OXFORD MULTIMIG CS Inverter welding power source

Oxford Welding machines have been for made in the UK for over 60 years. They are known for simple rugged build, high reliability, long life span & excellent welding performance. We take pride in hand building every machine using the best quality components. Our OXFORD MULTIMIG Inverter range are built exactly the same way. These models provide welding performance on another level & offer you more than most similar products on the market today.

MULTIMIG CS - one power source does everything!

Compact MIG + MMA + TIG Add 4X MIG wire feeder = SWF MIG + MMA + TIG



MULTIMIG CS inverter models are industrial machines, simple to use, rugged, reliable & offer better welding performance than older transformer MIG machines. Faster welding with less down time, less cleaning up & lower power consumption. Steel, stainless, Duplex, hardox, aluminium & alloys, whatever metal you weld these are a real joy to use!

Key features

- ✓ **One power source for compact or SWF MIG with true CC/CV multiprocess capability.**
- ✓ **Ready to plug in our OXFORD 4X wire feeder to make into a separate wire feed machine.**
- ✓ **Use with the 4X feeder allows set up of 2 diferent wires such as ALU in power source & steel on feeder.**
- ✓ **Ready to plug in our OXFORD spool guns for even better aluminium welding.**
- ✓ **Ready to plug in a TIG torch with switch & gas control with adjustable post flow.**
- ✓ **Infinitely variable weld power from 20A to max power with precision to 1A & 0.1V.**
- ✓ **Digital display show set values prior to welding & precise values when welding.**
- ✓ **Super smooth low spatter MIG welding with perfect welds & instant arc starts without popping.**
- ✓ **Unique ARC TUNE control allows operator full control over welding characteristics from CV through to CC.**
- ✓ **Unique ARC TUNE control - variable inductance - fine tune the arc precisely, dial out that spatter etc.**
- ✓ **Reversible polarity, 2T/4T function, adjustable burnback, adjustable gas post flow (ideal for TIG).**
- ✓ **Auto compensation for extension cables up to 100M & unstable or poor mains input supply.**
- ✓ **Generator friendly with built in protection from over & under voltage, over temp, over current, etc.**
- ✓ **High efficiency design & 12-20W standy power reduces running costs & helps the environment.**
- ✓ **High duty cycles to keep you welding all day long.**
- ✓ **Rugged power source case design with galvanised chassis & front panel bash protection.**
- ✓ **Cooling chamber keeps any dirty airflow away from electronic parts.**
- ✓ **Low weight & compact size for better portability.**
- ✓ **Genuinely Industrial machines built to work hard for 25+ years.**

UK CA CE RoHS COMPLIANT ECO DESIGN compliant Low energy design Compliance to BS IEC60974-1 2021, EU 2019/1784

PTO for more information.

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There are many models of inverter on the market today from Chinese imports to well made EU or US machines. EU/US made machines generally perform better & are more reliable with a longer life. However, the desire to cram more and more into smaller spaces with over complex circuitry often makes these difficult & prohibitively expensive to repair. Many of the lower cost imports are simpler in construction but have a short life, particularly in harsh environments. Some are plagued by unreliability & quickly end up scrapped. Welding machines may be used hard every day, but some customers may use occasionally. Little used machines often suffer more, possibly due to damp build up etc. There is nothing worse than buying a machine, using it for a few days or weeks over 2 or 3 years then finding its failed & you have an expensive repair or must buy again.

For the last 30+ years our Electronic Engineers have repaired almost every fault going on all makes & models, Esab, Miller, Lincoln, EWM, Lorch, Migatronic, CEA, Cebora, GYS, Fronius, Stel, Kemppi, Jasic, OTC, Panasonic etc.

Welding equipment is never used in perfect conditions, damp & dirty workshops are the norm! This alone causes many of the problems. We have seen almost every fault possible; we know what works well & lasts well.

We have applied that expertise into these models to give you something different from competitors products.

Firstly, we keep things simple. No microprocessor or over complex circuitry is fitted. A cooling chamber is used to prevent ingress of debris to the electronic components. We don't parallel 20 or 30 transistors we fit only 2 IGBT modules – **minimum parts & maximum reliability!**

We make everything we can 'in house' including inverter transformers, coils & PCBs, we even draw our own copper litz wire.

From a serviceability point our inverter machines are simple, no need for an Electronic degree! We include diagnostic LEDs & test points, all OXFORD machines can be maintained by any competent Technician anywhere in the world.

MULTIMIG models are actually simpler to use than an old style MIG, with just one knob to set the welding power & another to set wire speed. A stable digital display is fitted which shows set welding power prior to welding, with exact values shown during welding.

Despite the simplicity we have included features to give you superb welding characteristics, with low spatter, instant arc starting (no popping or delays) & full control over the output inductance & arc characteristics. 4 roll drive wire feed on all models ensures consistent hour after hour reliable welding.

In addition, all offer superb MMA electrode welding & lift TIG DC (with full switched control), also torch polarity can be swapped in seconds.

From a mechanical point MULTIMIG models have a tough galvanised chassis & front panel bash protection. Apart from handles & wheels almost no plastic is used in these machines. Protection class is to IP23, these can be used outdoors with basic protection from bad weather.

Basic specs Oxford MULTIMIG *CS models*

Model	Input Voltage	MIG amps range	Duty cycle @40C - MIG	Rec fuse (D type)	Efficiency & idle power	OCV – no load	Welding wire sizes	Weight approx.
CS271	230V 1 ph	20-270A	270A@35%, 205A@60%	16/25A	84%, 12W	70V DC	0.6-1.0mm	48kg
CS331	230V 1ph	20-330A	330A@40%, 260A@60%	25/32A	84%, 16W	70V DC	0.6-1.2mm	52kg
CS411	230V 1ph	20-410A	410A@45%, 355A@60%	32/45A	84%, 16W	72V DC	0.6-1.2mm	55kg
CS273	400V 3ph	20-270A	270A@35%, 205A@60%	16A	85%, 16W	70V DC	0.6-1.0mm	47kg
CS333	400V 3ph	20-330A	330A@40%, 260A@60%	16A	85%, 16W	70V DC	0.6-1.2mm	51kg
CS413	400V 3ph	20-410A	410A@45%, 355A@60%	16/25A	86%, 20W	72V DC	0.6-1.2mm	54kg
CS513	400V 3ph	30-510A	510A@45%, 450A@60%	25/32A	86%, 20W	72V DC	0.6-1.6mm	60kg

Power source case size 330Wx550Hx620L, with wheels & gas bottle tray fitted overall 460Wx650Hx840L (680H for 411/413 & 513).
Output amps range on MMA & TIG is the same as MIG, MMA duty cycle is reduced by 2% for the 513 up to 6% on the 271/273.
Compliance with BS IEC60974-1, WEE/HD0071UZ, EU2019/1784.

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MULTIMIG 4X wire feeder - a rugged, ultra-compact feeder built on a tough steel chassis.

4 roll all geared drive for precise feeding of welding wire, fitted with a wire spool cover as standard.
Like our earlier Oxford wire feeders, no electronics or controls are fitted in the 4X feeder – min parts & max reliability.



Just select an interconnecting cable 5M-20M & plug in wire feeder in less than 2 minutes.
Feeder case size 180Wx230Hx420L + extra height for feet + carry handle + extra at rear for wire spool cover, weight 9.8kg.

Options available at time of order.

Water cooling – built in design with torch flow protection. Low noise design, pump only runs as needed with adjustable post run time & option to switch off water cooling.	Internal wire feed system <u>not</u> fitted into CS power source. For use only with the 4X wire feeder – results in 5% reduction in power source price.	Longer mains input cable	Extra functions on request.

Accessories available to plug in or upgrade at any time after purchase.

MULTIMIG 4X wire feeder fitted with wire spool cover.	Interconnection cables up to 20M to connect power source to 4X feeder	Wire feeder swivel kit, includes all parts to fit power source & feeder.	Wire feeder overhead boom hanging kit (insulated).
Spool on gun torches – Plug directly into front socket.	TIG torches, air cooled or water cooled with full switched control.	MIG welding torches up to 5M.	MMA electrode leads.

Investing in an Oxford welder has been your guarantee of a quality product with the best back up.
Our long term back up is the best in the industry. 3 year warranty all items, 5 year main transformer warranty (the heart of the machine), 20 year <u>minimum</u> guarantee of spares availability.

Further info at www.oxfordwelders.co.uk