

# Cutmaster® 60i

Highest power-to-weight ratio in its class



The Cutmaster® 60i with SL60QD™ 1Torch® is the perfect combination of end-user insight, advanced technology, and intelligent design. Packed with power and offering the highest power-to-weight ratio in its class, the Cutmaster 60i with SL60QD 1Torch® also has best in class cutting arc length and the most empowering and engaging user experience no matter the application. Cutmaster MechPak is also available for easy integration into semi-automatic cutting processes.

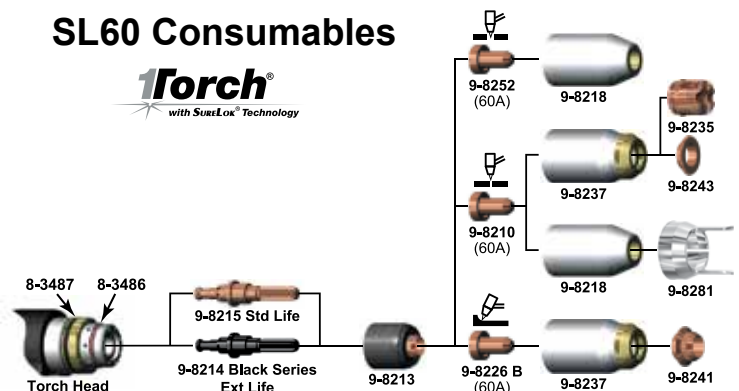
- Built for portability and durability with the integral multi-handle design, available in either a 1 phase or 3 phase unit
- 50% Duty Cycle at 60 A with automatic multi-voltage detection from 208-480 V
- Industrial SL60QD 1Torch quick disconnect with ATC® (Advanced Torch Connector) allowing selective replacement of either the torch handle assembly or the torch leads, using the patented SureLok® technology
- Up to 3/4 in. (20 mm) recommended cut capacity with maximum sever of 1-1/2 in. (38 mm) and 3/4 in. (20 mm) pierce capability
- High-visibility, oversized display with gas optimizer technology and consumables end-of-life indicator, makes setup and usage simple and productive
- Cutmaster Black Series electrode included for up to 60% longer life of consumable parts
- Industry leading 4-year warranty on power supply and 1-year warranty on torch

## Industry

- Agricultural Equipment
- Automotive Bodies
- Construction
- Fabrication
- General Manufacturing
- HVAC
- Repair and Maintenance
- Training Schools

Visit [esab.com/beast](http://esab.com/beast) for more information.

## SL60 Consumables



# Cutmaster® 60i

| Specifications                            |   |
|---|---|
| Amperage Output                           | 10 – 60 A, continuously adjustable  |
| Recommended Generator Size                | 15 kW (full output)   |
| Open Circuit Voltage (OCV)                | 300 V   |
| Input Voltage                             | 208 – 480 VAC +/- 10%, 50/60 Hz, 1 ph or 3 ph   |
| Rated Duty Cycle                          | 50% @ 60 A, 60% @ 50 A, 100% @ 40 A   |
| Amperage Draw                             | 43 A @ 208 V 1 ph / 26 A @ 208 V 3 ph<br>39 A @ 230 V 1 ph / 23 A @ 230 V 3 ph<br>19 A @ 480 V 1 ph / 11 A @ 480 V 3 ph |
| Input Power Cable and Plug                | 9 ft. (2.7 m) 1 ph 8 AWG 3/C with NEMA 6-50P plug<br>9 ft. (2.7 m) 3 ph 12 AWG 4/C cable without plug                   |
| Work Lead with Ground Clamp               | 20 ft. (6 m) #8 work cable with 50 mm connection  |
| Gas Requirements                          | Compressed air  |
| Operating Temperature Range               | 32 – 122° F (0° - 50° C)  |
| Operating Input Air Pressure Range        | 90 – 125 psi (6.2 – 8.6 bar)  |
| Air Flow Requirements (cutting & gouging) | 300 – 500 cfm (142 – 235 l/m)   |
| Recommended Cut                           | up to 3/4 in. (20 mm)   |
| Maximum Sever                             | 1-1/2 in. (38 mm)   |
| Pierce Rating                             | 3/4 in. (20 mm)   |
| SL60QD Torch Duty Cycle                   | 100% at 60 A @ 400 cfm air flow   |
| Torches – for use with the Cutmaster 60i  | SL60QD 1Torch (supplied)<br>SL60/SL100 1Torch<br>SL100 Mechanized 1Torch<br>SL100SLV Automated 1Torch                   |
| Dimensions L x W x H                      | 21.12 x 7.85 x 14.15 in. (536 x 199 x 359 mm)   |
| Weight                                    | 37 lbs (16.8 kg)  |

| Cutting Specifications |                          |
|------------------------|--------------------------|
| Plate Thickness        | Recommended Cut Speed    |
| 1/4 in. (6 mm)         | 80 in./min (2030 mm/min) |
| 1/2 in. (13 mm)        | 26 in./min (660 mm/min)  |
| 5/8 in. (16 mm)        | 19 in./min (480 mm/min)  |
| 3/4 in. (19 mm)        | 14 in./min (360 mm/min)  |
| 1 in. (25 mm)          | 6 in./min (150 mm/min)   |
| 1-1/4 in. (32 mm)      | 4 in./min (110 mm/min)   |
| 1-1/2 in. (38 mm)      | < 4 in./min (110 mm/min) |

| Ordering Information  |             |
|---|-------------|
| Description   | Part Number |
| Cutmaster 60i, 1 ph with SL60QD 1Torch 20 ft. (6.1 m) 75° Head  | 1-5630-1X   |
| Cutmaster 60i, 1 ph with SL60QD 1Torch 50 ft. (15.2 m) 75° Head | 1-5631-1X   |
| Cutmaster 60i, 1 ph Power Supply Only                           | 3-5630-1X   |
| Cutmaster 60i, 3 ph with SL60QD 1Torch 20 ft. (6.1 m) 75° Head  | 1-5630-2X   |
| Cutmaster 60i, 3 ph with SL60QD 1Torch 50 ft. (15.2 m) 75° Head | 1-5631-2X   |
| Cutmaster 60i, 3 ph Power Supply Only                           | 3-5630-2X   |

# Cutmaster® 60i

| <b>Torches</b>                                   |        |
|--|--------|
| SL60QD Torch and Lead 20 ft. (6.1 m) 75° Head    | 7-5620 |
| SL60QD Torch and Lead 50 ft. (15.2 m) 75° Head   | 7-5650 |
| SL60QD Torch Handle Assembly 75° Head (no leads) | 7-5681 |
| SL60QD Lead 20 ft. (6.1 m)                       | 4-5620 |
| SL60QD Lead 50 ft. (15.2 m)                      | 4-5650 |
| SL100 Mechanized Torch 5 ft. (1.5 m) 180° Body   | 7-5213 |
| SL100 Mechanized Torch 10 ft. (3.0 m) 180° Body  | 7-5214 |
| SL100 Mechanized Torch 25 ft. (7.6 m) 180° Body  | 7-5215 |
| SL100 Mechanized Torch 50 ft. (15.2 m) 180° Body | 7-5216 |

*Packages Include: Cutmaster 60i power supply, SL60QD 75° torch with lead, 20 ft. (6.1 m) work lead with ground clamp, spare parts kit, operating manual, and filter wrench. Cutmaster 60i is compatible with all 1Torch® ATC torch connections.*

| <b>Wear &amp; Spare Parts 1Torch</b>                        |                    |
|---|--------------------|
| <b>Description</b>  | <b>Part Number</b> |
| Cutmaster Black Series Extended Life Electrode              | 9-8214             |
| Start Cartridge   | 9-8213             |
| Standoff Guide  | 9-8281             |
| Shield Cup  | 9-8218             |
| Shield Cup Max Life   | 9-8237             |
| Shield Cap Gouging  | 9-8241             |
| Shield Cap (Drag only)                                      | 9-8235             |
| Shield Cap Deflector  | 9-8243             |
| Tip – Drag (60A)  | 9-8252             |
| Tip – Standoff (60A)  | 9-8210             |
| Tip – “A” Gouging, (40 A Max), Profile: Shallow/Narrow      | 9-8225             |
| Tip – “B” Gouging, (50 – 100 A), Profile: Deep/Narrow       | 9-8226             |
| Tip – “C” Gouging, (60 – 100 A), Profile: Moderate/Moderate | 9-8227             |
| Tip – “D” Gouging, (60 – 120 A), Profile: Shallow/Wide      | 9-8228             |

| <b>Options &amp; Accessories</b>               |                    |
|--|--------------------|
| <b>Description</b>                             | <b>Part Number</b> |
| Cutmaster Black Series Consumable Kit          | 5-0060             |
| Cutting Guide Kit (Deluxe)                     | 7-8910             |
| Circle Cutting Guide Kit                       | 7-3291             |
| Filter Wrench                                  | 9-9675             |
| Hand Pendant Extension 25 ft. (7.6 m)          | 7-7744             |
| Lead Extension, 15 ft. (4.6 m)                 | 7-7544             |
| Lead Extension, 25 ft. (7.6 m)                 | 7-7545             |
| Lead Extension, 50 ft. (15.2 m)                | 7-7552             |
| Leather Lead Covers 20 ft. (6.1 m)             | 9-1260             |
| Multi-Purpose Cart                             | 7-8888             |
| Radius/Roller Cutting Guide Kit                | 7-7501             |
| Remote Pendant Control 20 ft. (6.1 m)          | 7-3460             |
| Single Stage Air Filter Kit                    | 7-7507             |
| Straight Line Cutting Guide                    | 7-8911             |
| Two Stage Air Filter Kit                       | 9-9387             |
| Work Cable #8 with Ground Clamp and 50 mm Plug | 9-9692             |

# Cutmaster® 60i

## 1TORCH CONSUMABLES PARTS APPLICATION GUIDE

For SL60° / SL100° Manual Cutting and Gouging Operations.



**DRAG TIP CUTTING** The preferred method of cutting light gauge metal up to 1/4" (6 mm) thickness. Produces the best cut quality narrowest kerf width, fastest cutting speeds, and with little to no distortion. Traditional drag cutting was limited to 40 Amps or less; now with Thermal Dynamics TRUE Cut Drag Tip Series™ technology, it is possible to cut up to 60 Amps. For best results, use the Shield Cup with the torch tip in direct contact with the work (up to 60 Amps).



**DRAG SHIELD CUTTING** This is an operator-friendly method of cutting while maintaining a constant standoff distance. For metal thickness greater than 1/4" (6 mm), simply drag the shield cap in contact with the work piece. Use the shield cup body with the appropriate drag shield cap matching the current level being used. This method is not recommended for cutting light-gauge sheet metal.



**STANDOFF CUTTING** The preferred method of cutting metal thicker than 1/4" (6 mm) and at current levels above 60 Amps. Provides maximum visibility and accessibility. Shield cup for 'standoff' cutting (with the torch tip 1/8" (3 mm) to 1/4" (6 mm) from the work piece). Use the shield cup body together with the deflector for extended parts life and improved resistance to reflect heat. This combination provides cutting results similar to the single piece shield cup, as well as easy changeover to gouging or drag shield cutting.



**GOUGING** A simple method of metal removal by angling the torch to a lead angle of 35°-45°, and using a gouging tip. While maintaining a constant standoff distance, this allows for only a partial penetration into the work, thus removing metal from the surface. The amount of current, travel speed, standoff distance, lead angle, and tip size will determine the amount of material removed and the profile of the gouge. You can use the shield cup body with either the gouging shield cap or the shield deflector. Also, you can use the single piece shield cup.

| Gouging Profiles |              |          |          |
|------------------|--------------|----------|----------|
|                  | Output Range | Depth    | Width    |
| <b>Tip A</b><br> | 40A (MAX)    | Shallow  | Narrow   |
| <b>Tip B</b><br> | 50-100A      | Deep     | Narrow   |
| <b>Tip C</b><br> | 60-120A      | Moderate | Moderate |
| <b>Tip D</b><br> | 60-120A      | Shallow  | Wide     |

### Mechanized or Fully Automated Systems

To mechanize or fully automate your Cutmaster, Select a Mechanized 180 Deg Torch, Select an automatic interface kit, and Select a pinion assembly. It's as simple as 1, 2, 3.

#### Step#1: Mechanized 180 deg Torch Length

| Description                | Part Number |
|----------------------------|-------------|
| SL 180 Deg 25 ft (7.6 m)   | 7-4001      |
| SL 180 Deg 35 ft (10.7 m)  | 7-4002      |
| SL 180 Deg 50 ft (15.2 m)  | 7-4003      |
| SL 180 Deg 75 ft (22.9 m)  | 7-4004      |
| SL 180 Deg 100 ft (30.5 m) | 7-4005      |

#### Step#2: Automation Interface Kits

| Description  | Part Number |
|--|-------------|
| Automation Interface Kit for Cutmaster 52, 58, 82, 102 and 152 | 9-8311      |
| Automation Interface Kit for Cutmaster 60i                     | 9-8308      |

#### Step#3: Pinion Assembly

| Description                                | Part Number |
|--|-------------|
| Pinion Assembly 1.375 in. (35 mm) Diameter | 7-2827      |

### Semi-Mechanized Systems

For straight line cutting and gouging applications controlled with a simple start stop switch, ESAB's MechPak provides everything you need to allow precision setup and control for many semi-automated applications. The MechPak is compatible with all Cutmaster plasmas that contain the convenient ATC torch style quick connection.

#### Step#1: MechPaks

| Description                  | Part Number |
|------------------------------|-------------|
| MechPak, 25 ft. (7.6 m) Kit  | 7-7725      |
| MechPak, 50 ft. (15.2 m) Kit | 7-7750      |

#### Step#2: Optional Accessories

| Description                                | Part Number |
|--|-------------|
| VCM 201 Cutting Machine                    | 0252-0125   |
| 6 ft (1.8 m) Track                         | 0212-0005   |
| 9 ft (2.7 m) Track                         | 0212-0019   |
| 12 ft (3.7 m) Track                        | 0212-0018   |
| Pinion Assembly 1.375 in. (35 mm) Diameter | 7-2827      |



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