PowerCut®
900/1300/1600
plasmarc® cutting packages.

The PowerCut plasma cutting package will take whatever you throw at it, and ask for more. Designed with ESAB Plasmarc technology, PowerCut machines are more powerful and durable than any other machine in their class. They also make plasma cutting easier and more economical – delivering reliability, high production, and a wide variety of performance features. With design features that simplify operation, reduce set-up time, and enhance consumable life, PowerCut packages let you spend less time troubleshooting and more time cutting. And with the addition of the PowerCut 900 to the family, the most rugged machines in the industry are more versatile and accessible than ever.

PowerCut Features:

- **Rugged design** – PowerCut’s external housing design is durable, damage-resistant, corrosion-resistant, and weather-resistant, while remaining lightweight for portability
- **Tool-less quick disconnect torch** – disconnects from the machine without the use of wrenches or special tools. Now you can easily disconnect your 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.
- **Input voltage selector switch** – conveniently located on the back of the machine, lets you easily change input voltage from 208–460 (1300 and 1600 models only)
- **Blowback technology** – eliminates high-frequency startups that can disrupt CNC 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 console
- **Suspended electronics** – sensitive internal electronics are suspended from the aluminum frame, insulating them from shock and vibration

PowerCut gives you:

- **Powerful performance** – PowerCut offers the highest speeds and thickness capabilities in its price class, 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 series offers the lowest cost per foot of cut of any machine in its price class
- **Powerful durability** – these robust cutters stand up to rugged treatment and outdoor use, plus cut up to 1-1/2 inch metal with ease
- **Powerful ease of operation** – with features such as the tool-less quick disconnect torch and a digital readout display, the PowerCut family is easy to set up and operate, increasing productivity and reducing downtime
Sealed switches – silicone-sealed switches are immune to corrosion, as well as dust and dirt infiltration

Gouging capability – PowerCut delivers the extra output voltage needed for superior plasma gouging capability

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

Torch wrap and spare parts kit holder – now standard on all packages, the holder lets you neatly fold up excess torch cables for convenient storage in your consumable box

Plug-n-play mechanized option – lets you easily transform your manual cutting system into a powerful mechanized system for your gantry machine

Optional five-year warranty – PowerCut packages come with a three-year warranty and an option to purchase an extended warranty for a total of five years
Tests show ESAB’s top-performing PowerCut plasma cutters drastically reduce operating costs.

While there are several factors that influence operating costs in plasma cutting, most people agree that replacement costs for torch wear parts play a major role. ESAB put operation costs to the test using the PowerCut, the newest machine in this outstanding line of plasma cutters. As shown in the chart below, ESAB’s PowerCut Plasmarc machine had less than half the consumable costs per foot cut than its closest competition.

The straight story.

Often, ESAB competitors only give you half the story, focusing on nozzle and electrode life. Sure, replacing these front-end wear parts contributes significantly to your operating costs. But other wear parts – such as heat shields, swirl rings, and retaining caps – also have to be replaced on a regular basis. Their cost and lifespan are also important factors in the overall expense of operating your plasma cutter.

Lower costs across the board.

With more than 40 years of experience producing manual plasma cutting systems, ESAB is unsurpassed when it comes to reducing operation costs. In addition to attractive pricing, plus nozzles and electrodes designed for longer life, ESAB offers simplified torch design that significantly reduces wear on other parts as well as the quantity of other parts that need replacing.

Altogether better.

Superior economy of operation is just one reason to choose an ESAB Plasmarc cutter. Superior durability, reliability, and performance also make ESAB’s complete line of PowerCut machines the best choice for all your manual plasma cutting needs.

Consumable Cost Per Foot of Cut

Machines tested had equivalent cutting capacities. Tests were performed on ½ inch carbon steel. Costs were based on list prices as of 11/1/2002.
PowerCut family line.

**PowerCut 900**
- **Manual cut capacity**
  - Cuts 7/8 in (22 mm)
  - Severs 1¼ in (32 mm)
- **Mechanized pierce capacity**
  - Maximum 1/2 in (13 mm)

**PowerCut 1300**
- **Manual cut capacity**
  - Cuts 1¼ in (32 mm)
  - Severs 1½ in (38 mm)
- **Mechanized pierce capacity**
  - Maximum 5/8 in (16 mm)

**PowerCut 1600**
- **Manual cut capacity**
  - Cuts 1½ in (38 mm)
  - Severs 1¾ in (44 mm)
- **Mechanized pierce capacity**
  - Maximum 3/4 in (19 mm)
PT-38 Assembly.

**Torch Features:**
- 100% duty cycle for enhanced productivity and continuous operation
- Machined torch body with 1\(\frac{1}{2}\) in (34.9 mm) metal handle
- Copper shield for optimum longevity

PT-37 Assembly.

**Torch Features:**
- Ergonomic handle for operator comfort
- Big face switch maximizes convenience when wearing welder’s gloves. New blowback technology
- Easily repairable in the field
- Minimum part configurations
- Molded strain relief for secure torch leads

Torch Features:
- Ergonomic handle for operator comfort
- Big face switch maximizes convenience when wearing welder’s gloves. New blowback technology
- Easily repairable in the field
- Minimum part configurations
- Molded strain relief for secure torch leads
# System Specifications

<table>
<thead>
<tr>
<th></th>
<th>PowerCut 900</th>
<th>PowerCut 1300</th>
<th>PowerCut 1600</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CUT</strong></td>
<td>7/8 in</td>
<td>1 ¼ in</td>
<td>1 ½ in</td>
</tr>
<tr>
<td><strong>SEVER</strong></td>
<td>1 ¼ in</td>
<td>1 ½ in</td>
<td>1 ½ in</td>
</tr>
<tr>
<td><strong>MECHANIZED PIERCE CAPACITY MAXIMUM</strong></td>
<td>1/2 in</td>
<td>5/8 in</td>
<td>3/4 in</td>
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<tr>
<td><strong>OUTPUT CURRENT</strong></td>
<td>60A</td>
<td>70A</td>
<td>90A</td>
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<tr>
<td><strong>INPUT VOLTAGE</strong></td>
<td>208V-230V 1,3ph</td>
<td>208V-460V 1,3ph</td>
<td>208V-460V 1,3ph</td>
</tr>
<tr>
<td></td>
<td>460V 3ph</td>
<td>575V 3ph</td>
<td>575V 3ph</td>
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<td></td>
<td>575V 3ph</td>
<td>575V 3ph</td>
<td>575V 3ph</td>
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<tr>
<td></td>
<td>400V 3ph</td>
<td>50/60 Hz CSA CE</td>
<td>50/60 Hz CSA CE</td>
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<tr>
<td><strong>INPUT CURRENT</strong></td>
<td>208V 1ph: 56</td>
<td>208V 1ph: 70</td>
<td>230V 1ph: 78</td>
</tr>
<tr>
<td></td>
<td>208V 3ph: 38</td>
<td>230V 1ph: 36</td>
<td>230V 3ph: 41</td>
</tr>
<tr>
<td></td>
<td>230V 1ph: 47</td>
<td>230V 3ph: 31</td>
<td>460V 3ph: 25</td>
</tr>
<tr>
<td></td>
<td>230V 3ph: 23</td>
<td>460V 3ph: 20</td>
<td>460V 3ph: 26</td>
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<td></td>
<td></td>
<td>400V 3ph: 18</td>
<td>575V 3ph: 11</td>
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<tr>
<td></td>
<td></td>
<td>575V 3ph: 14</td>
<td></td>
</tr>
<tr>
<td><strong>DUTY CYCLE</strong></td>
<td>60% @ 60A</td>
<td>60% @ 70A 1ph</td>
<td>40% @ 90A 1ph</td>
</tr>
<tr>
<td></td>
<td>100% @ 50A</td>
<td>100% @ 70A 3ph</td>
<td>60% @ 90A 3ph</td>
</tr>
<tr>
<td><strong>DIMENSIONS L X H X W</strong></td>
<td>25.3 in X 14.2 in X 12.3 in</td>
<td>27.8 in X 14.9 in X 12.7 in</td>
<td>27.8 in X 14.9 in X 12.7 in</td>
</tr>
<tr>
<td></td>
<td>643 mm X 361 mm X 312 mm</td>
<td>706 mm X 378 mm X 323 mm</td>
<td>706 mm X 378 mm X 323 mm</td>
</tr>
<tr>
<td><strong>WEIGHT</strong></td>
<td>71 lbs (32 kg)</td>
<td>90 lbs (41 kg)</td>
<td>90 lbs (41 kg)</td>
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<tr>
<td><strong>GAS SUPPLY</strong></td>
<td>Air or N₂</td>
<td>Air or N₂</td>
<td>Air or N₂</td>
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<tr>
<td><strong>FLOW RATE AND PRESSURE</strong></td>
<td>400cfh @ 80PSI</td>
<td>400cfh @ 80PSI</td>
<td>400cfh @ 80PSI</td>
</tr>
<tr>
<td><strong>TORCH LEAD LENGTHS</strong></td>
<td>25 ft (7.6 m) 50 ft (15.2 m)</td>
<td>25 ft (7.6 m) 50 ft (15.2 m)</td>
<td>25 ft (7.6 m) 50 ft (15.2 m)</td>
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<tr>
<td><strong>RECOMMENDED GENERATOR POWER</strong></td>
<td>1 ph 208V 11.6kw</td>
<td>1 ph 230V 13.8kw</td>
<td>1 ph 230V 18kw</td>
</tr>
<tr>
<td></td>
<td>3 ph 208V 10kw</td>
<td>3 ph 230V 12.4kw</td>
<td>3 ph 230V 16.3kw</td>
</tr>
<tr>
<td></td>
<td>1 ph 230V 9.1kw</td>
<td>3 ph 460V 16.5kw</td>
<td>3 ph 460V 20kw</td>
</tr>
</tbody>
</table>

Specifications subject to change without notice.

## Ordering Information

### PowerCut 900
- 208V-230V, 25 ft (7.6 mm) 0558008121
- 208V-230V, 50 ft (15.2 mm) 0558008122
- 460V, 25 ft (15.2 mm) 0558008128
- 460V, 50 ft (15.2 mm) 0558008129
- 575V, 25 ft (7.6 mm) 0558008132

### PowerCut 1300
- 208V-230V/460V, 25 ft (7.6 mm) 0558007221
- 208V-230V/460V, 50 ft (15.2 mm) 0558007222
- 575V, 25 ft (7.6 mm) 0558007228
- 575V, 50 ft (15.2 mm) 0558007229

### PowerCut 1600
- 208V-230V/460V, 25 ft (7.6 mm) 0558007231
- 208V-230V/460V, 50 ft (15.2 mm) 0558007232
- 575V, 25 ft (7.6 mm) 0558007238
- 575V, 50 ft (15.2 mm) 0558007239
The PowerCut cart (0558007898)
This convenient cart features large rear wheels to easily transport your PowerCut around the shop. Its tilted configuration allows for easy viewing of the front display. The cart also provides extra cable wraps for your ground clamp and input cable.

Heavy-duty water separator (0558007897)
The heavy-duty water separator protects your machine by filtering dirt and moisture from severely contaminated lines. The separator comes ready to install on the back of your PowerCut.

Remote hand switch (0558008349)
This convenient remote switch allows you to easily start and stop your cutting process in a mechanized application. This switch is for use only on non-CNC controlled cutting applications.

Plug-n-play mechanized kit (0558007885)
Connect your PowerCut machine directly to a CNC controlled cutting table for mechanized applications. This easy-to-use kit allows you to convert your manual system to a fully operable CNC cutting system.

Spare parts kit (60A – 0558008418, 70A – 0558007641, 90A – 0558007639)
Available for the PowerCut 900, 1300, and 1600, spare parts kits provide everything you need to keep your torch running. The package is less expensive than buying each part individually.

Torch guide kit (0558003258)
Cut circles and straight lines with ease with this handy torch guide kit.

Standoff guide and gouging consumables
(Several options available. Ask your representative.)
The standoff guide ensures a consistent standoff distance from the plate, especially when following a template or straight edge. Gouging consumables optimize performance for gouging.
Unrivaled service and support.

Every ESAB product is backed by our commitment to superior customer service and support. Our skilled customer service department is prepared to quickly answer any questions, address problems, and help with maintenance and upgrading of your machines. Our products are backed with the most comprehensive warranty in the business.

With ESAB, you can be sure that you purchased a machine that will meet your needs today and in the future. Product and process training is also available. Ask your ESAB sales representative or distributor for a complete ESAB solution.