

Cutmaster® 60i

Highest power-to-weight ratio in its class



THERMAL DYNAMICS®

AN ESAB® BRAND



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

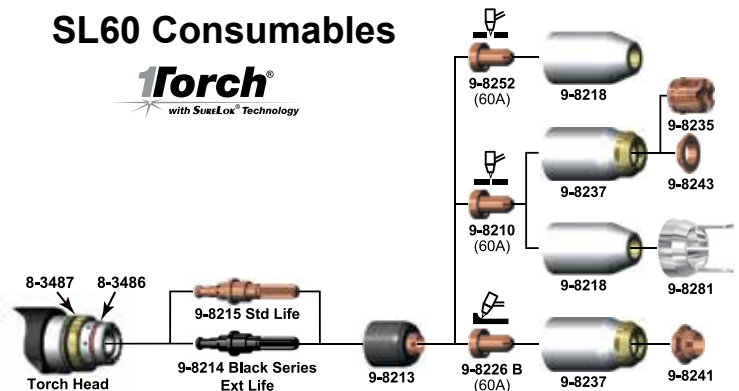


Industry

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

Visit esab.com/beast 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 39 A @ 230 V 1 ph / 23 A @ 230 V 3 ph 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 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) SL60/SL100 1Torch SL100 Mechanized 1Torch 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

Torches	
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.

Wear & Spare Parts 1Torch	
Description	Part Number
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

Options & Accessories	
Description	Part Number
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
Tip A 	40A (MAX)	Shallow	Narrow
Tip B 	50-100A	Deep	Narrow
Tip C 	60-120A	Moderate	Moderate
Tip D 	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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