

DIFFUSION ENGINEERS LIMITED



DIFFUSION
Innovative superconditioning solutions

WELDING & CUTTING SOLUTIONS
EQUIPMENT CATALOGUE



DW200i

1 Phase

50/60 Hz

DC

CE

CCC

MMA / ARC Welding
IGBT INVERTER TECHNOLOGY

PRODUCT SPECIALITY

DW 200i, DW 315G & DW 400G

1. With the function of auto-compensation against power fluctuation. And the output welding current will be stable.
2. Having the function of auto-protection against over-voltage and over-current.
3. Having powerful arc-force.
4. Reliable quality with small dimension and weight as well as high efficiency.
5. Able to weld basic and acid electrodes.
6. Applicable to low carbon steel, medium carbon steel and alloy steel
7. Saves power bill by 65% as compared to transformer based welding machines.

DW400i, DW500i & DW630i

1. The transformer core is made of high-tech material based on Nanotechnology
2. The tri-proof (water, dust and eroding proof) cooling system raised the reliability and duty-cycle of the key components.
3. Having the fan stand by function.
4. With OCV as high as 70V, able to weld basic and acid electrodes.
5. The duty-cycle is higher than 60% when the temperature of the operation surrounding is around 40°C. Capable to operate outdoors.
6. The maximum output efficiency is 85%. By using the advanced electro-circuit for power factor compensation, the max power factor could be as high as 0.93.
7. EMC electro-circuit added to reduce the pollution to the electric network.
8. With digital display of the welding current and remote control for option.
9. Saves power bill by upto 65% as compared to transformer based welding machines.

3 Phase

DW 315G



50/60 Hz

DC

CE

CCC

3 Phase

DW 400G



50/60 Hz

DC

CE

CCC



3 Phase

DW400i



50/60 Hz

DC

CE

CCC

3 Phase

DW500i



50/60 Hz

DC

CE

CCC

3 Phase

DW630i



50/60 Hz

DC

CE

CCC

DIFFARC RANGE (IGBT)



DIFFARC RANGE - MMAW/ARC WELDING

| Parameter/Model | DW200i | DW315G | DW 400G | DW400i | DW500i | DW630i |
|---------------------------|-------------------------|--------------------------|------------------|--------------|--------------|----------------------|
| Input Voltage (V) | 1phase, AC 220 ± 15% | AC 415 ± 15% | AC 415 ± 15% | AC 415 ± 15% | AC 415 ± 15% | AC 415 ± 15% |
| Frequency (Hz) | 50/60Hz | 50/60Hz | 50/60Hz | 50/60Hz | 50/60Hz | 50/60Hz |
| Rated Input Current (A) | 43.6 | 19.7 | 24 | 27.6 | 38.4 | 53.1 |
| No Load Voltage (V) | 58 | 68 | 68 | 68 | 72 | 72 |
| Output Current Range (A) | 20-200 | 30-315 | 40-400 | 40-400 | 50-500 | 50-630 |
| Rated Output Voltage (V) | 28 | 32.6 | 36 | 36 | 40 | 44 |
| Duty Cycle (%) | 60 | 60 | 60 | 100* | 100* | 100* |
| No- Load Loss (W) | 40 | 80 | 80 | 100 | 300 | 300 |
| Efficiency (%) | 80 | 85 | 85 | 85 | 85 | 85 |
| Power Factor | 0.73 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 |
| Insulation Grade | F | F | F | F | F | F |
| Housing Protection Grade | IP 21 S | IP 21 S | IP 21 S | IP 21 S | IP 21 S | IP 21 S |
| Net Weight (kg) | 8 | 23 | 20 | 38 | 40 | 54 |
| Dimensions (mm) | 375x155x232 | 565x306x432 | 515x262x468 | 565x286x432 | 650x300x615 | 670x337x617 |
| Plate thickness (mm) | 2.0-6.0 | 2.0-16.0 | 2.0-18.0 | 2.0-20.0 | 2.0-22.0 | 2.0-25.0 |
| Welding Rod Diameter (mm) | 1.5/2.5/3.15 | 1.5/2.5/3.15 /4.0/5.0 | 2.5/3.15/4.0/5.0 | 3.15/4.0/5.0 | 3.15/5.0/6.0 | 3.15/4.0/6.0 /8.0 |

* 100% Duty cycle when ambient temperatures are below 40deg C.

Standard accessories



Electrode holder with 3M cable



Earth clamp with 3M cable

Optional accessories



Welding Mask



Welding glove



Slag Remover

DW 315 P AC/DC



3
Phase

50
60
Hz

DC

CE

CCC

AC / DC PULSE TIG & MMA

DW315 P AC/DC

1. Inverter gas shielded welding power source utilised high power component MOSFET to transfer 50/60HZ frequency upto 100 KHZ then reduce the voltage and commutate and output high power voltage via PWM technology.
2. Multi-fuction: AC/DC TIG and AC/DC pulse TIG.
3. With special AC control electro circuit. AC current is ranging from 5 A to 315A. Good arc concentration guarantees the beautiful welding performance.
4. The frequency of the pulse ranges from 0.5 to 50 HZ. Pulse peak, base current, Vale Value Current and width of clean pulse are adjustable.
5. Arc-start current, crater current, current rising and down-sloping are all adjustable.
6. With the fuction of 2T/4T making the welding operation more convenient.
7. Complete protection against phase-missing, over voltage, low voltage, over current, over heat.
8. With connectors for remote control. The customers can choose pedal to adjust current.
9. The first and second inverters are placed on two different levels. Duct-proof, reliable and easy for maintenance.
10. Able to work even the power line is not stable. Applicable for input voltage from 380/V to 430V.
11. Saves power bill by upto 55% as compared to conventional machines.

DW200TM



1
Phase

50
60
Hz

DC

CE

CCC

TIG / MMA Welding

DW 200 TM & DW 400 i TM

1. Digital display of welding current adjustment. Direct and convenient
2. Having the function of auto-protection against over-voltage and over-current.
3. Based on the inverter technology. With the function of TIG and ARC.
4. Easy to start the arc; with stable welding current; reacting fast; with no noise, little spatter and little magnetic bias to make welding seam beautiful.
5. Reliable and energy - saving. Convenient to take around with small dimension and weight.
6. Suitable for the welding of stainless steel, carbon steel, copper, etc.
7. Saves power bill by upto 55% as compared to conventional at machines.

DW400 i TM



3
Phase

50
60
Hz

DC

CE

CCC

DIFFARC RANGE (IGBT/MOSFET)

| Parameter/Model | AC / DC PULSE TIG | TIG / MMA Welding | |
|----------------------------------|-----------------------|------------------------------|--------------------------------|
| | DW315P AC/DC | DW200TM | DW 400iTM |
| Input Voltage (V) | AC 415 ± 15% | AC 220 ± 15% | AC 415 ± 15% |
| Frequency (Hz) | 50/60Hz | 50/60Hz | 50/60Hz |
| Rated Input Current (A) | 12-13.6 | 43/28 | 27.6/20 |
| No –Load Voltage (V) | 60 | 56 | 70 |
| Output Current Range (A) | ARC 20-200/TIG 20-315 | 10-200 | 20-400 |
| Rated Output Voltage (V) | 22.6 | 28/18 | 36/26 |
| Duty Cycle (%) | 60 | 60 | 100* |
| No- Load Loss (W) | 2-10 | 40 | 100 |
| Arcing Way | HF/Transfer | Transfer/ HF | Transfer /HF |
| Efficiency (%) | 85 | 80 | 85 |
| Power Factor | 0.93 | 0.73 | 0.93 |
| Insulation Grade | F | F | F |
| Housing Protection Grade | IP 21 S | IP 21 S | IP 21 S |
| Net Weight (kg) | 34 | 9 | 29.5 |
| Dimensions (mm) | 570x364x302 | 375x155x232 | 550x280x545 |
| Recommended Plate thickness (mm) | 0.8-16.0 | ARC: 1.0-6.0 TIG: 0.3-5.0 | ARC: 2.0-16.0 TIG: 0.5-12.0 |

* 100% Duty cycle when ambient temperatures are below 40deg C.

Product Purchase Guide

| Base Material | Plate Thickness(mm) | Welding Process | Current Range(A) | Applicable Model |
|--|---------------------|-----------------|-----------------------|------------------|
| Carbon steel, Stainless steel, Low-alloy steel | 0.3-5.0 | DC TIG | 10-200 | DW 200TM |
| | 0.8-16 | DC TIG | ARC 20-200/TIG 20-315 | DW 315P |
| | 0.3- 20 | DC TIG | 20-400 | DW 400TM |

Standard accessories

| | | | | |
|---|---|--|--|---|
|  4M TIG torch WP-17/WP-26/WP-18 |  Electrode holder with 3M cable |  Earth clamp with 3M cable |  3M gas hose |  4 pcs hose clamp |
|---|---|--|--|---|

Optional accessories

| | | | | |
|--|---|--|---|---|
|  Argon regulator |  Welding helmet |  Welding glove |  Slag Remover |  Water cooling system for WP-18 torch |
|--|---|--|---|---|

DW300 i



3
Phase

50
60
Hz

DC

CE

CCC

DW250 i



3
Phase

50
60
Hz

DC

CE

CCC

MIG WELDING

PRODUCT SPECIALITY

DW300 i & DW250 i

1. Small and light : with the mid-frequency transformer which is extremely than the traditional welding power sources :
2. Efficient and energy-saving : because inverter welders reduce the wasted power by using less copper and steel. Over one third power consumption will be save because the efficiency is 80% to 85% while the power factor is as high as 0.93.
3. Having step-less adjustment for welding current and voltage. Different requirement of different welding technique will be reached.
4. Stable welding with small spatter and outstanding welding performance.
5. With the function of auto-compensation against power fluctuation.
6. Design separately; suitable for welding at high place or special position.

| Parameter/Model | DW250 i | DW300 i |
|----------------------------|--------------|--------------|
| Input Voltage (V) | AC 415 ± 15% | AC 415 ± 15% |
| Frequency (Hz) | 50/60Hz | 50/60Hz |
| Rated Input Current (A) | 12.7 | 16.7 |
| Output Current Range (A) | 50-250 | 50-300 |
| Rated Output Voltage (V) | 16.5-26.5 | 16.5-29 |
| Duty Cycle (%) | 60 | 60 |
| Efficiency (%) | 85 | 85 |
| Power Factor | 0.93 | 0.93 |
| Insulation Grade | F | F |
| Post flows (sec) | 1 | 1 |
| Type of Wire Feeder | Separated | Separated |
| Wire Diameter (mm) | 0.8/1.0 | 0.8/1.0 |
| Wire Feeding Speed (m/min) | 2.5-13 | 2.5-13 |
| Housing Protection Grade | IP 21 S | IP 21 S |
| Plate thickness | 0.8+ | 0.8+ |
| Net Weight (kg) | 15 | 18 |
| Dimensions (mm) | 505x203x375 | 505x203x375 |

Standard accessories



3M Euro connector MIG torch



Earth clamp with 3M cable



3M gas hose



CO2 regulator

Product Purchase Guide

| Base Material | Welding Process | Wire Diameter(mm) | Current Range(A) | Applicable Model |
|--|-----------------|-------------------|------------------|------------------|
| Carbon steel, Stainless steel, Low-alloy steel | CO2/MAG | 0.8/1.0 | 50-250 | DW 250i |
| | CO2/MAG | 0.8/1.0 | 50-300 | DW 300i |

SUBMERGE ARC WELDING MACHINE

IGBT Technology



DW 1000



PRODUCT SPECIALITY

1. IGBT High frequency Inverter Technology is used upto 20 KHz Inverter frequency provides that dynamic response.
2. The PWM control method guarantees the quality and stable performance.
3. Digital display of current and voltage adjustment before welding. Direct and convenient.
4. Applicable for all the welding positions as the welding current will be automatically adjusted when the stretching length is not more than 30mm.
5. Stable welding with strong capability against power fluctuation (380V-450V).
6. Saves power bill by upto 50% as compared to conventional machines.
7. Applicable to MMA/SAW Welding with Solid flux cored welding wire at differant welding specification.

Product Parameter

| Parameter | Model | DW1000 |
|----------------------------|-------|-------------|
| Input Voltage(V) | | AC415±15% |
| Frequency(HZ) | | 50/60 |
| Rated Input current(A) | | 84.3 |
| No-load Voltage(V) | | 72 |
| Output Current Range(A) | | 100-1000 |
| Rated Output Current(V) | | 44 |
| Arc Force Current Range(A) | | 0-100 |
| Duty cycle(%) | | 100 |
| No-load Loss(W) | | 300 |
| Efficiency(%) | | 85 |
| Power Factor | | 0.93 |
| Insulation Grade | | F |
| Housing Protection Grade | | IP 21 S |
| Net Weight(kg) | | 85.5 |
| Packing Dimension(mm) | | 800x455x785 |

Standard accessories



Product Purchase Guide

| Base Material | Plate Thickness(mm) | Wire Diameter | Current Range(A) | Applicable Model |
|--|---------------------|---------------|------------------|------------------|
| Carbon steel, Stainless steel, Low-alloy steel | 8.0-20.0 | 4.0/5.0 | 100-1000 | DW1000 |

DW350i MIG/MAG



3
Phase

50
60 Hz

DC

CE

CCC

PRODUCT SPECIALITY

DW350i MIG, DW400i MIG, DW500i MIG & DW630i MIG

1. IGBT High frequency Inverter Technology is used upto 20 KHz Inverter frequency provides that dynamic response.
2. The PWM control method guarantees the quality and stable performance.
3. Digital display of current and voltage adjustment before welding. Direct and convenient.
4. Applicable for all the welding positions as the welding current will be automatically adjusted when the stretching length is not more than 30mm.
5. Stable welding with strong capability against power fluctuation (380V-450V).
6. Saves power bill by upto 50% as compared to conventional machines.
7. Applicable to Co2 MIG/MAG Welding with Solid flux cored welding wire at different welding specification.

DW400i MIG/MAG



3
Phase

50
60 Hz

DC

CE

CCC

DW500i MIG/MAG



3
Phase

50
60 Hz

DC

CE

CCC

DW630i MIG/MAG



3
Phase

50
60 Hz

DC

CE

CCC

DW630i Flux Cord Feeder



3
Phase

50
60 Hz

DC

CE

CCC

MIG / MAG / MMA WELDING

| Parameter/Model | DW350i MIG | DW 400i MIG | DW500i MIG | DW630i MIG | DW630i Flux Cord Feeder |
|--------------------------------|--------------------|--------------------|--------------------|--------------------|-------------------------|
| Input Voltage (V) | AC 415 ± 15% |
| Frequency (Hz) | 50/60Hz | 50/60Hz | 50/60Hz | 50/60Hz | 50/60Hz |
| Rated Input Current (A) | 18 | 26 | 32 | 47 | 47 |
| Output Current Range (A) | 50-350 | 50-400 | 80-500 | 100-630 | 100-630 |
| Rated Output Voltage (V) | 16.5-31.5 | 16.5-34 | 18-39 | 19-44 | 19-44 |
| Duty Cycle (%) | 60 | 100% | 100* | 100* | 100* |
| Efficiency (%) | 85 | 85 | 85 | 85 | 85 |
| Power Factor | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 |
| Insulation Grade | F | F | F | F | F |
| Wire Feeder | Separate interface |
| Wire Feeding Speed (m/min) | 3-15 | 3-15 | 3-15 | 3-15 | 3-20 |
| Wire Diameter(mm) | 0.8/1.0/1.2 | 0.8/1.0/1.2 | 1.0/1.2/1.6** | 1.0/1.2/1.6** | 1.6/2.0/2.4/2.8** |
| Post Flows (sec) | 1.5± 0.5 | 1.5± 0.5 | 1.5± 0.5 | 1.5± 0.5 | 1.5± 0.5 |
| Housing Protection Grade | IP 21 S |
| Output Cable(mm ²) | 35+ | 35+ | 50+ | 70+ | 90+ |
| Net Weight (kg) | 30 | 36 | 42 | 42 | 42 |
| Dimensions (mm) | 555x263x440 | 515x265x405 | 685x302x660 | 685x302x660 | 685x302x660 |

*100% Duty cycle when ambient temperatures are below 40deg C

**with addition configuration wire diameter 2.0/2.4/2.8mm can be used in 500i MIG & 630i MIG only.

Product Purchase Guide

| Base Material | Welding Process | Wire Diameter(mm) | Current Range(A) | Applicable Model |
|--|-----------------|-------------------|------------------|------------------|
| Carbon steel, Stainless steel, Low-alloy steel | CO2/MAG | 0.8/1.0/1.2 | 40-350 | DW350I MIG |
| | CO2/MAG | 0.8/1.0/1.2 | 50-400 | DW400I MIG |
| | CO2/MAG | 1.0/1.2/1.6 | 50-500 | DW500I MIG |
| | CO2/MAG | 1.0/1.2/1.6 | 100-630 | DW630I MIG |
| | Flux Cord | 1.6/2.0/2.4/2.8 | 100-630 | DW630I MIG (F) |

Standard accessories



3M Euro connector MIG torch



Earth clamp with 3M cable



3M gas hose



4 pcs hose clamp

Optional accessories



CO2 regulator



Welding helmet



Welding glove



Electrode holder with 3M cable



Wire feeder CS-501BX

AIR PLASMA CUTTING

1
Phase

50/60
Hz

DC

CE

CCC

DW CUT 40



3
Phase

50/60
Hz

DC

CE

CCC

DW CUT 60



3
Phase

50/60
Hz

DC

CE

CCC

DW CUT 80 G



3
Phase

50/60
Hz

DC

CE

CCC

DW CUT 100



3
Phase

50/60
Hz

DC

CE

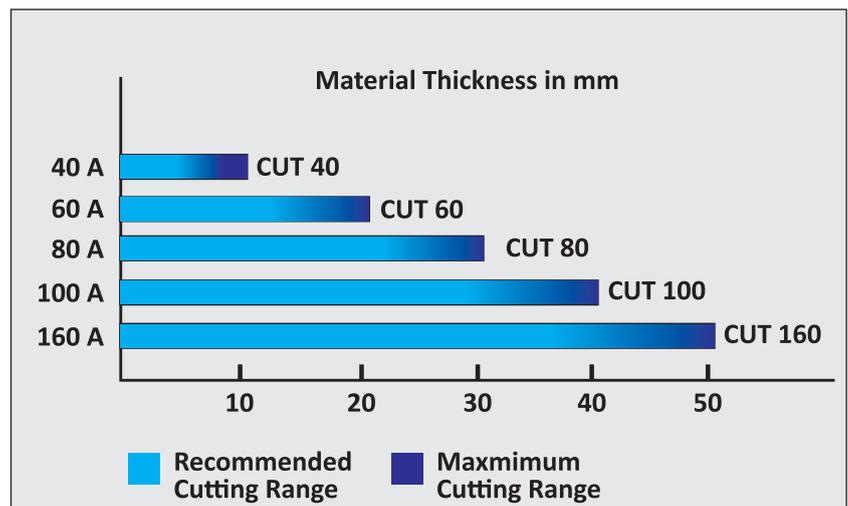
CCC

DW CUT 160



SALIENT FEATURES :

1. Able to cut metal plates in various routes.
2. Outstanding cutting performance. Especially suitable for cutting steel, stainless steel, aluminum and copper.
3. Widely used in iron structure construction, manufacture and automobile maintenance.
4. Improved cooling method for the cutting torch, greatly makes the cutting consumables more durable.
5. Using air pressure adjusting equipment, able to operate when the external air pressure is too high.
6. The cutting precise current is continuously adjustable.
7. With protection of electro circuit against over current, over voltage and low-voltage. Safety in operation is assured.



DWCUT SERIES (IGBT/MOSFET)



Plasma Cutting Machine

| Parameter/Model | DWCut40 | DWCut60 | DWCut80G | DWCut100 | DWCut160 |
|--------------------------------|-------------------------|-------------|-------------|-------------|-------------|
| Input Voltage (V) | 1phase, AC 220 ± 15% | AC415 ± 15% | AC415 ± 15% | AC415 ± 15% | AC415 ± 15% |
| Frequency (Hz) | 50/60Hz | 50/60Hz | 50/60Hz | 50/60Hz | 50/60Hz |
| Rated Input Current (A) | 30 | 12 | 17.2 | 23.1 | 44.3 |
| No Load Voltage (V) | 230 | 240 | 311 | 311 | 307 |
| Output Current Range (A) | 20-40 | 20-60 | 20-80 | 20-100 | 20-160 |
| Rated Output Voltage (V) | 96 | 104 | 112 | 120 | 144 |
| Duty Cycle (%) | 60 | 60 | 60 | 60 | 60 |
| No- Load Loss (W) | 40 | 60 | 60 | 80 | 100 |
| Efficiency (%) | 85 | 85 | 85 | 85 | 85 |
| Power Factor | 0.73 | 0.93 | 0.93 | 0.93 | 0.93 |
| Insulation Grade | F | F | F | F | F |
| Housing Protection Grade | IP 21 S | IP 21 S | IP 21 S | IP 21 S | IP 21 S |
| Net Weight (Kgs) | 9 | 19 | 25 | 36.5 | 60 |
| Dimensions (mm) | 375x153x232 | 480x204x303 | 515x263x372 | 560x370x350 | 670x337x617 |
| Recommended Air Pressure (Bar) | 4-5 | 4-5 | 4.5-5.5 | 4.5-5.5 | 4.5-5.5 |

Product Purchase Guide

| Base Material | Plate Thickness(mm) | Arcing Way | Current Range(A) | Applicable Model |
|--|---------------------|------------|------------------|------------------|
| Carbon steel, Stainless steel, Low-alloy steel | 1.0-10.0 | Contact | 20-40 | CUT40 |
| | 1.0-20.0 | Contact | 20-60 | CUT60 |
| | 1.0-30.0 | Transfer | 20-80 | CUT80G |
| | 1.0-40.0 | Transfer | 20-100 | CUT100I |
| | 1.0-50.0 | Transfer | 20-160 | CUT160 |

Standard accessories



5M plasma cutting torch



Earth clamp with 3M cable



3M gas hose



4 pcs hose clamp



Air regulator

Optional accessories



Cutting Goggle



FD-4

FEATURES:

- ➔ Operates on open-circuit and arc voltages
- ➔ Voltage-sensing control circuit with CC/CV switch
- ➔ Polarity insensitive
- ➔ High-torque, 24 VDC drive motor with two gear-driven drive rolls
- ➔ Solid-state speed control and brake circuit
- ➔ Overload protection
- ➔ Quick-change drive rolls and quick connect
- ➔ Insulated gun-holding bracket

Processes

-  Flux Cored (FCAW) Welding
(Gas and self-shielded)
-  MIG (GMAW) Welding

Heavy Industrial



(Use with CC/CV
DC Power Sources.)



FRONT VIEW



SIDE VIEW

| | |
|---------------------------------------|---|
| Input Voltage | Single Phase; 220 +/-10% VAC; 50/60Hz |
| Wire Feed Rate | 0-20m/min |
| Feeding Direction | FD4- Forward FD4 Super- Forward & Reverse. |
| Coil/ Spool size | S -15Kgs or B30Kgs |
| Torch | RB 61 GD , Air- cooled, 3m |
| Duty Cycle | 100% at 800Amps |
| Torch Neck | Bent Type |
| Polarity | Welding Torch - (+) Pole; Work Piece - (-) Pole. |
| Electrode Diameter Recommended | 1.6mm, 2.0mm, 2.4mm & 2.8mm |
| Roller Type | V- Knurling Type - 1 set (4nos); Hardened; 2 Fixed – 2 Movable |
| Gas Flow Rate (Allowable) | 20 Litres Per Minute |
| Dimensions | 350x 380x 750 |
| Weight (w/o spool) | 34Kgs |

WATER COOLER / RADIATOR



1
Phase

50
60
Hz

DC

CE

CCC

Introduction :

Adopted Italian Water Sealed, High-powered Stainless Steel Pump, With Our More Than Ten Years' Welding Experience, The Water Cooler Enjoy Superior Quality And Capability.

Features :

Stainless Steel (long Life For Torch) Pump, Corrosion Free.
No Priming Required, Quick Fill In & Drain Out Simple Maintenance 200mm Fan For The Big Radiator, No Water Leakage Guarantee.

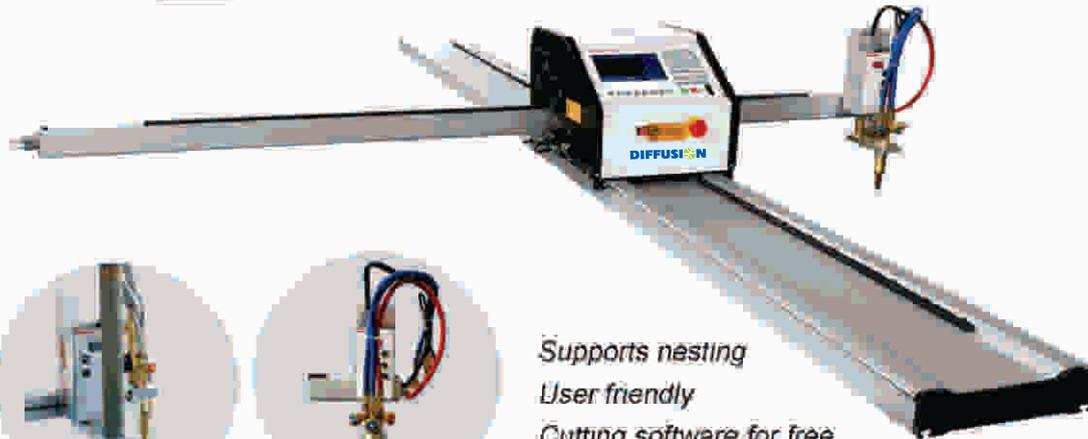
| | |
|--------------------------|----------------------|
| Model | Water Cooler 1901-X |
| Input Voltage | 1 Phase AC 220 ± 15% |
| Frequency (Hz) | 50 / 60 Hz |
| HP | 0.5 |
| KW | 0.37 |
| H Max | 30 Mtr. |
| Q Max | 8 Ltr. / Min. |
| Cooling Capacity | 1 Ltr. / Min. |
| Outlet Pressure | 0.3 Mpa |
| I Max | 3.1 Amp. |
| Housing Protection Grade | IP 21 S |
| Insulation Grade | F |
| Cooling Type | Air Cool |



ISO9001:2008
ISO14000



POWER-E



Plasma Cutting



Flame Cutting

*Supports nesting
User friendly
Cutting software for free
72h pre-delivery test
Professional customer service, 24h/7d !*

ECONOMICAL TYPE, STRENGTH KEEP!

| | |
|-------------------------|---|
| Input Power | 180W 110/220 V 60/50 Hz |
| Display | 7" Color LCD |
| Effective Cutting Range | X-Axis:1500 mm Y-Axis:3000 mm |
| Moving Speed | 0 – 4000 mm/min |
| Cutting Thickness | (Flame) 5 – 150 mm (Plasma) Depends on plasma power source |
| Total Machine Weight | 70.5 kg |
| Mode of Cutting | Flame or Plasma |
| Combustive Gas | Oxygen |
| Combustive Gas Pressure | Max 1.5 Mpa |
| Cutting Speed | 0 – 600 mm/min (Flame) 0-3000 mm/min (Plasma) |
| Cutting Software | Fast CAM Standard Version |
| Arc voltage sensing THC | Optional |

PORTABLE CNC PROFILING MACHINE



Reliable, 10 years best-selling machine! — Economical version of POWER

Easy for maintenance

Separated from engine
Lightweight and easy to
move
Maintenance friendly
components



High quality components and external ports

Sturdy and reliable frame
Superior hydraulic quality
with
other parts that perform
extremely well to finish
products





High quality built-in THC system (optional)

For precision cutting
Steady motion control Z-axis
Precision temperature system
Automatic temperature compensation



Cross beam anti-dive

Cutting Head
Does Not Decline



Powerful CNC Controller



SteelTailor portable controller is a powerful CNC controller with many new features

- Built-in library of commonly used figures
- Break-point & power-cut restoration
- ➔ Returning to reference point
- ➔ Keel compensation
- Revoiving
- ➔ Mirror image

PC



Memory Key





Compared to similar products

POWER-E Quality

||

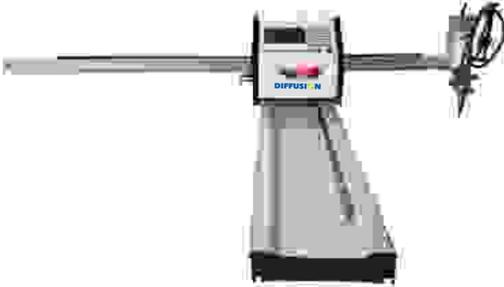
Better components + Strict standard + 100% Manual inspection

▼

Long service time + High capacity + High precision

▼

Reliability





Note : The above picture is for reference only and not the machine being offered.

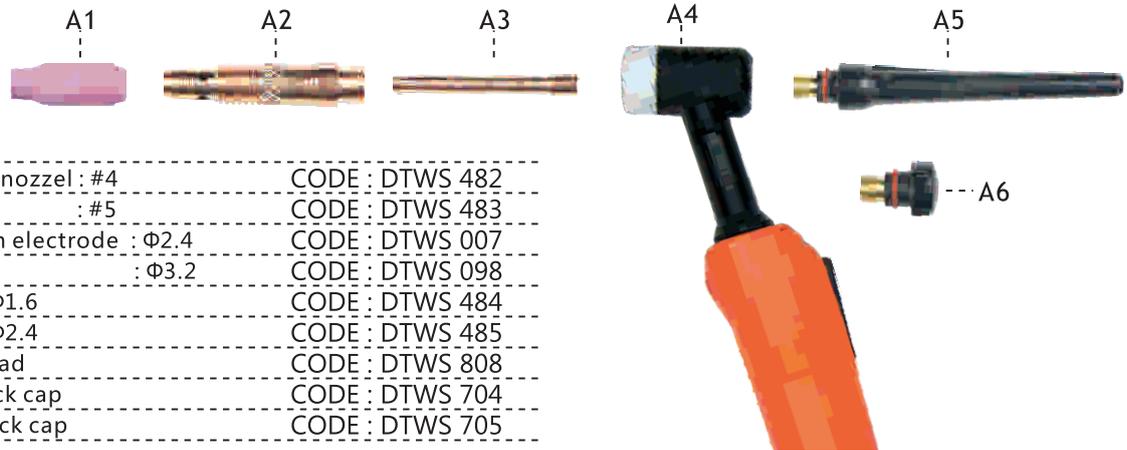
■ Configuration:

| Items | Description |
|--|--|
| Controller: | FL2300 Integrated THC |
| Servo Drive | Panasonic servo motor |
| Plasma THC Mode | Controller integrated THC |
| Oxy-fuel THC Mode | Oxy-fuel torch automatically lifting (optional capacitance oxy-fuel THC) |
| Longitudinal and Transverse Positioning | Guide rail, rack, pinion, towline |
| Length of Guide Rail | 2m is one unit |
| Longitudinal/Transverse Channel / Cable Transmission | Towline |
| Plasma Torch Holder | Standard: 1 set |
| Software | FastCAM professional version(Standard) / Libellula(Optional) |
| H-beam, towline and towline groove | Optional |
| Drilling function: | Optional |

■ Technical Parameters

| Items | Description: |
|---|---|
| Power Supply | Single phase AC220 V/110V 50/60 Hz 2KW |
| Effective Cutting Width (transverse) | 3000mm |
| Effective Cutting Length (longitudinal) | 3000 mm to 19000 mm (rail 2m) |
| Maximum Dry Speed | 12000mm/min |
| Torch Lifting Distance | 200mm |
| Machine Height | 1560mm |
| Machine Length | Effective cutting length +2000mm |
| Machine Width | 4500mm |
| Positioning accuracy | ±0.5mm |
| Repeatability | ±0.2mm |
| Cutting Thickness | Oxy-fuel (piercing cutting): 5-80mm Plasma Depend on plasma power source |
| Longitudinal Driving Method | Dual Drive |
| Types of Cutting Material | Carbon steel/ stainless steel / aluminum |

TIG/FD4 TORCH CONSUMABLE



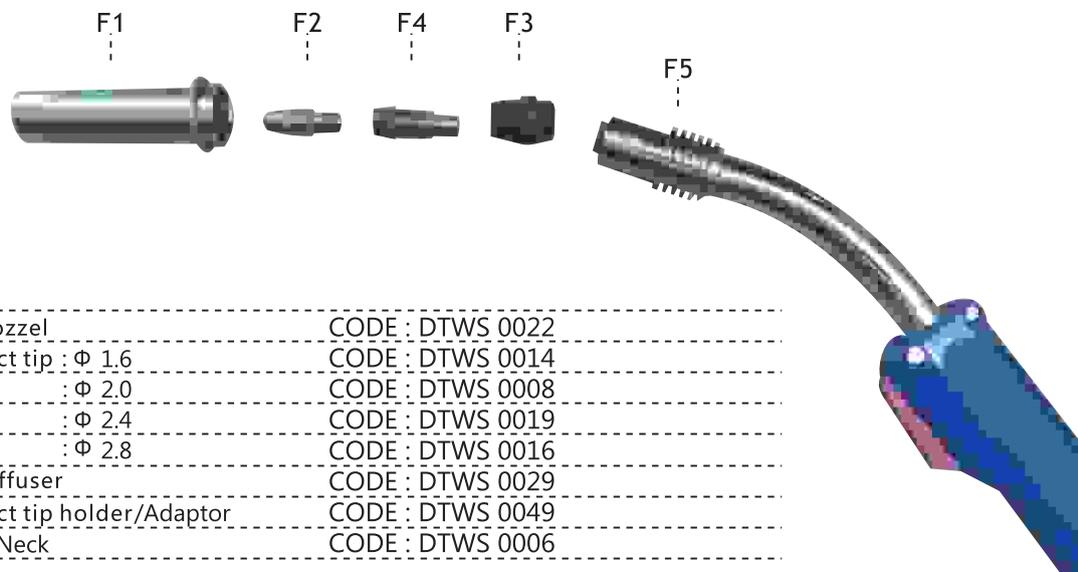
| | | |
|----|---------------------------------|-----------------|
| A1 | Ceramic nozzle : #4 | CODE : DTWS 482 |
| | : #5 | CODE : DTWS 483 |
| A2 | Tungsten electrode : $\Phi 2.4$ | CODE : DTWS 007 |
| | : $\Phi 3.2$ | CODE : DTWS 098 |
| A3 | Collet : $\Phi 1.6$ | CODE : DTWS 484 |
| | : $\Phi 2.4$ | CODE : DTWS 485 |
| A4 | Torch head | CODE : DTWS 808 |
| A5 | Long back cap | CODE : DTWS 704 |
| A6 | Short back cap | CODE : DTWS 705 |

DW 200 TM
WP-17 TIG Torch

DW 315 P
WP-26 TIG Torch

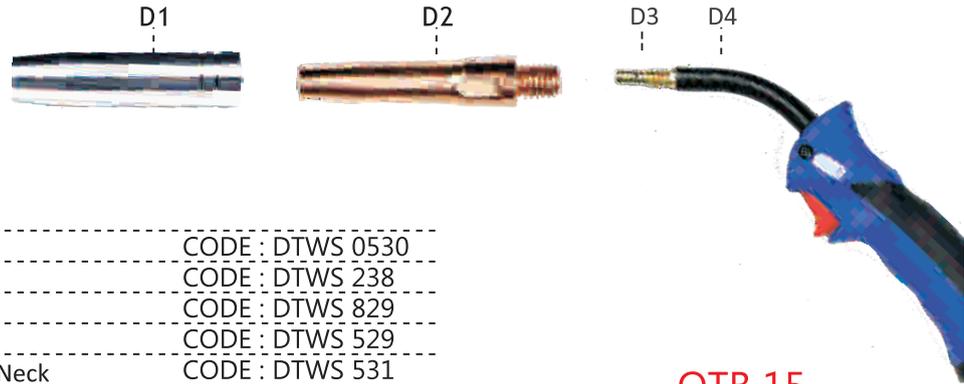
DW 400 TM
WP-18 TIG Torch

FD4 Torch



| | | |
|----|----------------------------|------------------|
| F1 | Gas nozzle | CODE : DTWS 0022 |
| F2 | Contact tip : $\Phi 1.6$ | CODE : DTWS 0014 |
| | : $\Phi 2.0$ | CODE : DTWS 0008 |
| | : $\Phi 2.4$ | CODE : DTWS 0019 |
| | : $\Phi 2.8$ | CODE : DTWS 0016 |
| F3 | Gas diffuser | CODE : DTWS 0029 |
| F4 | Contact tip holder/Adaptor | CODE : DTWS 0049 |
| F5 | Swan Neck | CODE : DTWS 0006 |

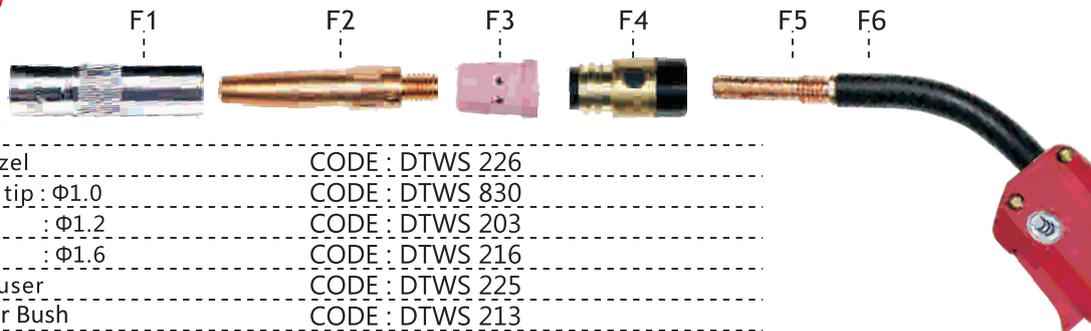
DW 250 / 300



| | | |
|----|--------------------------|------------------|
| D1 | Gas nozzle | CODE : DTWS 0530 |
| D2 | Contact tip : $\Phi 0.8$ | CODE : DTWS 238 |
| | : $\Phi 1.0$ | CODE : DTWS 829 |
| D3 | Contact tip holder | CODE : DTWS 529 |
| D4 | Torch head / Swan Neck | CODE : DTWS 531 |

QTB 15

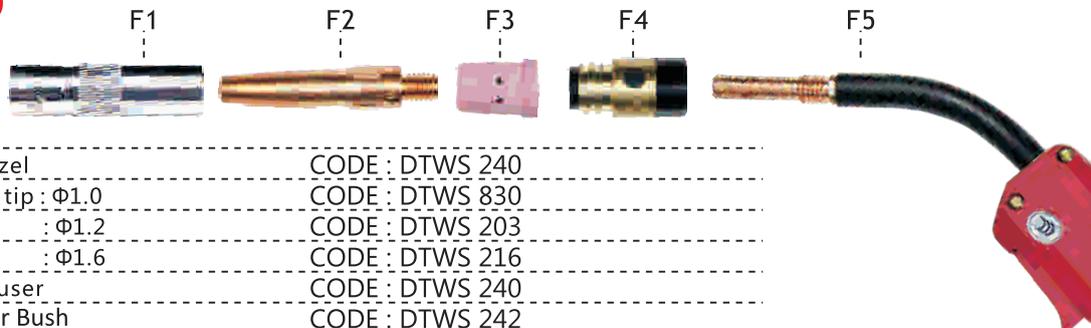
DW 350 / 400



| | | |
|----|--------------------------|-----------------|
| F1 | Gas nozzle | CODE : DTWS 226 |
| F2 | Contact tip : $\Phi 1.0$ | CODE : DTWS 830 |
| | : $\Phi 1.2$ | CODE : DTWS 203 |
| | : $\Phi 1.6$ | CODE : DTWS 216 |
| F3 | Gas diffuser | CODE : DTWS 225 |
| F4 | Insulator Bush | CODE : DTWS 213 |
| F5 | Contact tip holder | CODE : DTWS 239 |
| F6 | Torch head / Swan Neck | CODE : DTWS 227 |

QTB 350 / 400

DW 500 / 630



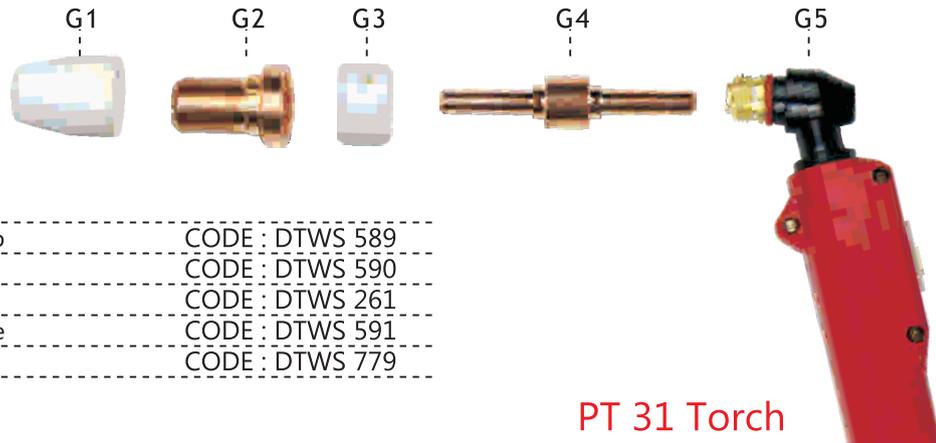
| | | |
|----|--------------------------|-----------------|
| F1 | Gas nozzle | CODE : DTWS 240 |
| F2 | Contact tip : $\Phi 1.0$ | CODE : DTWS 830 |
| | : $\Phi 1.2$ | CODE : DTWS 203 |
| | : $\Phi 1.6$ | CODE : DTWS 216 |
| F3 | Gas diffuser | CODE : DTWS 240 |
| F4 | Insulator Bush | CODE : DTWS 242 |
| F5 | Contact tip holder | CODE : DTWS 204 |
| F6 | Torch head / Swan Neck | CODE : DTWS 214 |

QTB 500



PLASMA TORCH CONSUMABLE

DW CUT 40



| | | |
|----|--------------------|-----------------|
| G1 | Ceramic shield cup | CODE : DTWS 589 |
| G2 | Tip/Nozzle | CODE : DTWS 590 |
| G3 | Gas diffuser | CODE : DTWS 261 |
| G4 | Electrode/Cathode | CODE : DTWS 591 |
| G5 | Torch head | CODE : DTWS 779 |

PT 31 Torch

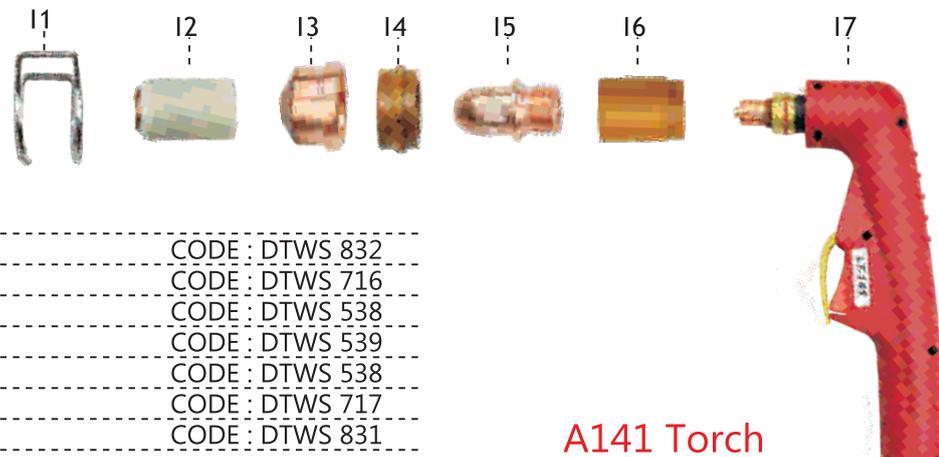
DW CUT 60/80/100



| | | |
|----|--------------------|-----------------|
| H1 | Ceramic shield cup | CODE : DTWS 220 |
| H2 | Tip/Nozzle | CODE : DTWS 221 |
| H3 | Electrode/Cathode | CODE : DTWS 222 |
| H4 | Torch head | CODE : DTWS 223 |

P80 Torch

DW CUT 160



| | | |
|----|-------------------|-----------------|
| I1 | Stand off guide | CODE : DTWS 832 |
| I2 | Outside nozzle | CODE : DTWS 716 |
| I3 | Tip/Nozzle | CODE : DTWS 538 |
| I4 | Air diffuser | CODE : DTWS 539 |
| I5 | Electrode/Cathode | CODE : DTWS 538 |
| I6 | Start cartridge | CODE : DTWS 717 |
| I7 | Torch head | CODE : DTWS 831 |

A141 Torch





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Carmarthenshire, UK SA 183 6Y

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