SYNERGIC MIG MACHINE
OVERVIEW
Parweld are pleased to introduce our new range of Synergic MIG Machines.

The Parweld multifunction welding power sources for MIG-MAG have been specifically designed and developed for use in the harshest working conditions and for continuous operation.

The Parweld Synergic MIG machines feature:

- 6" TFT display for perfect visibility
- One way navigation process for simple setting adjustments
- The innovative SD card system allowing updates to all machine parameters and software
- The Hi Block system which prevents the machines from being used if stolen

Perfect Visibility
All Parweld Synergic machines are supplied with a 6”/150mm TFT colour display allowing operator adjustments to be made easily and accurately from any angle. The browser and menu provides an intuitive and easy to follow menu system and allows rapid setting and adjustment of the weld parameters. An extremely strong polycarbonate guard protects the display against knocks or sparks even under the most intense operating conditions.

Parweld SD Card
Parweld SD card guarantees that your welding machine is constantly updated.

An update package ensures you have all the latest software and program updates on a regular basis. These updates can be loaded directly into the machine without the need for any type of computer device.

This system allows Parweld to deliver new synergic curves directly to the user and is combined with the innovative Hi Block anti-theft system.

Pulse Welding
Modulated transfer (pulsed arc) has been created to overcome the difficulties related to high thermal inputs typical with spray transfer (spray arc).

Pulsed output is used to supply a current much lower than the spray transition current for a precise time, which maintains the arc and heats the wire.

The current is then increased to a higher level in order to melt the wire and to transfer the drop of melted material into the welding pool.

Pulsed arc welding is frequently used for welding of sheet metal especially materials which are particularly sensitive to heat (alloy steels, stainless steels and nonferrous alloys) and generally when welding light alloys or brazing.

The advantages compared to MIG/MAG spray arc and short arc processes are:

- Reduction of thermal input to the work piece (less deformation, metallurgical structure of base material is not modified)
- Drastic reduction of spatter (reduced corrosion risk of base material)
- Elimination of the transition area (where arc is highly unstable) between short arc and spray arc
- Reduction of welding fumes
- Easier to use, also in different positions (reduction of weld prep)
- Better weld aesthetics alloys and thin sheet metal.

Dual Short Process
Dual Short Process is derived from traditional short arc and works with two different power levels.

The first level has a primary current suitable to obtain a higher penetration with the fusion of base materials;

The second level has a lower current output and therefore reduces the thermal effect and the stability of the arc is improved.

Smart Use of Energy (Dual Pulse)
Compared to traditional pulsed arc machines, the lower energy consumption of the Dual Pulse system gives improved control on thin materials with excellent aesthetic results (on par with TIG welding), while having the same welding speed as a typical MIG machine.

Advantages of Pulse:

- Lower thermal effect (less deformation, less post welding works, less risk of rupture)
- Higher arc stability
- Root pass can be made
- Possibility to weld in different positions
- Easier control of welding pool
- Reduced spray
- Suitable for use with CO2
- Faster than GTAW (TIG)

Parweld Remote
The Parweld Remote pendant is an innovative system for controlling the machine at a distance when it is not possible to have the machine nearby.

Conventional remote controls only allow the operator to make basic adjustments. The Parweld remote allows all adjustments to be made in an extremely compact unit. The Parweld remote puts all the machine information and adjustments right where you need them; you no longer have to leave your post to adjust your welding machine, the adjustments and information will always be with you.
New Synergic MIG Machine Range

- Ultra-Light and sturdy separate feeder with aluframe structure for low weight and maximum strength
- 6" TFT colour display for clarity and simplicity
- Machine Trolley - extremely strong, stable and easy to handle
- Power Source - intelligent power source with 4 microprocessors that control all the welding dynamics
- Optional Cooling Unit - A cooling system for using the welding machine in extreme conditions, upto 500 Amps

Range Overview

<table>
<thead>
<tr>
<th>Model</th>
<th>DP231C</th>
<th>DP323C</th>
<th>DS403SW</th>
<th>DP403SW</th>
<th>DP503SW</th>
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<tr>
<td>Input</td>
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<td>Pulsed Function</td>
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<td>Double Pulsed Function</td>
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<td>Special Weld Program</td>
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UK Sales: 01299 269 500  Export Sales: +44 1299 269 507
The Parweld DP231C offers a wide range of welding capabilities making it ideal for maintenance and auto repair applications.

**DC Output**
The DP231C has a DC Output and when combined with the correct type of wire it is suitable for welding mild steel, stainless steel, aluminium, galvanised steel and copper alloys.

The machine is ideal for welding a range of materials from 0.5mm to 8.0mm.

**Flexible**
The microprocessor control ensures that the arc can be closely controlled with specific programs for the welding of aluminium, galvanised and stainless steels.

The pulse and double pulse feature allows greater precision on thin materials giving the appearance of a TIG weld but with the advantages of higher weld speeds.

The unit incorporates a double short gap filling program for root runs.

**Versatile and Portable**
The DP231C cabinet can accept a 5kg (200mm) spool and a 15kg (300mm) spool on an optional external mounting. It is lightweight and portable.

**Standards of Conformance**

**Related Products**
XR916H
Light Reactive Welding and Grinding Helmet

**Options**
<table>
<thead>
<tr>
<th>Stock Code</th>
<th>Description</th>
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<tbody>
<tr>
<td>Torch Packages</td>
<td>XP300A-50E XP8 Torch Package x 5mt Euro</td>
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<td>Feed Roll Kits</td>
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<td>DR20/810 Feed Rolls 0.8mm-1.2mm V Groove D30</td>
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<td>DR40/1012 Feed Rolls 1.0mm-1.2mm Knurled D30</td>
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<td>Accessories</td>
<td>TR300 Trolley c/w Bottle Stand and External Holder for 15kg wire</td>
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<td>PRG02-12S1B025 Pro-Grip 26 TIG Torch x 12.5ft</td>
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<td>T06101 Flow Meter Mixed Gas 25lpm (MIG)</td>
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<td>100051 Gas Flow Tester</td>
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**Calibration Certificates are available at the time of order (please note that this is an additional cost).**

<table>
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<tr>
<th>Stock Code</th>
<th>Description</th>
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<tbody>
<tr>
<td>CERT-MIG</td>
<td>Calibration Certificate</td>
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</table>
The compact Parweld DP323C offers a wide range of welding capabilities making it ideal for workshop use.

**DC Output**
The DP323C has a DC Output and when combined with the correct type of wire it is suitable for welding mild steel, stainless steel, aluminium, galvanised steel and copper alloys.

The machine is ideal for welding a range of materials from 1.0mm to 12mm.

**Flexible**
The microprocessor control ensures that the arc can be closely controlled with specific programs for the welding of aluminium, galvanised and stainless steels.

The pulse and double pulse feature allows greater precision on thin materials giving the appearance of a TIG weld but with the advantages of higher weld speeds.

The unit incorporates a double short gap filling program for root runs.

**Versatile and Compact**
The DP323C cabinet can accept a 15kg (300mm) spool.

Its compact size means it occupies less space in the workshop but still delivers an impressive welding capability.

**Standards of Conformance**

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**Related Products**

**XP300A-40E**
XP8 Torch Package

**XR916H**
Large View Light Reactive Welding and Grinding Helmet

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**Options**

**Torch Packages**
XP300A-50E  XP8 Torch Package x 5mt Euro

**Feed Roll Kits**
DRTV010  Feat Roll 0.8mm-1.0mm V Groove D37
DRTV1012  Feat Roll 1.0mm-1.2mm V Groove D37
DRTV1216  Feat Roll 1.2mm-1.6mm V Groove D37
DRTU010  Feat Roll 0.8mm-1.0mm U Groove D37
DRTU1216  Feat Roll 1.2mm-1.6mm U Groove D37
DRTU1216  Feat Roll 1.2mm-1.6mm Knurl D37
DRTV2428  Feat Roll 2.4mm-2.8mm Knurl D37

**Accessories**
WCU  Modular Water cooler
PR025-125BD25  Pro-Grip 25 TIG Torch x 12.5ft
706101  Flow Meter Mixed Gas 25pm (MIG)
900011  Gas Flow Tester

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**Stock Code**  **Description**
CERT-MIG  Calibration Certificate
The Parweld DS403SW offers a wide range of welding capabilities making it ideal for workshop on large fabrications.

DC Output
The DS403SW has a DC Output and when combined with the correct type of wire it is suitable for welding mild steel, stainless steel, galvanised and aluminium, galvanised steel and copper alloys.

The machine is ideal for welding a range of materials from 1.0mm to 12mm.

Flexible
The microprocessor control ensures that the arc can be closely controlled with specific programs for the welding of aluminium, galvanised and stainless steels.

The synergic control ensures low levels of spatter, uniform penetration and bead profile.

The unit incorporates a double short gap filling program for root runs.

Versatile
The DS403SW has a separate wire feeder which allows the machine to be used in areas with limited access.

Standards of Conformance

**Related Products**

**XR916H/E**
Everyday Light Reactive Welding and Grinding Helmet - Eagle

**XP350A-40E**
XP8 Torch Package

**XR916H/E**
Everyday Light Reactive Welding and Grinding Helmet - Eagle

**XP350A-40E**
XP8 Torch Package

**DS403SW**
Three Phase Separate Synergic MIG Machine with built in Water Cooler

- 400V Three Phase
- 40% Duty Cycle Ø 400A
- 4 Roll Drive
- Forced Air Fan Cooling
- Infinitely Variable Wire Speed
- Overload Warning Indicator
- Stand For Full Size Gas Cylinder
- Holds 15Kg Wire Spools Internally
- 6’ / 150mm Digital Display
- Job Store
- Optional Cooling Unit
- Custom Program Storage
- 2 Year Warranty

- Burn Back Control
- Soft Start Control
- Synergic MIG
- Double Short Gap Filling MIG
- MIG Brazing
- MMA Function
- Lift Arc TIG Welding

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**DS403SW - Technical Information**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
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<td>Input Voltage</td>
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<td>Output Range Amps</td>
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<td>Output Volts</td>
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<td>340A @ 60%</td>
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<td>Dimensions</td>
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<td>Insulation / Protection Class</td>
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<td>Mechanical Protection</td>
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<tr>
<td>Wire feed speed</td>
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</table>

**Standard Package Includes**

- XPB Torch Package x 4mt Euro
- Input Cable x 2.5mt
- Earth Cable Clamp Kit x 3mt
- Feed Rolls 0.8mm to 1.2mm
- Gas Hose x 3mt w/c 3/8" BSP Fittings
- Modular Water Cooler
- Interconnect Cable x 5mt Water Cooled
- Trolley with Bottle Stand

**Options**

- Stock Code Description
- XPB Torch Package x 4mt Watercooled
- Feed Roll Kits
  - DRTV0810 Feed Rolls 0.8mm-1.0mm V Groove D37
  - DRTV1012 Feed Rolls 1.0mm-1.2mm V Groove D37
  - DRTV1216 Feed Rolls 1.2mm-1.6mm V Groove D37
  - DRTU0810 Feed Rolls 0.8mm-1.0mm U Groove D37
  - DRTU1012 Feed Rolls 1.0mm-1.2mm U Groove D37
  - DRTU1216 Feed Rolls 1.2mm-1.6mm U Groove D37
  - DRTK1216 Feed Rolls 1.2mm-1.6mm Knurl D37
  - DRTK2428 Feed Rolls 2.4mm-2.8mm Knurl D37
- Accessories
  - IC050 Inflatable Cable 5mt Water Coated
  - IC100 Inflatable Cable 10mt Water Coated
  - WCU Modular Water Cooler
  - PRK061-125SB25 Pro-Grip 25 TIG Torch x 12.5ft
  - 706101 Flow Meter Mixed Gas 25lpm (MIG)
  - ISO001 Gas Flow Tester

Calibration Certificates are available at the time of order (please note that this is an additional cost).

**Stock Code** Description
- CERT/MIG Calibration Certificate
DP403SW

Double Pulse Synergic Three Phase Separate MIG Machine with built in Water Cooler

The Parweld DP403SW offers a wide range of welding capabilities making it ideal for large workshop fabrications.

**DC Output**
The DP403SW has a DC Output and when combined with the correct type of wire it is suitable for welding mild steel, stainless steel, aluminium, galvanised steel and copper alloys.

The machine is ideal for welding a range of materials from 1.0mm to 15mm.

**Flexible**
The microprocessor control ensures that the arc can be closely controlled with specific programs for the welding of aluminium, galvanised and stainless steels.

The pulse and double pulse feature allows greater precision on thin materials giving the appearance of a TIG weld but with the advantages of higher weld speeds.

The unit incorporates a double short gap filling program for root runs.

**Versatile**
The DP403SW has a separate wire feeder which allows the machine to be used in areas with limited access.

**Standards of Conformance**

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### Related Products

**XR16H/A**
Everyday Light Reactive Welding and Grinding Helmet - Eagle

**XP350A-40E**
XP8 Torch Package

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### Stock Code Description

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<td>DP403SW</td>
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### Technical Information

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<td>34.4A @ 60%</td>
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### Options

**Stock Code** | Description
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XP450W-50E       | XP8 Torch Package x 5mt Euro

**Feed Roll Kits**

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**Accessories**

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<td>706101</td>
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<td>I9000</td>
<td>Gas Flow Tester</td>
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**Calibration Certificates are available at the time of order (please note that this is an additional cost).**

**Stock Code** | Description
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CERT-MIG       | Calibration Certificate |
The Parweld DP503SW offers a wide range of welding capabilities making it ideal for large workshop fabrications.

DC Output
The DP503SW has a DC Output and when combined with the correct type of wire it is suitable for welding mild steel, stainless steel, aluminium, galvanised steel and copper alloys.

The machine is ideal for welding a range of materials from 1.0mm to 20mm.

Flexible
The microprocessor control ensures that the arc can be closely controlled with specific programs for the welding of aluminium, galvanised and stainless steels.

The pulse and double pulse feature allows greater precision on thin materials giving the appearance of a TIG weld but with the advantages of higher weld speeds.

The unit incorporates a double short gap filling program for root runs

Versatile
The XTS DP503S has a separate wire feeder which allows the machine to be used in areas with limited access.

Standards of Conformance

Related Products

XR916H
Everyday Light Reactive Welding and Grinding Helmet

XP450W-40E
XP8 Torch Package

Options

Torch Packages
XP450W-50E
XP8 Torch Package x 5mt Euro

Feed Roll Kits
DR7U810
Feed Rolls 0.8mm-1.0mm V Groove D37
DR7U1012
Feed Rolls 1.0mm-1.2mm V Groove D37
DR7U1216
Feed Rolls 1.2mm-1.6mm U Groove D37
DR7U2428
Feed Rolls 2.4mm-2.8mm Knurl D37

Accessories
ICG01
Intertakt Cable 5mt Water Cooled
IC1010
Intertakt Cable 10mt Water Cooled
WC01
Modular Water Cooled
PR026-128/1BD05
Pro-Grip 26 TIG Torch x 12.5ft
T08101
Flow Meter Mixed Gas 25lpm (MIG)
BG0601
Gas Flow Tester

Calibration Certificates are available at the time of order (please note that this is an additional cost).

Stock Code Description
CERT-MIG Calibration Certificate