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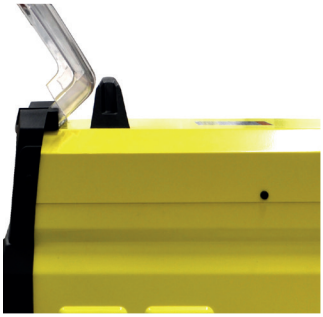
sifWELD Evolution Range

Buyers Guide










sifweld®
evolution

Industrial design, High performance welding solutions

The sifWELD Evolution equipment range meets the most demanding needs of professional applications in a variety of welding environments. Because welding applications vary, we have developed the range to include power sources that can meet various needs and requirements including higher energy efficiency to keep running costs lower compared to traditional equipment.

Designed for welders with an eye for detail, sifWELD Evolution TIG/MMA equipment as well as sifWELD Evolution AC and DC inverters keep technology on the inside and simple, easy to use control and performance on the outside, offering reliable solutions to keep you welding at your best.

The range of MTS power sources are superbly supported by two portable and lightweight professional microprocessor-controlled inverter power-sources for AC TIG, DC TIG & MMA applications. Built-in fast switching IGBT technology helps to combine high efficiency with a responsive user interface.

sifWELD Evolution TS200DC Dual Voltage

TSXE1T200DC

A professional, microprocessor-controlled inverter welding power source for DC TIG & MMA applications. The use of IGBT technology providing a compact and lightweight machine that is feature rich.

High Frequency ignition and High Speed Pulse and the complete range of fully adjustable parameters normally expected on a professional TIG welding machine.

Multi-modal for TIG HF / TIG Lift / MMA process parameters

Power Supply	110V	230V
MMA Duty Cycle (40°C 10min)	60% 130A 100% 105A	30% 200A 60% 145A 100% 135A
TIG Duty Cycle (40°C 10min)	90% 130A 100% 125A	30% 200A 60% 145A 100% 135A
Welding Current Range (A)	5 ~ 130	5 ~ 200
No Load Voltage (V)	66	
Net Weight (Kg)	10	
Dimensions (mm)	465 x 146 x 278	

Features

- Full digital control with large colour LCD for showing and changing all welding parameters.
- Power factor correction.
- 230V and 110V.
- Spot / repeat / high speed pulse function.
- Generator friendly.
- Foot pedal available.

Ordering information

sifWELD Evolution TS200DC Dual Voltage	**TSXE1T200DC**
WP26 4m Air Cooled Tig Torch with Fittings	**TSXEWP26***
Earth Cable 25mm2 3m	**TSXE5052-2***
Electrode Cable 25mm2 3m	**C250301T200***
Gas hose 2m with 3/8" BSP Hose Tail	**TSXE5051-1***
Argon Regulator	**AE3005LXBEEXT***
Wired Foot Pedal	**TSXE5054-2**

Ready to use machine package includes items marked * Our arc welding machines are UKCA & CE certified, compliant to BS EN 60974-1

sifWELD Evolution TS200ACDC Dual Voltage Aerotech

TSXE1T200ACP

The advanced sifWELD Evolution Aerotech range of AC/DC TIG machines have features normally only available on high end Aerospace specific TIG welding machines, including: Four power levels of HF ignition strength, fully adjustable cleaning and welding current levels on both the positive and negative parts of the AC Square Wave Cycle.
A professional, microprocessor-controlled inverter welding power source for AC TIG, DC TIG & MMA applications. The use of IGBT technology providing a compact and lightweight machine including the advanced Aerotech features, high speed pulse and the complete range fully adjustable parameters normally expected on a professional TIG welding machine. Multi-modal for TIG HF / TIG Lift / MMA process.

Multi-modal for TIG HF / TIG Lift / MMA process parameters

Power Supply	110V	230V
MMA Duty Cycle (40°C 10min)	30% 130A 60% 110A 100% 80A	30% 200A 60% 145A 100% 135A
TIG Duty Cycle (40°C 10min)	60% 160A 100% 125A	60% 200A 100% 155A
Welding Current Range (A)	5 ~ 130 (MMA) 5 ~ 150 (TIG)	5 ~ 200
No Load Voltage (V)	75	
Net Weight (Kg)	17.1	
Dimensions (mm)	485 x 240 x 445	

Features

- Full digital control with large colour LCD for showing and changing all welding parameters.
- Power factor correction.
- 230V and 110V.
- Spot / repeat high speed pulse function.
- Generator friendly.
- Wired or wireless foot pedal available.
- Programmable job memory.

Ordering information

sifWELD Evolution TS200ACDC Dual Voltage	**TSXE1T200ACP**
WP26 4m Air Cooled Tig Torch with Fittings	**TSXEWP26***
Earth Cable 25mm2 3m	**TSXE5052-2***
Electrode Cable 25mm2 3m	**C250301T200***
Gas hose 2m with 3/8" BSP Hose Tail	**TSXE5051-1***
Water Cooler Cable	**TSXES053-1**
Argon Regulator	**AE3005LXBEEXT***
Wireless Foot Pedal	**TSXE5054-1**
Wired Foot Pedal	**TSXE5054-2**

Ready to use machine package includes items marked * Our arc welding machines are UKCA & CE certified, compliant to BS EN 60974-1

sifWELD Evolution TS320ACDC Aerotech

TSXE3T320AC

The advanced sifWELD Evolution Aerotech range of AC/DC TIG machines have features normally only available on high end Aerospace specific TIG welding machines, including: Four Power levels of HF Ignition Strength. Fully adjustable Cleaning and Welding Current Levels on both the Positive and Negative parts of the AC Square Wave Cycle. A professional, microprocessor-controlled inverter welding power source for AC TIG, DC TIG & MMA applications. The use of IGBT technology providing a compact and lightweight machine that is feature rich including the advanced Aerotech features, High Speed Pulse and the complete range fully adjustable parameters normally expected on a professional TIG welding machine. Full digital control with large colour LCD for showing and changing all welding parameters.

Parameters

Power Supply	400V
MMA Duty Cycle (40°C 10min)	60% 320A 100% 250A
Welding Current Range (A)	5 ~ 320
No Load Voltage (V)	82
Net Weight (Kg)	27.7
Dimensions (mm)	530 x 240 x 445

Features

- High duty cycle.
- Spot / repeat /high speed pulse function.
- Wired or wireless foot pedal and wireless remote control panel available.
- Programmable job memory.
- Water cooled and air cooled packages including trolley available.

Ordering information

sifWELD Evolution TS320ACDC Dual Voltage	**TSXE3T320ACPKG**	**TSXE3T320WCPKG**
WP18 4m Water Cooled Tig Torch with Fittings	**TSXEWP18**	**TSXEWP18***
WP26 4m Air Cooled Tig Torch with Fittings	**TSXEWP26***	**TSXEWP26**
Water Cooler	**TXSEWC**	**TXSEWC***
Earth Cable 25mm^2 5m	**TSXES052-2***	**TSXES052-2***
Electrode Cable 25mm2 5m	**C25030IT200***	**C25030IT200***
Wireless Remote Control Panel	**TXS5054-3**	**TXS5054-3**
Wireless Foot Pedal	**TXS5054-1**	**TXS5054-1**
Wired Foot Pedal	**TXS5054-2**	**TXS5054-2**
Evolution Trolley (non-wirefeed)	**TXSETROLLEY**	**TXSETROLLEY***
Argon Regulator	**AE3005LXSEEXT***	**AE3005LXSEEXT***
Gas Hose 2m 3/8" BSP Hosetail	**TXS505i-1***	**TXS505i-1***

Our arc welding machines are UKCA & CE certified, compliant to BS EN 60974-1

sifWELD Evolution CUT40 Dual Voltage

TSXE1P40

TThe sifWELD Evolution Cut40 Dual Voltage is a professional 40Amp plasma cutting system designed for hand-held efficient cutting in manufacturing, sheet metal, general maintenance industries and automotive. Featuring IGBT inverter technology, the sifWELD Cut40 Dual Voltage plasma cutter is engineered to consistently deliver heavy-duty cutting performance. This is ideal to cut up to 12mm thick steel. The 6m cutting torch ensures exceptionally smooth, clean cuts, and comes with a quick-connect euro adapter to ensure effortless connection, and cost effective replacement of the torch. The sifWELDCut40 Dual Voltage can be used to efficiently cut mild and low-alloy steels, stainless, aluminium, copper, titanium and nickel alloys.

Multi-modal for TIG HF / TIG Lift / MMA process parameters

Power Supply	110V	230V
Duty Cycle (40°C 10min)	35% 30A 60% 22A 100% 20A	50% 40A 60% 36A 100% 30A
Welding Current Range (A)	20 ~ 30	20 ~ 40
Severance Cut for Carbon Steel (mm)	20	25
Production Cut (MM) Carbon Steel Stainless Steel Aluminium Copper	 15 15 12 8	 20 20 16 12
No Load Voltage (V)	210	
Net Weight (Kg)	8	
Dimensions (mm)	510 x 146 x 278	

Features

- 40A, 230V or 110V single phase plasma cutter.
- PFC Technology.
- Very high duty cycle, 100% at 30A, 230V.
- Full digital control with LCD display for showing the output, monitoring and displaying any torch or machine faults.
- Max cutting thickness 25mm, severance on carbon steel at 230V 20mm at 110V.
- Quick connect plasma euro torch connector.
- 6m manual plasma cutting torch included.

Ordering information

sifWELD Evolution CUT40 PFC LCD 110V	**TSXE1P40**
sifWELD Evolution (IPT-60 6M) Torch	**TSXE1P40T***
Earth Cable 16mm^2 4m	**TSXES052-1***

Ready to use machine package includes items marked * Our arc welding machines are UKCA & CE certified, compliant to BS EN 60974-1

sifWELD Evolution CUT40 Air

TSXE1P40C

The SifWeld Evolution Cut40 AIR professional 40Amp plasma with Built In Compressor is designed for hand-held efficient cutting in manufacturing, sheet metal, general maintenance industries and automotive.

The Built In Compressor gives the operator the advantage of Plasma Cutting when an external Air Supply is not available, just flip the switch and the machine can be used with external air supply in the workshop. The SifWeld Cut40 AIR can be used to efficiently cut mild and low-alloy steels, stainless, aluminium, copper, titanium and nickel alloys.

Parameters

Power Supply		230V
Duty Cycle (40°C 10min)		50% 40A 60% 36A 100% 30A
Cutting Current Range (A)		20 ~ 40
Severance cut for carbon steel (mm)	Compressor 18	External Air 25
Production Cut (mm) Carbon Steel Stainless Steel Aluminium Copper	 14 14 14 5	 20 20 16 12
Net Weight (Kg)	18.9	
Dimensions (mm)	510 x 146 x 278	

Features

- 40A, 230V single phase plasma cutter.
- Very high duty cycle, 100% at 30A.
- Used with internal compressor or external air supply.
- Full digital control with LCD display for showing the output, monitoring and displaying any torch or machine faults.
- Max cutting thickness 20mm, severance on carbon steel, external air.
- 18mm thickness with built in compressor.
- Quick connect plasma eurotorch connector.
- 6m manual plasma cutting torch included.

Ordering information

Sifweld Evolution CUT40 AIR	**TSXE1P40C**
Sifweld Evolution (IPT-60 6M) Torch	**TSXE1P40T***
Earth Cable 16mm^2 4m	**TSXES052-1***

Ready to use machine package includes items marked * Our arc welding machines are UKCA & CE certified, compliant to BS EN 60974-1

sifWELD Evolution CUT100 CNC

TSXE3P100

The SifWeld Evolution Cut100 CNC is a professional 100 Amp system designed for efficient cutting in the heavy fabrication, manufacturing, demolition and general maintenance industries. With 100% duty cycle a CNC connection can be connected to a plasma cutting table for precision automatic cutting if required.

Featuring IGBT inverter technology, and is ideal to cut up to 60mm thick steel. The 6m cutting torch ensures exceptionally smooth, clean cuts, and comes with a quick-connect euro connector. Cutting cut mild and low-alloy steels, stainless, aluminium, copper, titanium and nickel alloys.

Parameters

Power Supply	400V 3 Phase
Duty Cycle (40°C 10min)	100% 100A
Cutting Current Range (A)	20 ~ 100
Severance Cut for Carbon Steel (mm)	60
Production Cut (mm) Carbon Steel Stainless Steel Aluminium Copper	 45 45 36 20
No Load Voltage (V)	420
Net Weight (Kg)	32.5
Dimensions (mm)	600 x 240 x 445

Features

- 100A, three phase plasma cutter.
- CNC input for connection to cutting table, etc.
- Very high duty cycle, 100% at 100A
- Perfect machine for automatic cutting.
- Full digital control with LED display for showing the output, monitoring and displaying any torch or machine faults.
- Max cutting thickness 60mm, severance on carbon steel.
- 6M manual plasma cutting torch included.

Ordering information

Sifweld Evolution CUT100 HF CNC LCD	**TSXE3P100***
Sifweld Evolution LT101 6M Torch	**TSXE3P100T***
Earth Cable 16mm^2 4m	**TSXE3P100EC***

Ready to use machine package includes items marked * Our arc welding machines are UKCA & CE certified, compliant to BS EN 60974-1

sifWELD Evolution MTS200SYN Dual Voltage

TSXE1D200MTS

The sifWELD Evolution MTS200SYN is a professional, microprocessor-controlled inverter welding power-source for MIG, MMA & Lift-TIG applications on/off site. Using the built in Synergic facility the machine will automatically give the optimum welding parameters for the specific material, wire size and shielding gas. Featuring IGBT technology and providing a lightweight, multi-process machine. An integral wire feed system accommodates 5kg wire spools.

Parameters

Power Supply	110V	230V
MMA Duty Cycle (40°C 10min)	45% 100A 60% 85A 100% 65A	40% 200A 60% 165A 100% 130A
TIG Duty Cycle (40°C 10min)	40% 140A 60% 115A 100% 90A	
MMA Welding Current Range (A)	10 ~ 110	10 ~ 200
TIG/MIG Welding Current Range (A)	10 ~ 140	
Welding Voltage Range (A)	10 ~ 21	10 ~ 27
No Load Voltage (V)	72	
Net Weight (Kg)	19.5	
Dimensions (mm)	511 x 213 x 400	
Wire Diameter (mm)	Fe 0.6 1.0 Ss 0.8 1.0 Flux-Cored 1.0	Fe 0.6 1.0 1.2 Ss 0.8 1.0 1.2 Flux-Cored 1.0 1.2

Features

- 200A, single phase MIG welding machine with power factor correction, perfect for 110V site work.
- Synergic or manual settings.
- Full digital control with large colour LCD screen for showing and changing all welding parameters.
- Genuine lift TIG facility, with switched internal gas valve.
- High duty cycle.
- Generator friendly.
- 5Kg reel.

Ordering information

sifWELD Evolution MTS200SYN Dual Voltage	**TSXE1D200MTS***
200A SifGun MIG Torch	**FXMT2004***
Earth Cable 25mm2 3m	**TSXE5052-2***
Electrode Holder 25mm2 3m	**TSXE1D200MTSEH***
Gas hose 2m with 3/8" BSP Hose Tail RH to Regulator	**TSXE5051-1***
Argon Regulator	**AE3005LXBEEXT***
V Roller 0.9./1.0mm Single	**TSXES049-3***
U Roller 1.0/1.2mm Pair	**TSXES048-1**

Ready to use machine package includes items marked * Our arc welding machines are UKCA & CE certified, compliant to BS EN 60974-1

sifWELD Evolution MTS300SYN

TSXE1D300MTS

The sifWELD Evolution MTS300SYN is a professional, microprocessor-controlled inverter welding package for MIG, MMA & Lift-TIG applications. With 100% Duty Cycle at 300A and 60% at 500A this machine is the ideal work horse for high production manufacturing in air cooled or water cooled versions. Using the built in synergic facility the machine will automatically give the optimum welding parameters for the specific material, wire size and shielding gas. Featuring IGBT technology and providing a lightweight, multi-process machine. A separate wire feed system with full feature control.

Parameters

Power Supply	230V Single Phase
MMA Duty Cycle (40°C 10min)	
Welding Current Range (A)	10 ~ 300
Welding Voltage Range (A)	
No Load Voltage (V)	
Net Weight (Kg)	
Dimensions (mm)	511 x 213 x 400
Wire Diameter(mm)	Fe 0.6 1.0 1.2 Ss 0.8 1.0 1.2 Flux-Cored 1.0 1.2

Features

- 300A, single phase MIG welding machine with separate wire feed unit.
- Synergic or manual settings.
- Perfect machine where only 230V is available.
- Supervisor lock out included.
- Full digital control with large colour LCD Screen.
- 15Kg reel or bulk drum.
- Water cooled or air cooled ready to weld packages.
- 5mmor 10m interconnect cable.
- 25m interconnect cable for special applications.

Ordering information

sifWELD Evolution MTS300SYN LCD	**TSXE3D300MTS***
sifWELD Evolution MTS400SYN WFU	**TSXE3D400MTSWFU***
sifWELD Evolution Trolley	**TSXETROLLEY***
5m Internconnect Air Cooled 50mm^2	**TSXE1C-05AC***
Argon Regulator	**AE3005LXSEEXT***
SifGun 400A Air Cooled MIG Torch	**FXMT4003***

Ready to use machine package includes items marked * Our arc welding machines are UKCA & CE certified, compliant to BS EN 60974-1

sifWELD Evolution MTS400SYN

TSXE3D400MTS

The sifWELD Evolution MTS400SYN is a professional, microprocessor-controlled inverter welding package for MIG, MMA & Lift-TIG applications.

With 100% Duty Cycle at 400A and 60% at 500A this machine is the ideal work horse for high production manufacturing in air cooled or water cooled versions. Using the built in synergic facility the machine will automatically give the optimum welding parameters for the specific material, wire size and shielding gas.

Featuring IGBT technology and providing a lightweight, multi-process machine. A separate wire feed system with full feature control.

Features

- 500A, three phase MIG welding machine with separate wire feed unit.
- Synergic or manual settings.
- Very high duty cycle, 100% at 400A, 60% at 500A.
- Perfect machine for high production environment.
- Supervisor lock out included.
- Full digital control with large colour LCD screen.
- 15Kg reel or bulk drum.
- Water cooled or air cooled ready to weld packages.
- 5m or 10m interconnect cable.
- 25m interconnect cable for special applications.

500Amp Digital Multi-Process Inverter

Parameters

Power Supply	400V 3 Phase
MIG Duty Cycle (40°C 10min)	60% 500A 100% 400A
Welding Current Range (A)	10 ~ 500
Welding Voltage Range (A)	14 ~ 50
No Load Voltage (V)	72
Net Weight (Kg)	31.5
Dimensions (mm)	511 x 213 x 400
Wire Diameter(mm)	Fe 0.6 1.0 1.2 1.6 Ss 0.8 1.0 1.2 1.6 Flux-Cored 1.0 1.2 1.6

Ordering information

sifWELD Evolution MTS400SYN LCD	**TSXE3D400MTS***
sifWELD Evolution MTS400SYN WFU	**TSXE3D400MTSWFU***
sifWELD Evolution Water Cooler	**TSXEWC**
Water Cooler Power Cable 1M	**TSXES053-1**
sifWELD Evolution Trolley	**TSXETROLLEY***
5m Internconnect Air Cooled 50mm^2	**TSXE1C-05AC***
5m Internconnect Water Cooled 50mm^2	**TSXE1C-05WC**
V Roller 1.0/1.2mm Pair	**TSXES049-1**
V Roller 1.2/1.6mm Pair	**TSXES049-2***
U Roller 1.0/1.2mm Pair	**TSXES048-2**
U Roller 1.2/1.6mm Pair	**TSXES048-3**
K Roller 1.0/1.2mm Pair	**TSXES050-1**
K Roller 1.2/1.6mm Pair	**TSXES050-2**
Argon Regulator	**AE3005LXSEEXT***
SifGun 400A Air Cooled MIG Torch	**FXMT4003***
500A Water Cooled MIG Torch	**QH400400LX**

Ready to use machine package includes items marked * Our arc welding machines are UKCA & CE certified, compliant to BS EN 60974-1

sifWELD Evolution MTS500 DP

TSXE3D500MTS

The sifWELD Evolution MTS500 Dual Pulse is a professional, microprocessor-controlled inverter welding package for MIG, MMA & Lift-TIG applications. With 100% Duty Cycle at 400A this machine is the ideal work horse for high production manufacturing in air cooled or water cooled versions. The dual pulse function incorporating the built in Synergic facility the machine will automatically give the optimum welding parameters for the specific material, wire size and shielding gas, including optimum MIG welding of aluminium.

Featuring IGBT technology and providing a lightweight, multi-process machine, a separate feed system with full feature control.

Features

- 500A, three phase MIG welding machine with separate wire feed unit.
- Synergic features including Dual Pulse programs for steels, aluminium and MIG brazing.
- Very high duty cycle, 100% at 400A, 60% at 500A.
- Perfect machine for high production environment.
- Programmable job memory.
- Supervisor lockable parameters.
- Full digital control with large colour LCD screen.
- 15Kg reel or bulk drum.
- Water cooled or air cooled ready to weld packages.
- 5m or 10m interconnect cable.

Dual Pulse 500Amp Inverter

Parameters

Power Supply	500V 3 Phase
Duty Cycle (40°C 10min)	50% 500A 100% 400A
Welding Current Range (A)	10 ~ 500
Welding Voltage Range (A)	14 ~ 50
No Load Voltage (V)	14 (MMA/TIG) 18 (MIG)
Net Weight (Kg)	34.8
Dimensions (mm)	605 x 240 x 445
Wire Diameter(mm)	Fe 0.6 1.0 1.2 1.6 Ss 0.8 1.0 1.2 1.6 Flux-Cored 1.0 1.2 1.6

Ordering information

sifWELD Evolution MTS500DP LCD	**TSXE3D500MTS***
sifWELD Evolution MTS500DP WFU	**TSXE3D500MTSWFU***
sifWELD Evolution Water Cooler	**TSXEWC**
Water Cooler Cable	**TSXES053-1**
sifWELD Evolution Trolley	**TSXETROLLEY***
5m Internconnect Air Cooled 50mm^2	**TSXE1C-05AC***
5m Internconnect Water Cooled 50mm^2	**TSXE1C-05WC**
V Roller 1.0/1.2mm Pair	**TSXES049-1**
V Roller 1.2/1.6mm Pair	**TSXES049-2***
U Roller 1.0/1.2mm Pair	**TSXES048-2**
U Roller 1.2/1.6mm Pair	**TSXES048-3***
K Roller 1.0/1.2mm Pair	**TSXES050-1**
K Roller 1.2/1.6mm Pair	**TSXES050-2**
10m Interconnect Cable 50mm^2 Air Cooled	**TSXE1C-10AC**
10m Interconnect Cable 50mm^2 Water Cooled	**TSXE1C-10WC**
Argon Regulator	**AE3005LXSEEXT***
SifGun 400A Air Cooled MIG Torch	**FXMT4003***
500A Water Cooled MIG Torch	**QH400400LX**

Ready to use machine package includes items marked * Our arc welding machines are UKCA & CE certified, compliant to BS EN 60974-1

sifWELD Evolution MTS500 Robot

TSXE3D500RMTS

The sifWELD Evolution MTS500 Robot is a professional, microprocessor-controlled inverter welding package for MIG, MMA & Lift-TIG applications. With 100% Duty Cycle at 400A this machine is the ideal work horse for high production manufacturing in air cooled or water cooled versions. Ideally suited for robotic welding solutions

The dual pulse function incorporating the built in Synergic facility the machine will automatically give the optimum welding parameters for the specific material, wire size and shielding gas, including optimum MIG welding of aluminium.

Featuring IGBT technology and providing a lightweight, multi-process machine, a separate wire feed system.

Features

- 500A, three phase MIG welding machine with separate wire feed unit.
- Synergic features including Dual Pulse programs for steels, aluminium and MIG brazing.
- Full digital or analogue robot interface connections.
- Very high duty cycle, 100% at 400A, 60% at 500A.
- Perfect machine for robotic solutions or a manual high production environment.
- Programmable job memory.
- Supervisor lockable parameters.
- Full digital control with LED display.
- 5Kg reels or bulk drum.
- Water cooled or air cooled.
- 5m or 10m interconnect cable.

Robot 500Amp Inverter

Parameters

Power Supply	500V 3 Phase
Duty Cycle (40°C 10min)	60% 500A 100% 400A
Welding Current Range (A)	10 ~ 500
Welding Voltage Range (A)	14 ~ 50
No Load Voltage (V)	14 (MMA/TIG) 18 (MIG)
Net Weight (Kg)	34.8
Dimensions (mm)	605 x 240 x 445
Wire Diameter(mm)	Fe 0.6 1.0 1.2 1.6 Ss 0.8 1.0 1.2 1.6 Flux-Cored 0.6 0.8 1.0 1.2 1.6

Ordering information

sifWELD Evolution MTS500Robot	**TSXE3D500RMTS***
sifWELD Evolution MTS500Robot WFU	**TSXE3D500RMTSWFU***
sifWELD Evolution Water Cooler	**TSXEWC**
sifWELD Evolution Trolley	**TSXETROLLEY***
5m Interconnection Cable 50mm^2 Air Cooled	**TSXE1C-05AC***
5m Internconnect Water Cooled 50mm^2	**TSXE1C-05WC**
Water Cooler Cable	**TSXES053-1**
Robot Cable	**TSXE3D500RMTSC**
V Roller 1.0/1.2mm Pair	**TSXES049-1**
V Roller 1.2/1.6mm Pair	**TSXES049-2***
U Roller 1.0/1.2mm Pair	**TSXES048-2**
U Roller 1.2/1.6mm Pair	**TSXES048-3***
K Roller 1.0/1.2mm Pair	**TSXES050-1**
K Roller 1.2/1.6mm Pair	**TSXES050-2**
500A Water cooled MIG Torch 4m	**QH400400LX**
10m Interconnect Cable 50mm^2 Air Cooled	**TSXE1C-10AC**
10m Interconnect Cable 50mm^2 Water Cooled	**TSXE1C-10WC**
Argon Regulator	**AE3005LXSEEXT***

Ready to use machine package includes items marked * Our arc welding machines are UKCE & CE certified, compliant to BS EN 60974-1

Inverter-Based Dual Pulsed MIG Welding Technology

Dual Pulsed MIG technologies have advanced to provide excellent welding performance on thin gauge aluminium, stainless and other alloys. Upgrading to a modern MIG inverter can improve productivity, reduce weld costs and improve operator efficiency:

- Dual Pulsed MIG can replace AC TIG by giving welders the ability to control heat input, increase travel speeds, eliminate burn through and control the bead profile while welding aluminium.
- New Dual Pulsed MIG technology enables operators to tailor the arc length to match their personal preferences.
- Inverter technologies offer a substantial return-on-investment and quick payback compared to older machines.

To weld sheet metal and use conventional welding equipment, new technology improves the first-pass yield rates, lower cycle times and reduce piece costs.

The challenge of welding sheet metal efficiently involves obtaining good fusion while simultaneously controlling:

- Heat input
- Weld bead profile
- Arc starts/stops
- Arc performance while welding
- Activities that do not add value (e.g. grinding, rework).

Conventional and old pulsed welding technology cannot provide the advanced control capabilities of the new technology.

Today's control algorithms, software and microprocessors operate much more efficiently than those developed earlier, while thicker sections of metal might not need advanced control, sheet metal offers little room for error, but lots of room for improvement.

Dual Pulsed MIG technology is the solution for welding thin aluminium, Dual Pulsed MIG gives users:

- The ability to control heat input. The pulse of peak current provides the good fusion associated with spray transfer, while the low background current cools the weld puddle and lets it freeze slightly.
- Good travel speeds, switching from AC TIG to Dual Pulsed MIG increased travel speeds by 30 percent while cutting heating input by more than 55 percent.
- The ability to control bead profile. Using a simple function called arc control, operators can adjust the width of the arc cone, which tailors the bead profile to the application. In all cases, a bead of the right size eliminates excess heat input, over-welding and post-weld weld grinding.
- Superior arc starts, Dual Pulsed MIG technology automatically provides more energy at the start of the weld which helps ensure good fusion and then reduces energy to normal parameters for optimal welding characteristics
- At the end of the weld, today's Dual Pulsed MIG technology can ramp down to a cooler welding parameter to fill in the crater, as well as tailor the amount of ramping to compensate for the different heat dissipation characteristics of aluminium, carbon steel and stainless steel.

Ensuring accuracy of equipment settings by annual verification

In this era of procedures, inspection records and accountability, driven by quality-control standards for welding, such as ISO 3834 and EN 1090, the need to be confident of accurate, consistent welding machine settings has become vitally important. Furthermore, the increased use of part-or fully-mechanised welding processes has led to a requirement for more rigorous verification of welding equipment performance.
To ensure machine settings such as current, voltage, speed, gas flow and pulse characteristics are consistently accurate, standards have been developed which stipulate best practice for regular maintenance, and a process for the annual inspection, testing and reporting/certifying of equipment display meters. The standard for welding equipment is EN 60974-14. This standard sets the level of accuracy and consistency of the output.

The validation certificate should contain the following information

- Name and address of the validator
- Type of equipment under test
- Model and make of equipment
- Serial number of the equipment under test
- Ambient temperature
- Supply voltage
- Function under test (e.g. current)
- Method of verification, e.g. load resistor type, meter type
- Grade of verification, i.e. standard or precision
- Type of verification, i.e. accuracy or consistency
- Range of the function under verification
- Results of the measurements on the function under verification, comparing the equipment readings with the verification meter readings.
- Result of verification, i.e. pass or fail
- Date of verification
- Signature or mark of the validator

For your peace of mind, our nationwide team of field service technicians provide an on-site welding machine verification service, to EN 60974-14, resulting in a detailed report for each unit, for your compliance audit records.

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