

# PowerCut™ 1600

Powerful plasma cutting package for cutting up to 38mm material thicknesses

**For all types of heavy duty cutting and gouging within production, repair, maintenance and assembly. Use on all electrically conductive materials, e.g. mild steels, aluminium and “stainless steels”.**

**This rugged, easy to use, power efficient unit, offers excellent cutting, piercing and gouging properties. It can also be adapted for mechanization. Runs off your mains supply together with compressed air or Nitrogen.**

## Performance

- Blowback technology – eliminates high-frequency starts that can disrupt electronic controls and nearby computer systems
- Auto-modes (gouge, grate, and normal modes) switch between modes automatically, tailoring your application without manually changing settings on the power source
- Gouging capability – PowerCut™ delivers the extra output voltage needed for superior plasma gouging capability

## Long life & reliability

- Rugged design – PowerCut™ 's external housing design is durable, damage-resistant, corrosion-resistant and weather resistant, while remaining lightweight for portability
- Suspended electronics – sensitive internal electronics are suspended from the aluminium frame, insulating them from shock and vibration
- Sealed switches – silicone-sealed switches are immune to corrosion, as well as dust and dirt infiltration
- Automatic fan control – the cooling fan is automatically controlled to run only when necessary, to conserve energy and reduce ingested dust and dirt
- Built-in power line conditioner – protects against damage from power line noise and spikes, even with poor-quality power

## The PT-38 manual cutting torch

- Ergonomic handle for operator comfort
- Big face switch maximizes convenience when wearing welder's gloves.
- Blowback technology
- Easily repairable in the field
- Minimum part configurations
- Moulded strain relief for secure torch leads



## Easy to use

- Tool-less quick disconnect torch – disconnects from the machine without the use of wrenches or special tools. It is easy to disconnect the PT-38 torch for storage, repairs or replacement, or to attach a PT-37 mechanized torch for mechanized applications
- Digital readout display – easy to read and shows the exact pressure or amperage, so you can operate with confidence. The display also shows help codes to assist in troubleshooting minor errors, reducing downtime
- Trigger lock function permits releasing switch for long cuts.
- Torch wrap and wear parts kit holder – standard on all packages. The holder lets you neatly wind up torch and cables for convenient storage. Also gives easy access to the included wear part kit.

## Mechanization

- Plug-n-play optional kits – let you easily transform your manual cutting system into a powerful mechanized system for your gantry machine.

- **Powerful performance – PowerCut™ offers the highest speeds and thickness capabilities, as well as high duty cycle ratings, for outstanding productivity and performance**
- **Powerful economy – through a combination of long part life, high speeds and simple torch design, the PowerCut™ offers the lowest cost per cut meter of any machine in its price class**
- **Powerful durability – this robust cutting unit stands up to rugged treatment and outdoor use, plus cuts up to 38mm metal with ease**
- **Powerful ease of operation – with features such as the tool-less quick disconnect torch and a digital readout display, the PowerCut™ is easy to set up and operate, increasing productivity and reducing downtime**

## Technical data

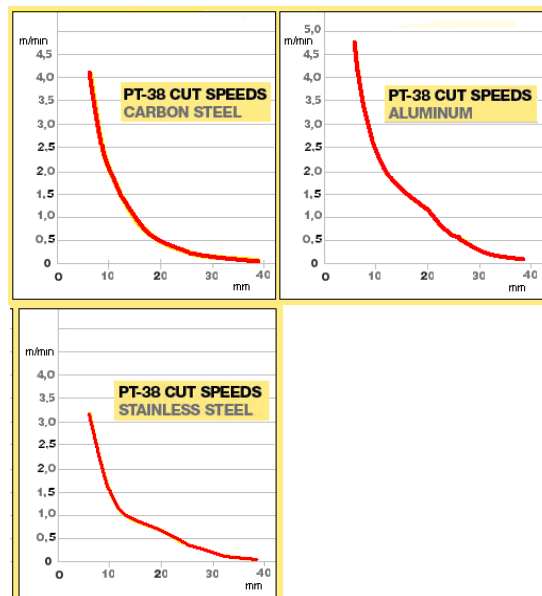
<b>Mains voltage, V/Ph Hz</b>	400, 3~ 50/60 +/- 10%
<b>Fuse (slow), A</b>	25
<b>Mains cable, Ø mm²</b>	4 x 6
<b>Permitted load at</b>	
60% duty cycle, A/V	90/115
100% duty cycle, A/V	70/115
<b>Power factor at maximum current</b>	0,72
<b>Efficiency at maximum current, %</b>	0,89
<b>Setting range, A</b>	20-90
<b>Open circuit voltage, V</b>	280
<b>Air requirements l/min / bars</b>	236 / 6.2
<b>Dimensions l x w x h, mm</b>	706 x 322 x 379
<b>Weight, kg</b>	41
<b>Enclosure class</b>	IP23S
<b>Standards</b>	IEC/EN 60974-1-10
<b>Operating temperature, °C</b>	-10 to +40
<b>Recommended generator power kW</b>	20

## Manual cut capacity

Cuts, mm/inch	38 / 1½
Severs, mm/inch	45 / 1¾

## Mechanized pierce capacity

Maximum, mm/inch	19 / ¾
------------------	--------



## Wear parts for torch PT-38



## Ordering information

Description	Item no
PowerCut™ 1600 400V CE (package with 7,6 m long PT-38 torch)	0558 007 235
PowerCut™ 1600 400V CE (separate power source without torch & wear part kit)	0558 007 234

## Optional accessories

90A PT-38 Wear Parts Kit CE	0558 007 640
Plasma Flow Measuring Kit	0558 000 739
Torch Guide Kit Deluxe max 106 cm Radius	0558 003 258
Torch Guide Kit Basic:	
44.5 to 71 cm Radius	0558 002 675
Heavy Duty Water Separator	0558 007 897
Trolley	0558 007 898
PT-38 Torch, 15.2 m / 50'	0558 006 787
Wear part kit PT-38, 90A, CE	0558 007 640

## Mechanization kits

CNC Cable interface 15.2m	0558 004 215
Plug N Play Mechanized kit	0558 007 885
Remote Hand Switch, 7,6m lead	0558 008 349
PT-37 Torch with rack 7.6m / 25'	0558 004 862
PT-37 Torch without rack 5.2m / 17'	0558 004 895
Torch Holder	0558 005 926



PowerCut™ 1600 package with optional cart



**ESAB AB**  
 Box 8004  
 SE-402 77 GÖTEBORG SWEDEN  
 Phone: +46 31 50 90 00 Fax: +46 31 22 04 49  
 E-mail: info@esab.se

[www.esab.com](http://www.esab.com)

ESAB is certified according to ISO 9001



The ESAB group is certified according to ISO 14001 & OHSAS 18001