



# Oxford Cutmaker plasma range

**230V single phase, dual voltage & 400V three phase to cut up to 36mm**

The Oxford Cutmaker range of plasma cutters are different from all other machines on the market today! We have listened to our customers & designed these machines to be more versatile, so as well as offering the very best cutting performance we have incorporated thermal heating & thermal gouging functions.

- Exceptional cutting quality & performance.
- Thermal heating setting to replace gas bottles.
- Thermal gouging setting to remove metal quickly.
- Bullet proof design built to last 25+ years.



Like all Oxford machines, these are designed & manufactured here in Great Britain. With a history dating back over 50 years, Oxford machines are known around the world for simple rugged build, high reliability with a long life span and excellent performance.

At the heart of every Oxford is a substantial copper wound transformer. Unlike most plasma products on the market today these machines are not inverter based, instead our unique transformer + rectifier + PWM, design gives unbeatable performance & also guarantees that you have a rugged machine which will last for years in even the harshest of conditions. In addition these machines are generator friendly, they will work on long extension leads & even an unstable electric supply will not cause problems.

- Superior cut quality means straight clean cuts ready to weld without dressing & with minimal heat affected zone.
- Cuts steel, stainless steel, Hardox, boron steel, aluminium & alloys, copper, brass, painted metals, rusty metals, mesh etc.
- Cut from tin foil right up to 31mm metal on single phase models & 36mm on three phase (severance cut).
- Infinitely variable power so you can always set output to the optimum for the material.
- Thermal heating function allows the user to apply heat only, ideal for replacing gas bottles to remove rusted nuts, bearings etc.
- Thermal gouging function for removing metal without cutting through, remove welds, brackets, fastenings etc.
- Long life torch consumables & importantly, lower cost consumables compared with other leading makes.
- Class leading air consumption, up to 50% less than our competitors, 100L/min (3.5CFM) so only a small compressor needed.
- Air filter & regulator fitted to set the pressure & help trap moisture & pressure gauge displays setting.
- 6M (20 foot) cutting/gouging/heating torch supplied as standard, takes low cost consumables.
- Over 90% efficiency means the lowest power consumption possible so keeps your running costs to the minimum!
- Low fume technology means up to 50% reduction in fumes compared with our competitors.
- Non HF starting system means these are safe for use on vehicles & don't interfere with IT systems etc.
- Generator friendly design guarantees no damage even if the generator is unstable!
- Not affected by harsh environments like inverter based machines so guaranteed no blow ups!
- Built to comply with BS EN60974-1, BS EN60974-10, RoHS directive, weee directive & CE marked.
- Really rugged industrial design for the longest possible life span.

## Standard models & technical information

Models	CUTMAKER 350	CUTMAKER 550	CUTMAKER 550 dual	CUTMAKER 700
Input voltage/fuse	230V 1~ 16A (dual volt options)	230V 1~, 32A	230V/400V 32/20A	400/415V 3 ~ 16A
Max severance cut	20mm steel	31mm steel	31mm steel	36mm steel
Clean quality cut up to max	15mm	22mm steel	22mm steel	28mm steel
Pierce capacity max	9mm	14mm	14mm	16mm
Max cutting power output	5.0KW	7.7KW	7.7KW	10KW
Min generator for ¾ power	4KVA	6KVA	6KVA	8KVA
Recommended generator	5.5KVA	8KVA	8KVA	11KVA
Air pressure & flow rate	60-70 psi 3.0CFM	65-70 psi 3.5CFM	65-70 psi 3.5CFM	70 psi 3.5CFM
Duty cycle ½ power & below	100%	100%	100%	100%
Duty cycle at full power	40%	40%	40%	40%
Duty cycle thermal heating	50%	50%	50%	50%

**Note:** severance cut is the maximum thickness slow cut.  
**Note:** both the Cutmaker 350 & 550 models can be used on a 13A supply at reduced cutting capacity of about 10mm max.  
**Note:** Cutmaker 350 model is also available in dual voltage 110V/230V or dual voltage 230V/400V

**PTO for further information**



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## OXFORD Cutmaker additional information.

### Cutting function

Our Cutmaker models offer exceptional cutting performance on all metals. The cutting arc is more constricted than most other machines on the market today. This results in a very straight narrow cut & minimal dross. Even on thick material such as 20mm the cut will be very close to perfectly straight. Compared with using oxy-fuel (gas bottles) cut speed can be as much as 3 times as fast & gives a much cleaner finish, with far less distortion.

The infinitely variable output allows you to select the most suitable power for the material, for instance on thin materials you can turn the output right down to give a very fine cut & controlled cutting speed with superb near laser quality. Whilst on thick materials maximum power may be required to get the job done quickly. In addition if you need to cut through double skinned material it's possible to set the power so as to only cut through the top skin or turn it up & cut through both together!

The cutting torch is very compact, so ideal for getting into tight spaces. Its supplied as standard with drag consumables; this allows you to keep the torch in contact with the metal for easy use & makes following straight edges & templates easy.

The arc starts using only air (non HF) this means these are safe for use on vehicles & don't interfere with IT systems.

### Thermal heating function

This been developed to provide a fast source of direct heat mainly to assist with the removal of seized nuts, bearings & other items. This thermal heating function provides intense instant heat which far hotter than propane or butane torches produce. It's also a more direct & controllable heat so heats only the item you need heating & the cooling air keeps everything else at a low temperature. For instance when removing seized nuts propane torches tend to heat the nut & bolt, the cutmaker plasma will heat the nut & leave the bolt relatively cool, this allows the nut to be removed quicker.

In addition the thermal heating function can be used for some light preheating applications.

All the OXFORD Cutmaker models have the same thermal heating capacity & duty cycle which is 50% (5min on, 5min off etc).

The following are typical times to heat nuts to cherry red colour. M5 – 4 secs, M6 – 6 secs, M8 – 10 secs, M10 – 15 secs, M12 – 22 secs, M16 – 33 secs, M20 – 45 secs.

You will see this thermal heating function can replace expensive gas bottles for many applications!

### Thermal gouging function

Thermal gouging using plasma on most machines is too vicious & the arc has a tendency to cut into the metal rather than gouge metal. These OXFORD plasma models have a soft arc when gouging which is better for removing just the metal you need to remove. The process is fast & precise & the compact torch allows you to get into places where a grinder would not be possible.

### Additional technical information

Models	CUTMAKER 350	CUTMAKER 550	CUTMAKER 550 dual	CUTMAKER 700
Size approx.	350Wx550Lx570H	350Wx550Lx570H	350Wx550Lx570H	350Wx550Lx570H
Weight approx..	43kg	50kg	53kg	59kg
Max cut speed 6mm steel	1100mm/min	2200mm/min	2200mm/min	3100mm/min
Max cut speed 10mm steel	520mm/min	1100mm/min	1100mm/min	1550mm/min
Max cut speed 15mm steel	260mm/min	600mm/min	600mm/min	850mm/min
Max cut speed 20mm steel	100mm/min	290mm/min	290mm/min	550mm/min
Max cut speed 25mm steel	N/A	150mm/min	150mm/min	280mm/min
Performance on aluminium & stainless etc will vary a little from steel figures, aluminium is normally a little faster cutting & stainless steel & hardox around 15% lower cutting speed. Best quality cut speed is typically 15%-20% lower than maximum. Cutmaker 551 dual will connect to 230V or 400V (changeover under top cover).				

### Options available at time of order:

Dual voltage version of Cutmaker 350  
110/230 or 230/400V.

Quick connector system so torch can be removed in 30 seconds.

Longer mains input lead or earth lead.

### Optional cutting aids etc

Circle cutting kit with 3 attachments for cutting of round holes 100mm to 1300mm.

Straight line cutting carriage for easier linear cutting.

Fine cut consumables to give the most narrow cut possible on thin materials.

Longer cutting torches & torch extensions available.

Thermal heating & gouging spares.

### All Oxford Cutmaker models are supplied with the following as standard.

6M Trafimet hand torch suitable for all cutting, thermal gouging & thermal heating.

3M mains input lead & 3M work lead (earth).

Casters fitted under chassis for best workshop portability.

Torch cutting consumable kit, (tips & electrodes) to keep you cutting for some time.

### The Oxford unbeatable warranty & long term back up.

2 year main components warranty.

5 year main transformer warranty (the heart of the machine)

20 year minimum guarantee of spares availability.