Cutmaster® 50+
The total portable plasma cutting package

ESAB®

Icons: SL60 | 50 AMPS | 3 YR WARRANTY | 5/8" 16mm | 400 VOLTS (CE) | 3 PHASE

Cutmaster 50+ is the perfect combination of power and portability for hand-held plasma cutting machines. Plus means more, so we've added a user-friendly 10.9 cm (4.3 in.) TFT LCD screen and upgraded features that give you even more control and flexibility to master any pierce and cut up to 16 mm. Together with the SL60 1Torch, it all adds up to the total plasma cutting package.

Recommended pierce and cut capacity: 16 mm
Maximum edge cut capacity: Up to 32 mm*

(depending on material)

- Portable and durable with three handles and lightweight, industrial all-weather housing
- Bright 10.9 cm (4.3 in.) TFT LCD display with glove-friendly adjustment knob simplifies use and provides greater control and flexibility
- Input 400 V, 3-phase power
- Comes with industrial SL60 1Torch featuring 2T/4T function, safety trigger lock, and double-tap trigger to conserve bottled air
- Switch between normal and grate cutting modes
- Post-cut air purge to expand consumable life
- 60% duty cycle @ 50 A with cutting voltage 150 V
- Cutmaster Black Series consumables included for up to 60% longer life
- Industry leading 3-year warranty on power supply and 1-year warranty on torch and leads
- CNC functionality with pre-installed 14 pin CPC receptacle and voltage divider which allows:
  1. Start/Stop
  2. OK to Move
  3. Divided arc voltage
     (ratio 20:1, 30:1, 40:1, 50:1, 80:1)

Visit **esab.com** for more information.

Industry

- Industrial and General Fabrication
- Light Fabrication
- Industrial Production & Manufacturing
- Automotive Bodies
- Hobbyist
- Agricultural Equipment
- HVAC
- Repair and Maintenance
- Pipeline
- Training Schools

Simple and intuitive TFT LCD panel

Cutmaster® 50+

Specifications

Amperage Output	15 – 50 A, continuously adjustable
Recommended Generator Size	12 kW (or higher)
Recommended Cut and Pierce Capacity	Up to 16 mm
Maximum Edge Cut Capacity*	Up to 32 mm
Input Voltage	400 VAC +/- 10%, 50/60 Hz, 3ph
Rated Duty Cycle @ 40° C	60% @ 50 A with cutting voltage 150 V
Recommended Circuit Breaker Size *(at Maximum Cut Capacity)*	16 A
Amperage Draw *(at Maximum Cut Capacity)*	15.5 A
Input Power Cable	3 m, 12 AWG 4/C or 2.5mm² without plug
Work Lead with Ground Clamp	3 m, 10 mm² work cable with 25 mm² connection
Gas Requirements	Compressed air
Operating Temperature Range	-10° C to + 50° C
Compressed Air Pressure Requirement	6.2 – 8.6 bar (90 – 125 psi) (0.62 – 0.86 Mpa)
Compressed Air Flow Requirement	142 – 235 l/min (300-500 scfh)
SL60 Torch Duty Cycle	100% @ 60 A with 165 l/min (350 scfh) air flow
Torches – for use with Cutmaster 50+	SL60 1Torch (supplied)
Enclosure Class	IP23S
Certifications	CE, UKCA
Dimensions L x W x H	465 x 200 x 315 mm
Weight	16 kg

*depending on material.

Ordering Information

Description	Part Number
ESAB Cutmaster 50+ Package, 400 V 3 ph CE/UKCA *	0559150004
Torches	
SL60 1Torch and Lead 6.1 m (20 ft) 75° Head	7-5204
SL60 1Torch and Lead 15.2 m (50 ft) 75° Head	7-5205

*Cutmaster 50+ power supply, SL60 75° torch and lead 5 m , work lead with ground clamp 3 m, consumables kit, regional 1/4" air fitting.
Cutmaster 50+ is compatible with all Torch ATC torch connections.

Options & Accessories

Description	Part Number
Cutting Guide Kit	7-7501
Circle Cutting Guide Kit	7-3291
Straight Line Cutting Guide	7-8911
Yellow Leather Lead Cover, 7.6 m (25 ft)	0700009088
Black Leather Lead Cover, 7.6 m (25 ft)	0700009089
Multi-Purpose Cart	7-8888
Single Stage Air Filter Kit	7-7507
Two Stage Air Filter Kit	9-9387
Shoulder Strap	0445197880

Cutmaster® 50+

Wear & Spare Parts Torch	
Description	**Part Number**
Electrode, SL60	9-8215
Cutmaster Black Series Extended Life Electrode	9-8214
Start Cartridge, SL60	9-8213
Shield Cup, SL60	9-8218
Shield Cup, SL60, Max Life	9-8237
Shield Cap, Gouging, Max Life (A – D)	9-8241
Shield Cap Deflector, Max Life (All)	9-8243
A size gouging tip	9-8225
B size gouging tip	9-8226
Cutting tip 20A	9-8205
Cutting tip 30A	9-8206
Cutting tip 40A	9-8207
Cutting tip 50A	9-8209
Cutting shield cap (40A)	9-8244
Cutting shield cap (50A)	9-8235
Torch "O" Ring 1	8-3487
Torch "O" Ring 2	8-3486
Stand Off Cutting Guide	9-8251

1TORCH Consumables Parts Application Guide

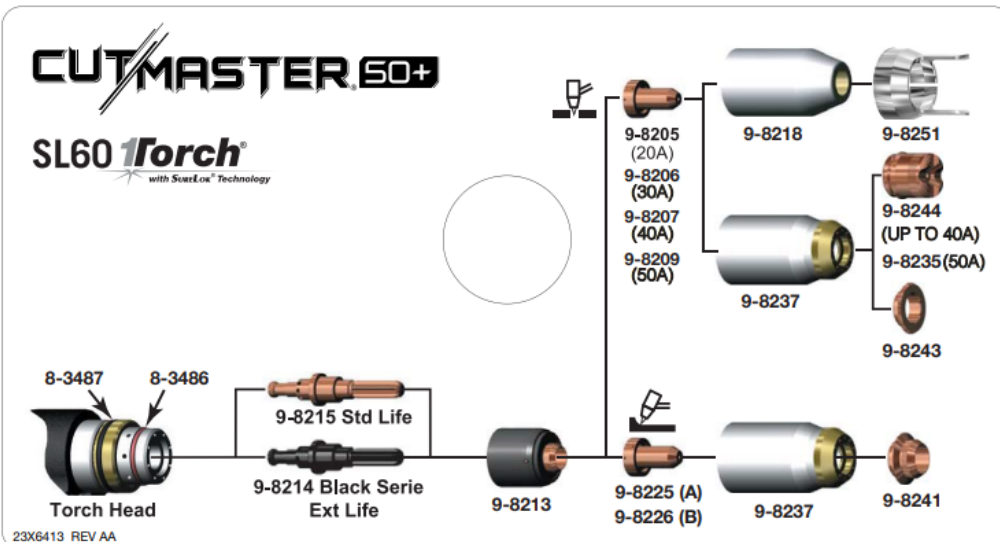For SL60 and SL100 manual cutting and gouging operations.

DRAG SHIELD CUTTING This is an operator-friendly method of cutting while maintaining a constant standoff distance. For metal thickness greater than 1/4 in. (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. Provides maximum visibility and accessibility. Shield cup for standoff cutting (with the torch tip 1/8 in. (3 mm) to 1/4 in. (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 cap.

CUTMASTER 50+
SL60 1Torch® with SureLox® Technology

8-3487 8-3486
Torch Head
9-8215 Std Life
9-8214 Black Serie Ext Life
9-8213
9-8225 (A)
9-8226 (B)
9-8237
9-8241

9-8205 (20A)
9-8206 (30A)
9-8207 (40A)
9-8209 (50A)
9-8218
9-8251
9-8244 (UP TO 40A)
9-8235 (50A)
9-8237
9-8243

23X6413 REV AA

Cutmaster® 50+

Semi-Mechanized Systems

For straight line cutting and gouging applications controlled with a simple start stop switch, MechPak from ESAB 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.

Ordering Information	
Description	**Part Number**
MechPak, 7.6 m (25 ft) Kit	7-7725
MechPak, 15.2 m (50 ft) Kit	7-7750

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GLOBALLY CERTIFIED
MANAGEMENT SYSTEMS