Auckland: (09) 2717 234
Christchurch: (03) 741 6241

sales@machineryhouse.co.nz
www.machineryhouse.co.nz

Product Brochure For W1724

MIG/TIG/STICK - ENVY MULTI 250 AC/DC Welder

U11238

Ex GST	Inc GST
$4,400.00	$5,060.00



ORDER CODE:	W1724
MODEL:	ENVY MULTI 250 AC/DC
Type:	MIG / DC-TIG / STICK & Multifunction Welder
Part Number:	U11238
Voltage (V):	240
Recommended Plug Amperage (amp):	15
Welding Current Range - MIG (amp):	20 - 250
Welding Current Range - STICK (amp):	10 - 230
Welding Current Range - TIG (amp):	3 - 250
Duty Cycle (% @ amp):	20 @ 250 - MIG & 20 @ 250 - TIG
Wire Spool Size (kg):	5 & 15
Ferrous Wire Size - Range (mm):	0.6 - 1.2
Stainless Steel Wire Size - Range (mm):	~
Aluminium Wire Size - Range (mm):	~
MMA Rod Size (mm):	~
Wire Feeding Speed (m/min):	~
Recommended Generator (KVA):	12
Dimensions (mm):	810 x 280 x 520
Nett Weight (kg):	34.5

Description

Get superior performance on your worksite or in your workshop, the ENVY MULTI 250 AC/DC is capable of every kind of welding and filled with the latest revolutionary technologies.

Silicon Carbide Technology
The first of its kind, the new silicon carbide (SiC) MOSFET is the next-generation of semiconductor technology. Our new SiC MOSFET works to make the machine more reliable, with a superior arc performance and better weld quality compared to previous IGBT technology.

Not All Pulse Machines Are Equal
Less spatter. Lower heat. Smoother results. Streamline your welds with the single and double pulse functions.
Single Pulse A single pulse weld alternates between a peak and base current, which works to minimise the amount of heat input without compromising on any of the penetration. The addition of a base current and reduction in heat means it's perfect for softer materials like aluminium. Pulse welding is also done by spray transfer, eliminating spatter and cutting your post-weld clean-up time.
Double Pulse A double pulse weld alternates between a peak current and two base currents, reducing the heat input of the weld even further than single pulse, while still maintaining all of the benefits. Because of the faster freezing puddle, your double pulse welds come out looking just like a stack of dimes. You get the aesthetics of a TIG weld with all the speed of spray MIG.

MIG Smart-Set
Ready to weld with the press of a few buttons. Simply select your joint type, filler wire, gas mixture, and wire diameter, and the machine will choose the ideal settings. If it’s a little off, you can make manual adjustments to finetune every weld.

Ultimate TIG Welding
Weld every kind of metal. With the ability to run on an Alternating Current (AC) you’re able to weld aluminium as effortlessly as mild and stainless steels on a Direct Current (DC).

TIG Smart-Set
Starting a weld has never been faster with the class-leading synergic TIG. Choose your material, joint type, tungsten diameter, plate thickness, and gas mixture, and you’re off and running. If it’s not quite right, you can tweak the parameters to perfection.

Advanced TIG Programs
Independent Amplitude Control The independent amplitude lets you adjust the amperage in both the EP and EN parts of the AC cycle, letting you completely customise the amount of heat directed to the workpiece and the tungsten.
Speed Start Speed up the formation of the weld puddle by applying a synergic pulse program to the beginning of the weld. The initial pulse works to melt the joint edges faster, for quicker puddle formation compared to a standard arc start.
Steady Arc Steady Arc adjusts the welding current based on the arc voltage. When the voltage goes down, the amperage will go up, and vice versa, to give a consistent weld puddle, a sharper arc and a constant heat input. Weld speeds can be increased with no fluctuations in the weld current.

Auckland: (09) 2717 234
Christchurch: (03) 741 6241

sales@machineryhouse.co.nz
www.machineryhouse.co.nz

Product Brochure For W1724

TackPlus TackPlus is a tack welding program used to create evenly spaced and sized fusion tack welds along a joint with minimal heat input. Cap Shaping Get the perfect tungsten shape for your aluminium welds every time with just the click of the trigger. Turn the cap shaping feature on, press the torch trigger, and the machine will prep the optimal tungsten shape for your aluminium welds.

AC & DC Waveforms
Customise your waveform in both DC and AC weld modes. Choose from your preferred welding waveform or use a combination of two to adjust the arc characteristics to suit your welding needs.

Auto Polarity
Easily swap between weld modes with auto polarity. Simply press the torch trigger, and the machine will swap to the selected mode.

Line Resistance Detection
Get consistent voltage control across varying cable lengths and setups, for improved arc stability, better weld quality, reduced defects and less spatter with the integrated cable calibration.

Large Wire Spool Capacity
The machine fits both D200 and D300 wire spools, so you can put 15kg mild steel or 7kg aluminium spools in the machine.

Digital 4 Geared Wire Drive
Experience unparalleled accuracy with our Digital 4 Geared Wire Drive system. Designed to sustain a consistent arc in varying conditions and with different wire types, it ensures an accurate wire feed speed. With this system, achieving precision in every welding task is effortless.

Power Factor Correction (PFC)
Get the most out of your machine. The PFC maximises the electrical efficiency of the machine and automatically compensates for any voltage fluctuations, so you get more output power and the internal components last longer.

Smart Fan
Smart Fan diminishes noise, saves power, helps reduce energy costs, and minimises the number of contaminants being pulled through the machine.

Advanced MMA Features
Advanced MMA features are designed for improving weld quality and ease of use.
Pulse MMA Revolutionary pulse stick reduces spatter, improves heat control and makes for easier slag removal, as well as improves the speed and efficiency of vertical up welds without sacrificing any root fusion.
Arc Force The Arc Force feature helps to keep the arc stabilised throughout the weld, by increasing or decreasing the peak current to compensate for your arc length, preventing the arc from cutting out or the electrode from sticking.
Hot Start The adjustable hot start is designed to help with striking an arc. The hot start temporarily boosts the output current at the start, making striking an arc, even with difficult electrodes, much easier. You get smoother arc starts, improving the quality of your weld.
Anti-Stick The Anti Stick feature, which is always on, prevents your electrode from sticking to your workpiece. When the machine detects sticking, the current will drop significantly, so the electrode can be removed.

Additional Features
Job Memory The job memory function allows you to enter and store weld parameter settings. Weld parameters can be further adjusted and stored as required. A total of 100 jobs can be memorised and stored for recall.
Low Amp TIG With Stable Arc Maintain a stable arc even when TIG welding as low as 3A. The new and improved SiC MOSFET technology means you can hold a steady arc no matter how low your amperage.
Inductance Control Take complete control of your arc with the inductance settings. By changing the frequency of your short circuit MIG welds with the Inductance controls, you can choose your preferred arc characteristics on every weld.
Robotic Connection The robot connection lets you integrate a robotic arm into your workflow, which can improve the precision, consistency, and efficiency across welding tasks. It allows for automated, repeatable welds, reducing human error and improving productivity.
Generator Compatible Take it anywhere. Connect the machine to a generator and use it wherever, whenever you need it. We recommend 12kVA for this machine.
Mixed AC/DC Experience the best of both worlds. Mixed AC/DC combines the efficiency of AC and the penetration of DC- TIG in one weld. With it, you get faster welding speeds, better penetration, a faster weld puddle on cold workpieces, and you can weld on thicker materials.
Higher Pulse Frequency in AC & DC With a pulse frequency as high as 999 pulses per second in both AC and DC TIG, you can get as many pulses as you need for any scenario.
Burnback Adjustment Stop your wire from ever fusing with your weld or your contact tips again. Tune your burnback control to suit how much wire you want to remain sticking out from your torch when you finish a weld.
Dual Gas Inputs Set up for MIG and TIG at the same time. With dual gas inputs for both weld types, you won't need to swap your gas when you swap torches. The quick connect inputs also make replacing your gas bottle as simple as unplugging and plugging in.

Features

- First-of-its-kind, next-generation silicon carbide MOSFET technology
- Single and double pulse MIG programs & high-frequency AC & DC TIG
- MIG & TIG Smart-Set weld modes for complete synergic setups

Includes

- ENVY MULTI 250 AC/DC Welder
- 3m M350 Digital MIG Torch
- 4m T2 TIG Torch
- 4m Twist Lock Electrode Holder
- 4m 300 Amp Earth Clamp & Lead
- 2 x Dual Stage Argon Flowmeters
- 2 x 1.8m Quick-Connect Gas Hoses
- Operating Manual
- 4 x 0.8-0.9mm V Groove Roller
- 4 x 0.8-0.9mm F Groove Roller
- 4 x 1.0-1.2mm U Groove Roller

Optional Accessories

Auckland: (09) 2717 234
Christchurch: (03) 741 6241

sales@machineryhouse.co.nz
www.machineryhouse.co.nz

Product Brochure For W1724

- Ready for any kind of welding you've got planned, connect a complete range of MIG, TIG or MMA accessories to your welder.
- Separate Wire Feeder Get the ultimate flexibility. The addition of a separate wire feeder means you can detach the wire feeder from the main power source, giving you an extra 10m of manoeuvrability. Adding a SWF also allows you to run two wires from the machine at the same time.
- T40 Welding Trolley Maximise your flexibility, portability, manoeuvrability with the T40 Welding Trolley.
- Water Cooler Maximise your TIG welding performance, especially at high amperages. When combined with the T3W Water-Cooled TIG Torch, which uses Bi-Flow™ Technology, you get greater performance from the TIG torch.
- Foot Pedal Enjoy greater control and precision with our optional foot control accessory. This handy feature allows you to easily adjust your TIG amperage on the fly, without interrupting your torch movement. Wireless and wired options available.
- Push-Pull Gun Achieve smooth and steady wire feeding, especially when using softer wires such as aluminium. With a 'Pull' motor built into the torch, the wire can be fed over a greater distance, granting you the freedom to move and manoeuvre with ease while MIG welding.

Specific Features



Front View



Left View



Kit

Recommended Accessories

W5011

0.8mm Unimig M350/M580W Style Contact Tips - Steel



W5012

0.9mm Unimig M350/M580W Style Contact Tips - Steel



W5013

1.0mm Unimig M350/M580W Style Contact Tips - Steel



W5013A

1.0mm Unimig M350/M580W Style Contact Tips - Aluminium



Auckland: (09) 2717 234
Christchurch: (03) 741 6241

sales@machineryhouse.co.nz
www.machineryhouse.co.nz

Product Brochure For W1724

W5014
1.2mm Unimig M350/M580W Style Contact Tips - Steel



W5014A
1.2mm Unimig M350/M580W Style Contact Tips - Aluminium



W5015
Unimig M350 Style Conical Insulated Gas Nozzles



W5017
Unimig M350 Style Tip Adapter



W501A
M350 MIG Torch Consumables Starter Kit



W1140FA
Elbor 5356 Aluminium Mig Wire 2kg



W1140LA
Elbor 5356 Aluminium Mig Wire 7kg



W241
Universal Welder Trolley



W2415
TRI-CART Multi-Machine Welding Trolley



W10362
Magnetic MIG Torch Rest



W1140D
Argon Gas Regulator-Twin Gauge



W001
Auto Darken Welding Helmet - 9~13 Shade



Auckland: (09) 2717 234
Christchurch: (03) 741 6241

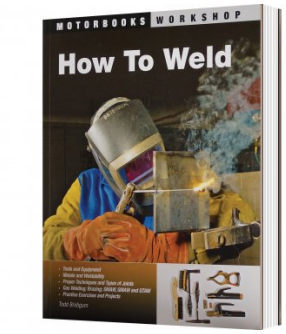
sales@machineryhouse.co.nz
www.machineryhouse.co.nz

Product Brochure For W1724

W100
ROGUE™ Heavy Duty Welding Gloves - 400mm



L3456
How to Weld Book



W08450
FIXTURE TABLE



W08500
40pc Square & Round Welding Table Clamp Kit



W08510
Weld Clamps with Locking Nuts (2 Piece Pack)



C103
228mm Muliti-Purpose Locking Clamp



W08512
Weld Clamps with Locking Nuts (2 Piece Pack)



W08515
38mm x M12 Multi-Purpose Riser/Stops (Spigot Type) - 4pc Pack



V099
90 degree Angle Vice Clamp



V100
90 degree Angle Vice Clamp

