Cup No 10	10N45	16mm	MAT4280	Torch Body C/W Handle	WP17V	-
MAT4100	Collet 1.6	10N23	1.6mm	MAT4400	Tungsten Thoriated 1.6mm Red	-	1.6mm
MAT4105	Collet 2.4	10N24	2.4mm	MAT4410	Tungsten Zirconiated 3.2mm Red	-	3.2mm
MAT4130	Collet Body 1.6	10N31	1.6mm	MAT4405	Tungsten Thoriated 2.4mm Red	-	2.4mm
MAT4135	Collet Body 2.4	10N32	2.4mm	MAT4415	Tungsten Zirconiated 1.6mm White	-	1.6mm
MAT4220	Back Cap Long	57Y02	Long	MAT4420	Tungsten Zirconiated 2.4mm White	-	2.4mm
MAT4225	Back Cap Short	57Y04	Short	MAT4425	Tungsten Zirconiated 3.2mm Red	-	3.2mm
MAT4235	Cup Gasket All Torch Front	-	Front	MAT4430	Tungsten Zirconiated 4.0mm White	-	4.0mm
MAT4240	Valve	VS2	17V				
MAT4250	Handle Ribbed						





ALUMINA CUP NOZZLES

- Manufactured from high strength alumina
- Displays good electrical insulation properties
- High heat and impact resistance

Part No.	Size	No.	Code
MAT4000	6mm	#4	10N50
MAT4005	8mm	#5	10N49
MAT4010	9mm	#6	10N48
MAT4015	11mm	#7	10N47
MAT4020	13mm	#8	10N46
MAT4025	16mm	#10	10N45



ALUMINA CUP GAS LENS

- Manufactured from high strength alumina
- Displays good electrical insulation properties
- High heat and impact resistance
- Vastly reduces turbulence in the shield gas stream

Part No.	Size	No.	Code
MAT4030	8mm	#5	54N17
MAT4035	10mm	#6	54N16
MAT4040	11mm	#7	54N15
MAT4045	12mm	#8	54N14



ALUMINA CUP GAS LENS COLLET BODY

- Vastly reduces turbulence in the shield gas stream
- Used in conjunction with Matweld alumina cup gas lenses
- Allows for electrode to be extended further for better visibility

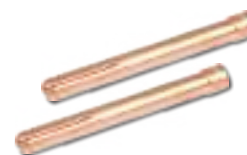
Part No.	Size	Code
MAT4175	1.6mm	45V25
MAT4180	2.4mm	45V26
MAT4185	3.2mm	45V27
MAT4190	4.0mm	45V28



COLLETS

- Used to securely clamp the tungsten electrode
- For use with 17/26 and 18 series torches

Part No.	Size	Code
MAT4100	1.6mm	10N23
MAT4105	2.4mm	10N24
MAT4110	3.2mm	10N25
MAT4115	4.0mm	54N20



COLLET BODIES

- Used to securely clamp the tungsten electrode
- For use with 17/26 and 18 series torches

Part No.	Size	Code
MAT4130	1.6mm	10N31
MAT4135	2.4mm	10N32
MAT4140	3.2mm	10N28
MAT4145	4.0mm	40B488
MAT4150	Stubby	17CB2024



TORCH HEAD

- Heavy duty copper construction
- High current capabilities and maximum heat dissipation
- Resilient silicone rubber insulation
- Replaceable teflon nozzle and cup gaskets
- All torch heads supplied with handles

Part No.	Type	Code
MAT4280	17 with Valve	WP17V



TORCH HEAD

- Heavy duty copper construction
- High current capabilities and maximum heat dissipation
- Resilient silicone rubber insulation
- Replaceable teflon nozzle and cup gaskets
- All torch heads supplied with handles

Part No.	Type	Code
MAT4295	26 with Valve	WP26V



TORCH HEAD

- Heavy duty copper construction
- High current capabilities and maximum heat dissipation
- Resilient silicone rubber insulation
- Replaceable teflon nozzle and cup gaskets
- All torch heads supplied with handles

Part No.	Type	Code
MAT4290	26 no Valve	WP26





TORCH HEADS

- Heavy duty copper construction
- High current capabilities and maximum heat dissipation
- Resilient silicone rubber insulation
- Replaceable teflon nozzle and cup gaskets
- All torch heads supplied with handles



Part No.	Type	Code
MAT4285	18 no Valve	WP18

TORCH HANDLES

- Available in both smooth and ribbed handles

Part No.	Size	Handle
MAT4250	17V	Ribbed
MAT4255	18/26/26V	Ribbed
MAT4260	17V	Smooth
MAT4265	18/26/26V	Smooth



BACK CAPS

- For use with 17/26 and 18 series torches



Part No.	Type	Code
MAT4220	Long	57Y02
MAT4225	Short	57Y04

SWITCH & SWITCH BOOTS

- Rubber switch boots available in large (26/18) and small (17)
- Both take same switch MAT4335

Part No.	Size
MAT4336	18/26
MAT4337	17
MAT4335	17/18/26



2 PCE HOSE & CABLE CONNECTORS

- Two piece connector connects current cable and gas hose to torch head
- Use MAT4360 Oetiger clamps



Part No.	Size
MAT4361	17
MAT4362	26

OETIGER CLAMP

- One piece clamp crimps hose securely onto connectors and tails



Part No.	Size
MAT4360	9.5mm

NUTS, TAILS & NIPPLES

- Male nipple and tails with left or right hand threads
- Female 3/8" thread nut and tail for connection to argon flow meter
- Use MAT4360 Oetiger clamps



Part No.	Type	Size
MAT4345	Male RH	3/8"
MAT4350	Male LH	3/8"
MAT4355	Female RH	3/8"

TUNGSTEN ELECTRODES

- Highest quality ground finish
- 2% thoriated (red tip) for mild & stainless steel
- 2% zirconiated (white tip) for aluminium; 150mm long

Part No.	Size
MAT4400	1.6 Red
MAT4405	2.4 Red
MAT4410	3.2 Red
MAT4415	1.6 White
MAT4420	2.4 White
MAT4425	3.2 White
MAT4430	4.0 White





- General Purpose Welding Rod
- Suitable electrode for mild steel welding, fillet, tack and butt welding



Part No.	Size	Kg
MAT6992	2.50MM	1
MAT6993	3.20MM	1
MAT6995	2.50MM	5
MAT6996	3.20MM	5
MAT6997	4.00MM	5





**STAINLESS STEEL E309MOL-16;
AWS/ ASME SFA 5.4;
E309MOL-16;
DIN 8556 E22 14.3 LR 23**

- Matweld Stanox E309MoL-16 is a low carbon, high alloy rutile coated stainless steel electrode
- Matweld Stanox E309MoL-16 is suitable for all positions except vertical down
- Matweld Stanox E309MoL-16 is suitable for welding 309 and 309L stainless steel and the dissimilar welding of 300 series and selected 400 series stainless steels



Part Number	Size	Welding Current (Amps)	Weight
MAT6120	2.5mm	60 - 80	1Kg
MAT6125	3.15mm	90 - 110	1Kg
MAT6130	4.0mm	110 - 150	1Kg

**LOW HYDROGEN E7018-1; AWS A5.1.
E7018-1; DIN 1913 E51 55 B10;
SABS 455 E5118/-4427H**

- Matweld E7018-1 is a basic coated hydrogen controlled electrode designed for welding in all positions
- Matweld E7018-1 has a low spatter and excellent re-strike characteristics
- The weld has an excellent bead profile and appearance and the slag is easily detached
- Used to weld C-Mn and low alloy steels requiring X-ray examination
- Matweld E7018-1 requires a minimum AC open circuit voltage of 70 Volts and must be baked at 180°C (350°F) for 2 hours prior to use



Part Number	Size	Welding Current (Amps)	Weight
MAT6050	2.5mm	70 - 110	4Kg
MAT6055	3.15mm	80 - 140	4Kg
MAT6060	4.0mm	130 - 190	4Kg
MAT6065	5.0mm	172 - 250	5Kg

**STAINLESS STEEL E316-16;
AWS/ ASME SFA 5.4; E316L-16;
DIN 8556 E19 12 3 LR 26**

- Matweld Stanox E316-16 is a low carbon rutile coated stainless steel electrode suitable for all positions except vertical down
- Matweld Stanox E316-16 is used for the general purpose welding of 300 austenitic stainless steel series such as 301, 303 as well as 304 and 304L types



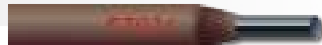
Part Number	Size	Welding Current (Amps)	Weight
MAT6145	2.5mm	40 - 70	1Kg
MAT6150	3.15mm	75 - 110	1Kg
MAT6155	4.0mm	110 - 150	1Kg

IRON POWDER E7024;

AWS A5.1.E7024;

DIN 1913 E51 45RR 11 160

- Matweld E7024 is a high quality heavily coated rutile iron powder electrode designed for the high speed welding of H-Vfillets, flat butt joints and structural steel
- Matweld E7024 has very low spatter and its strike and re-strike characteristics are excellent
- Matweld E7024h as a very good weld appearance and the slag is easily detachable and in most cases self lifting



Part Number	Size	Welding Current (Amps)	Weight
MAT6085	3.15mm	100 - 160	5Kg
MAT6090	4.0mm	160 - 220	5Kg
MAT6095	5.0mm	190 - 320	5Kg

STAINLESS STEEL E308L-16;

AWS/ ASME SFA 5.4; E308L-16;

DIN 8556 E19 19 LR 26

- Matweld Stanox E308L-16 is a low carbon smooth running rutile coated stainless steel electrode
- Matweld Stanox E308L-16 is suitable for all positions except vertical down
- Matweld Stanox E308L-16 is suitable for welding 19Cr10Ni type steels including 201, 202, 301, 302, 304L and 308



Part Number	Size	Welding Current (Amps)	Weight
MAT6100	2.5mm	40 - 70	1Kg
MAT6105	3.15mm	75 - 110	1Kg
MAT6110	4.0mm	110 - 150	1Kg

STAINLESS STEEL E312-16;

AWS/ ASME SFA 5.4; E312-16;

DIN 8556 E29 9 LR 23

- Matweld E312-16 is a rutile coated stainless steel electrode ideally suited to welding dissimilar steel such as stainless to carbon steel



Part Number	Size	Welding Current (Amps)	Weight
MAT6170	2.5mm	40 - 80	1Kg
MAT6175	3.15mm	70 - 120	1Kg
MAT6180	4.0mm	100 - 150	1Kg

STAINLESS STEEL E309MOL-16;

AWS/ ASME SFA 5.4; E309MOL-16;

DIN 8556 E22 14.3 LR 23

- Matweld Matcast50 is a graphite type coated electrode with a Fe-Ni alloy core
- Matweld Matcast50 provides a low expansion coefficient and good machining properties
- Matweld Matcast50 is suitable for welding ductile and malleable cast iron as well as grey cast iron material



Part Number	Size	Welding Current (Amps)	Weight
MAT6200	2.5mm	60 - 80	1Kg
MAT6205	3.15mm	90 - 110	1Kg
MAT6210	4.0mm	110 - 150	1Kg

CAST IRON ENI-CL; AWS A5.15 ENI-CL;

DIN 8573 ENI G24

- Matweld Matcast100 is a graphite type coated electrode with a pure nickel alloy core
- The weld provides excellent machineability and good tensile strength as well as good crack resistance
- Matweld Matcast100 is suitable for welding high pressure parts



Part Number	Size	Welding Current (Amps)	Weight
MAT6240	2.5mm	60 - 80	1Kg
MAT6245	3.15mm	70 - 120	1Kg
MAT6250	4.0mm	100 - 150	1Kg

ALUMINIUM MIG WIRE - ER4043

- High quality 4043 grade aluminium MIG welding wire
- Contains 5% silicon
- ER4043 is one of the most widely used welding and brazing alloys and can be classified as a general-purpose filler alloy
- The silicon additions result in improved fluidity (wetting action) to make the alloy the preferred choice for welders
- The alloy is less sensitive to weld cracking and produces brighter, cleaner welds
- Can also be used for joining cast to wrought materials
- Non-heat treatable
- Softer than 5356 and slightly harder to feed, can be used on standard MIG torches



Part Number	Size	Grade	Weight
MAT7050	1.0mm	ER4043	6Kg
MAT7055	1.2mm	ER4043	6Kg



ALUMINIUM MIG WIRE - ER5356

- High quality 5356 grade aluminium MIG welding wire
- Contains 5% magnesium
- ER5356 is the most widely used welding alloy and can be classified as a general-purpose filler alloy
- It is typically chosen because of its relatively high shear strength
- The 5356 alloy base material has a weld pool chemistry greater than 3% Mg and service temperatures in excess of 6°C
- ER5356 gives a high strength weld deposit with very good crack resistance
- Corrosion resistance is very good especially in a marine environment
- Easy feeding wire, can be used on standard MIG torches



Part Number	Size	Grade	Weight
MAT7060	1.0mm	ER5356	6Kg
MAT7065	1.2mm	ER5356	6Kg

STAINLESS STEEL MIG WIRE - ER308LSi

- Designed for welding '18-8' type stainless steels such as 302/304/304L (wrought) and CF-3/CF-8 (cast)
- The deposit is highly resistant to oxidation and corrosion
- This all-position, quality MIG welding wire is ideally suited for joining common austenitic stainless steel grades
- It is specially processed to provide superior feed-ing and arc stability



Part Number	Size	Grade	Weight
MAT7000	1.0mm	ER308LSi	15Kg
MAT7010	1.2mm	ER308LSi	15Kg

STAINLESS STEEL MIG WIRE - ER309LSi

- For welding 304L/309 (wrought) and CF-3/CH-20 (cast) base materials
- A high Cr austenitic stainless steel electrode for applications where improved corrosion and oxidation resistance are required
- Also used for dissimilar metals joining such as stainless steel to carbon/low alloy steel



Part Number	Size	Grade	Weight
MAT7015	1.0mm	ER309LSi	15Kg
MAT7020	1.2mm	ER309LSi	15Kg

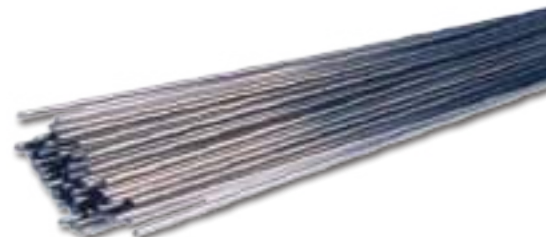
STAINLESS STEEL MIG WIRE - ER316LSi

- Optimised arc performance and feedability
- This MIG wire is designed for joining low carbon molybdenum bearing austenitic stainless steels, such as type 316 and 316L
- All-position stainless steel MIG welding wire



Part Number	Size	Grade	Weight
MAT7025	1.0mm	ER316LSi	15Kg
MAT7030	1.2mm	ER316LSi	15Kg





MILD STEEL MIG WIRE ER70-S6

- Premium, all position, mild steel welding wire
- Designed for general purpose MIG welding
- Contains higher levels of Manganese and Silicon than other standard grades of MIG wire to produce high quality welds when used on rusted, dirty or oily steel
- This product requires a shielding gas, Co² and/or Argon/Co² mix

Part Number	Size	Grade	Weight
MAT6030	0.8mm	ER70-S6	15Kg
MAT6031	0.8mm	ER70-S6	5Kg
MAT6032	0.9mm	ER70-S6	15Kg
MAT6033	0.9mm	ER70-S6	5Kg
MAT6034	1.0mm	ER70-S6	15Kg
MAT6035	1.2mm	ER70-S6	15Kg
MAT7085	0.9mm	ER70-S6	1Kg
MAT7086	0.8mm	ER70-S6	1Kg

ALUMINIUM TIG WIRE - ER4043

- High quality 4043 grade aluminium TIG welding wire
- Contains 5% silicon
- ER4043 is one of the most widely used welding and brazing alloys and can be classified as a general-purpose filler alloy
- The silicon additions result in improved fluidity (wetting action) to make the alloy the preferred choice for welders
- The alloy is less sensitive to weld cracking and produces brighter, cleaner welds
- Can also be used for joining cast to wrought materials
- Non-heat treatable
- Grade stamped

Part Number	Size	Grade	Weight
MAT6445	1.6mm	ER4043	5Kg
MAT6450	2.4mm	ER4043	5Kg
MAT6455	3.2mm	ER4043	5Kg

ALUMINIUM TIG WIRE - ER5356 220V

- High quality 5356 grade aluminium TIG welding wire
- Contains 5% magnesium
- ER5356 is the most widely used welding alloy and can be classified as a general-purpose filler alloy
- It is typically chosen because of its relatively high shear strength
- The 5356 alloy base material has a weld pool chemistry greater than 3% Mg and service temperatures in excess of 6° C
- ER5356 gives a high strength weld deposit with very good crack resistance
- Corrosion resistance is very good especially in a marine environment
- Grade stamped

Part Number	Size	Grade	Weight
MAT6460	1.6mm	ER5356	5Kg
MAT6465	2.4mm	ER5356	5Kg
MAT6475	3.2mm	ER5356	5Kg

MILD STEEL TIG WIRE - ER70-S6

- Premium, all position, mild steel welding wire
- Designed for general purpose TIG welding
- Contains higher levels of Manganese and Silicon than other standard grades of TIG wire to produce high quality welds when used on rusted, dirty or oily steel
- This product requires a shielding gas, Co² and/or Argon/Co² mix

Part Number	Size	Grade	Weight
MAT6038	1.6mm	ER70-S6	5Kg
MAT6040	2.4mm	ER70-S6	5Kg

ALUMINIUM TIG WIRE - ER5356

- High quality 5356 grade aluminium TIG welding wire
- Contains 5% magnesium
- ER5356 is the most widely used welding alloy and can be classified as a general-purpose filler alloy
- It is typically chosen because of its relatively high shear strength
- The 5356 alloy base material has a weld pool chemistry greater than 3% Mg and service temperatures in excess of 6° C
- ER5356 gives a high strength weld deposit with very good crack resistance
- Corrosion resistance is very good especially in a marine environment
- Grade stamped

Part Number	Size	Grade	Weight
MAT6460	1.6mm	ER5356	5Kg
MAT6465	2.4mm	ER5356	5Kg
MAT6475	3.2mm	ER5356	5Kg

MILD STEEL TIG WIRE - ER70-S6

- Premium, all position, mild steel welding wire
- Designed for general purpose TIG welding
- Contains higher levels of Manganese and Silicon than other standard grades of TIG wire to produce high quality welds when used on rusted, dirty or oily steel
- This product requires a shielding gas, Co² and/or Argon/Co² mix

Part Number	Size	Grade	Weight
MAT6038	1.6mm	ER70-S6	5Kg
MAT6040	2.4mm	ER70-S6	5Kg



STAINLESS STEEL TIG WIRE - ER308LSi

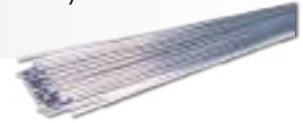
- Designed for welding '18-8' type stainless steels such as 302/304/304L (wrought) and CF-3/CF-8 (cast)
- The deposit is highly resistant to oxidation and corrosion
- This all-position, quality TIG weldng wire is ideally suited for joining common austenitic stainless steel grades
- It is specially processed to provide superior feeding and arc stability
- Grade stamped



Part Number	Size	Grade	Weight
MAT6400	1.6mm	ER308LSi	5Kg
MAT6405	2.4mm	ER308LSi	5Kg
MAT6410	3.2mm	ER308LSi	5Kg

STAINLESS STEEL TIG WIRE - ER309LSi

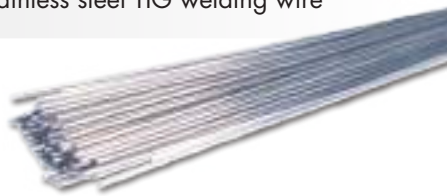
- For welding 304L/309 (wrought) and CF-3/CH-20 (cast) base materials
- A high Cr austenitic stainless steel electrode for applications where improved corrosion and oxidation resistance are required
- Also used for dissimilar metals joining such as stainless steel to carbon/low alloy steel
- Grade stamped



Part Number	Size	Grade	Weight
MAT6415	1.6mm	ER309LSi	5Kg
MAT6420	2.4mm	ER309LSi	5Kg
MAT6425	3.2mm	ER309LSi	5Kg

STAINLESS STEEL TIG WIRE - ER316LSi

- Optimised arc performance and feedability
- This TIG wire is designed for joining low carbon molybdenum bearing austenitic stainless steels, such as type 316 and 316L
- All-position stainless steel TIG welding wire

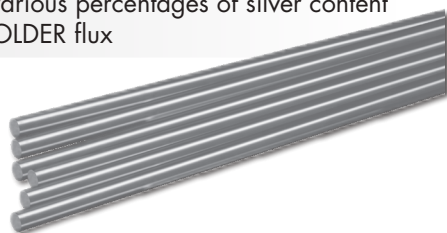


Part Number	Size	Grade	Weight
MAT6430	1.6mm	ER316LSi	5Kg
MAT6435	2.4mm	ER316LSi	5Kg
MAT6440	3.2mm	ER316LSi	5Kg



MATWELD SILVER SOLDER

- CADMIUM FREE
- Silver solder suitable for use on all ferrous and non-ferrous metals, except aluminium
- Can be used with a range of heat sources
- Available in various percentages of silver content
- Use SILVER SOLDER flux



Part Number	Size	% Silver	Weight
MAT6800	1.5mm	20	1Kg
MAT6805	1.5mm	30	1Kg
MAT6810	1.5mm	40	1Kg

SILVER SOLDER FLUX

- Designed specifically for use with bare silver solder (above)
- Available in 500g tubs



Part Number	Size
MAT6999	500g





SILVER SOLDER FLUX - COATED

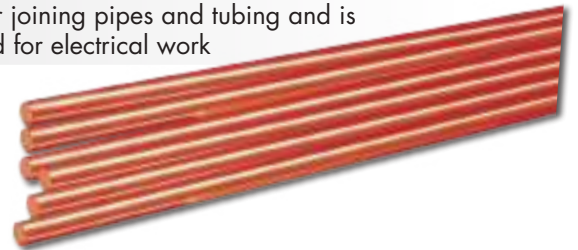
- Special fast flow flux improves base metal cleansing action
- CADMIUM FREE
- Silver solder suitable for use on all ferrous and non-ferrous metals, except aluminium
- Can be used with a range of heat sources
- Available in various percentages of silver content



Part Number	Size	% Silver	Weight
MAT6825	1.5mm	20 (White)	5Kg
MAT6830	1.5mm	30 Blue	5Kg
MAT6835	1.5mm	40 Yellow	5Kg

COPPER TO COPPER BRAZING RODS

- Excellent flow and wetting properties
- For use on copper, brass and bronze
- Does not require flux
- Suitable for joining pipes and tubing and is widely used for electrical work

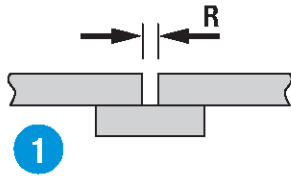


Part Number	Size	% Silver	Weight
MAT6850	2.0mm	0	1Kg
MAT6855	3.0mm	0	1Kg
MAT6860	2.0mm	2	1Kg
MAT6865	3.0mm	2	1Kg
MAT6870	2.0mm	5	1Kg
MAT6875	3.0mm	5	1Kg
MAT6880	2.0mm	15	1Kg
MAT6885	3.0mm	15	1Kg

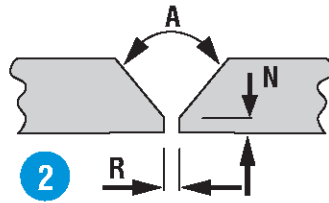




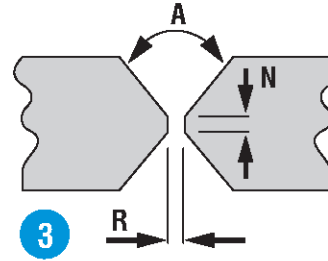
Types of Joints



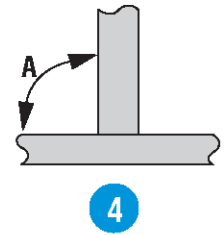
Lap Joint



Single Vee Joint



Double Vee Joint



Tee Joint

MIG Welding Tables

Indicative data for welding carbon steel in gas atmosphere (CO₂)

THICKNESS OF METAL SHEET (mm)	TYPES OF JOINTS	TYPES OF WELDING	R (mm)	A	Ø WIRE (mm)	SPEED WIRE (m/min)	WELDING VOLTAGE (V)	WELDING CURRENT (A)	WELDING SPEED (m/min)	N° OF PASSES
0,9	1 & 4	PO.VD.ST	0	-	0,8	2,6	16-18	50-60	0,48-0,6	1
1,6	1 & 4	P.VD	0	-	0,8	3,4	16-19	80-90	0,6	1
2	4	P	0	-	0,8	2,9	17-19	60	0,4	1
	4	O	0	-	0,8	2,3	16-18	45	0,4	1
	4	V	0	-	0,8	3,25	15-18	65	0,5	1
	4	ST	0	-	0,8	3	16-18	60	0,45	1
2,5	4	P	0	-	0,8	6,3	18-22	115	0,7	1
	4	P	0	-	1	4,8	20-24	140	0,8	1
	4	O.V	0	-	0,8	4,1	18-20	80	0,55	1
	4	O.V	0	-	1	4,6	20-23	135	0,8	1
	4	V	0	-	0,8	5,2	17-21	100	0,6	1
	4	V	0	-	1	4,8	20-24	140	0,9	1
	4	ST	0	-	0,8	4,4	18-20	85	0,5	1
	4	ST	0	-	1	4,5	20-23	135	0,85	1
3	1	P	0,8	-	0,8	5	20	120	0,5	1
	1	VD	1,6	-	0,8	5	20	120	0,5	1
	4	P	0	-	0,8	9,9	19-23	155	0,7	1
	4	O.V	0	-	0,8	5,7	18-21	105	0,4	1
	4	V	0	-	0,8	3,5	16-18	70	0,3	1
	4	ST	0	-	0,8	5,6	18-20	105	0,4	1
	4	P	0	-	1	6,6	22-26	180	0,8	1
	4	O.V	0	-	1	4,6	20-23	135	0,5	1
	4	V	0	-	1	2,6	18-20	90	0,3	1
	4	ST	0	-	1	6	21-25	165	0,7	1
	4	P	0	-	1,2	3	20	140	0,6	1
	4	O.V	0	-	1,2	4	20-23	150	0,5	1
	4	V	0	-	1,2	2,3	17-20	100	0,4	1
	4	ST	0	-	1,2	3,2	19-22	130	0,4	1
6	2	P	0	60°	0,8	6,4	18-22	115	0,1	2
	4	O.V	0	-	0,8	6,8	19-22	140	0,2	1
	4	V	0	-	0,8	6,5	17-22	115	0,2	1
	4	ST	0	-	0,8	7	19-22	150	0,2	2
	4	P	0	-	1	4,8	20-24	140	0,2	1
	4	O.V	0	-	1	6,7	22-26	180	0,1	1
	4	V	0	-	1	3,8	20-22	120	0,2	1
	4	ST	0	-	1	4,5	20-23	135	0,2	1
	2	P	0	60°	1,2	3,3	20	150	0,3	2
	1	VD	0	-	1,2	3,3	20	150	0,3	2
	4	P	0	-	1,2	5	22-26	180	0,2	1
	4	O.V	0	-	1,2	5,9	24-28	200	0,3	1
	4	V	0	-	1,2	3,9	19-22	150	0,25	1
	4	ST	0	-	1,2	4,1	20-23	155	0,2	1
	4	V	0	-	1,6	1,9	18-21	160	0,2	1
	4	ST	0	-	1,6	2	19-21	160	0,15	1
10	4	P	0	-	0,8	9,9	19-23	155	0,1	2
				-	0,8	6,5	18-22	115	0,07	2
	4	O.V	0	-	1	6,7	22-26	180	0,1	1
	4	V	0	-	1	5,3	20-25	150	0,1	1
	2	P	0,8	60°	1,2	3,3	19-21	150	0,2	3
	2	V	1,6	60°	1,2	3,3	19-21	150	0,2	3
	4	O.V	0	-	1,2	4,7	18-21	170	0,1	1
	4	V	0	-	1,2	3,9	20-23	150	0,1	1
	4	ST	0	-	1,2	4,1	20-23	135	0,08	2
	4	V	0	-	1,6	1,9	18-21	160	0,2	1
	4	ST	0	-	1,6	2	19-22	160	0,15	1

THICKNESS OF METAL SHEET (mm)	TYPES OF JOINTS	TYPES OF WELDING	R (mm)	A	Ø WIRE (mm)	SPEED WIRE (m/min)	WELDING VOLTAGE (V)	WELDING CURRENT (A)	WELDING SPEED (m/min)	N° OF PASSES
12	4	O.V	0	-	1	4,6	20-23	135	0,04	3
	4	V	0	-	1	3,1	18-20	100	0,05	1
	4	ST	0	-	1	4,5	20-23	135	0,05	4
	1	V	1,6	60°	1,2	3,3	20-21	150	0,2	4
	4	O.V	0	-	1,2	4,7	18-21	170	0,1-0,2	3
	4	V	0	-	1,2	3,9	19-22	150	0,05	2
	4	ST	0	-	1,2	4,1	20-23	155	0,06	3
	2	V	1,6	60°	1,6	2	20-22	160	0,2	4
	4	V	0	-	1,6	2,3	19-22	185	0,05	1
	4	ST	0	-	1,2	2	19-22	160	0,05	4
18	2	V	1,6	60°	1,2	3,3	19-21	150	0,2	4
	1	P	0	-	1,2	4,65	20-23	170	0,03	4
	4	O.V	0	-	1,2	4,7	18-21	170	0,03	8
	4	V	0	-	1,2	3,9	19-22	150	0,03	4
	4	ST	0	-	1,2	4,1	20-23	155	0,03	9
	3	V	1,6	60°	1,6	2	20-22	160	0,2	4
	4	V	0	-	1,6	2,3	19-22	185	0,03	2
	4	ST	0	-	1,6	2	19-22	160	0,05	4

Operational Parameters for "SPRAY-ARC" welding:

THICKNESS OF METAL SHEET (mm)	TYPES OF JOINTS	TYPES OF WELDING	R (mm)	A	Ø WIRE (mm)	SPEED WIRE (m/min)	WELDING VOLTAGE (V)	WELDING CURRENT (A)	WELDING SPEED (m/min)	N° OF PASSES
6	1	P	0,8	-	1,2	11-12	29-32	330	0,5	1
	4	O.V	0	-	1,2	5,9	24-28	200	0,3	1
10	4	P	0	-	1,0	9,2	24-28	230	0,2	2
	4	O.V	0	-	1,0	8,8	23-27	220	0,15	3
	2	P	1,6	30°	1,6	5	30-33	370	0,4	1
	4	P	0	-	1,6	5,2	31-35	250	0,2	1
	4	O.V	0	-	1,6	3,6	22-26	265	0,5	3
12	4	P	0	-	1,0	9,2	24-28	230	0,08	3
	1	P	0,8	-	1,2	12,5	30-33	330	0,4	2
	4	P	0	-	1,2	6	26-35	210	0,08	2
	4	P	0	-	1,2	8,5	29-33	270	0,1	1
	4	O.V	0	-	1,2	8,7	28-30	270	0,14	3
	2	O	1,6	30°	1,6	5,5	32-35	400	0,5	2
	4	O	0	-	1,6	3,6	25-28	270	0,08	2
	4	O	0	-	1,6	5,2	31-35	350	0,1	21
	4	O.V	0	-	1,6	3,6	22-26	265	0,08	3
18	2	P	0	50°	1,2	12,5	30-34	330	0,3	3
	4	P	0	-	1,2	7,5	38-34	300	0,05	3
	4	O.V	0	-	1,2	8,7	28-32	270	0,06	7
	4	O.V	0	-	1,6	3,6	22-26	265	0,04	8
	2	P	0	50°	1,6	6,3	32-34	400	0,3	3
	4	P	0	-	1,6	3,7	25-28	270	0,04	3
	4	P	0	-	1,6	5,3	31-35	350	0,05	2
25	4	P	0	-	1,2	7,8	32-35	300	0,04	6
	4	O.V	0	-	1,2	6,6	24-28	210	0,02	10
	4	O.V	0	-	1,2	8,7	28-32	270	0,03	10
	2	P	0	50°	1,6	6,3	33-35	430	0,3	5
	4	P	0	-	1,6	3,7	25-28	270	0,02	8
	4	P	0	-	1,6	5,3	31-35	350	0,03	4
	4	O.V	0	-	1,6	3,6	22-26	265	0,02	14
40	2	P	0	50°	1,6	6,3	32-35	430	0,3	7

NOTES: P = Level. O = Horizontal. V = Vertical. VD = Vertical Downwards. ST = Overhead



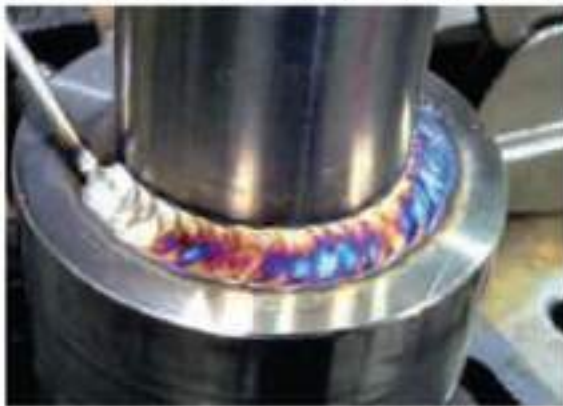
TIG Welding Calculation Charts

Aluminium • Manual Welding • Alternating Current - High Frequency



Metal Thickness	Joint Type	Tungsten Electrode Diameter	Filler Rod Diameter	Amps/Range	Gas Type
1.6mm	Butt	1.6mm	1.6mm	60-85	Argon
	Lap	1.6mm	1.6mm	70-90	Argon
	Corner	1.6mm	1.6mm	80-85	Argon
	Filllet	1.6mm	1.6mm	75-100	Argon
3.25mm	Butt	2.4mm - 3.25mm	2.4mm	125-150	Argon
	Lap	2.4mm - 3.25mm	2.4mm	130-160	Argon
	Corner	2.4mm - 3.25mm	2.4mm	120-140	Argon
	Filllet	2.4mm - 3.25mm	2.4mm	130-160	Argon
5.0mm	Butt	3.25mm - 4.0mm	3.25mm	180-225	Argon
	Lap	3.25mm - 4.0mm	3.25mm	190-240	Argon
	Corner	3.25mm - 4.0mm	3.25mm	180-225	Argon
	Filllet	3.25mm - 4.0mm	3.25mm	180-240	Argon
8.0mm	Butt	4.0mm - 6.0mm	5.0mm	240-280	Argon
	Lap	4.0mm - 6.0mm	5.0mm	250-320	Argon
	Corner	4.0mm - 6.0mm	5.0mm	240-280	Argon
	Filllet	4.0mm - 6.0mm	5.0mm	250-320	Argon

Stainless Steel • Manual Welding • Direct Current - Straight Polarity



Metal Thickness	Joint Type	Tungsten Electrode Diameter	Filler Rod Diameter	Amps/Range	Gas Type
1.6mm	Butt	1.6mm	1.6mm	40-60	Argon
	Lap	1.6mm	1.6mm	70-90	Argon
	Corner	1.6mm	1.6mm	40-60	Argon
	Filllet	1.6mm	1.6mm	50-70	Argon
3.25mm	Butt	2.4mm	2.4mm	65-85	Argon
	Lap	2.4mm	2.4mm	90-110	Argon
	Corner	2.4mm	2.4mm	65-85	Argon
	Filllet	2.4mm	2.4mm	90-110	Argon
5.0mm	Butt	2.4mm	3.25mm	100-125	Argon
	Lap	2.4mm	3.25mm	125-150	Argon
	Corner	2.4mm	3.25mm	100-125	Argon
	Filllet	2.4mm	3.25mm	125-150	Argon
8.0mm	Butt	3.25mm	4.0mm	135-160	Argon
	Lap	3.25mm	4.0mm	160-180	Argon
	Corner	3.25mm	4.0mm	135-160	Argon
	Filllet	3.25mm	4.0mm	160-180	Argon

Mild Steel • Manual Welding • Direct Current - Straight Polarity



Metal Thickness	Joint Type	Tungsten Electrode Diameter	Filler Rod Diameter	Amps/Range	Gas Type
1.6mm	Butt	1.6mm	1.6mm	60-70	Argon/CO ₂ Mix
	Lap	1.6mm	1.6mm	70-90	Argon/CO ₂ Mix
	Corner	1.6mm	1.6mm	60-70	Argon/CO ₂ Mix
	Filllet	1.6mm	1.6mm	70-90	Argon/CO ₂ Mix
3.25mm	Butt	1.6mm - 2.4mm	2.4mm	80-100	Argon/CO ₂ Mix
	Lap	1.6mm - 2.4mm	2.4mm	90-115	Argon/CO ₂ Mix
	Corner	1.6mm - 2.4mm	2.4mm	80-100	Argon/CO ₂ Mix
	Filllet	1.6mm - 2.4mm	2.4mm	90-115	Argon/CO ₂ Mix
5.0mm	Butt	2.4mm	3.25mm	115-135	Argon/CO ₂ Mix
	Lap	2.4mm	3.25mm	140-165	Argon/CO ₂ Mix
	Corner	2.4mm	3.25mm	115-135	Argon/CO ₂ Mix
	Filllet	2.4mm	3.25mm	140-165	Argon/CO ₂ Mix
8.0mm	Butt	3.25mm	4.0mm	160-175	Argon/CO ₂ Mix
	Lap	3.25mm	4.0mm	170-200	Argon/CO ₂ Mix
	Corner	3.25mm	4.0mm	160-175	Argon/CO ₂ Mix
	Filllet	3.25mm	4.0mm	170-200	Argon/CO ₂ Mix



[illegible]



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