

Cutmaster® 50+

The total portable plasma cutting package



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 TFT LCD screen and upgraded features that give you even more control and flexibility to master any cut up to 25 mm. Together with the SL60 1Torch, it all adds up to the total plasma cutting package.

Pierce capacity : 16 mm

Cutting capacity: 25 mm

Maximum severance: 32 mm

Results may vary based on material used.

Industry

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

- Portable and durable with three handles and lightweight, industrial all-weather housing
- Bright 10.9 cm TFT LCD display with glove-friendly adjustment knob simplifies use and provides greater control and flexibility
- Input 400 V, 3-phase power
- Includes 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
- Compatible with all ATC torch connections
- Includes a complete package of general cutting and gouging consumables for most applications
- Post-cut air purge to expand consumable 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.



Simple and intuitive TFT LCD panel

Cutmaster® 50+

Specifications	
Input Voltage	400 VAC +/- 15%, 50/60 Hz, 3 Φ
Certifications	CE, UKCA
Amperage Output	15 – 50 A, continuously adjustable
Recommended Generator Size	12+ kW
Pierce Capacity*	Up to 16 mm
Cutting Capacity*	25 mm @ 205 mm/min
Maximum Severance*	32 mm @ 100 mm/min
Open Circuit Voltage (OCV)	310 V
Rated Duty Cycle	60% @ 50 A / 150 V 100% @ 40 A / 150 V
Circuit Breaker	25 A
Amperage Draw	20 A
Input Power Cable and Plug	3m 2.5mm ² , with 16 A plug
Weight	16.5 kg
Gas Requirements	Compressed air: Clean, dry, oil-free per ISO 8573-1 Class 1.2.2 Compressed Nitrogen: 99.95% pure
Operating Temperature Range	-10° to + 50° C
Inlet Air Pressure Requirement	6.2 – 8.6 bar (90 – 125 psi)
Recommended Outlet Air Pressure	5.2 bar (75 psi)
Inlet Air Flow Requirement	142 – 235 l/min (300 – 500 cfh)
Torch Duty Cycle	100% at 60 A @ 189 l/min (400 cfh) air flow and 5.2 bar (75 psi) pressure
Enclosure Class	IP23S
Dimensions L x W x H	465 x 200 x 315 mm

* Depending on material

Ordering Information	
Description	Part Number
ESAB Cutmaster 50+ Package, 3 Φ 400 V (16 A plug) CE/UKCA *	0559150004

*Cutmaster 50+ power supply, 5 m (16 ft) SL60 75° torch with lead, 3 m (10 ft) work lead with 10 mm² (4 AWG) ground clamp 9 mm (3/8 in.) OKC/dinse 10-25 connector, consumables kit, regional 1/4" air fitting.

Options & Accessories	
Description	Part Number
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
SL100 Mechanised ATC 180° 7.6 m (25 ft)	7-5215
SL100 Mechanised ATC 180° 15.2 m (50 ft)	7-5216
Ground Clamp Dinse 25 mm lead (10 mm ² OKC) - 3 m	0700400909
Cutting Guide Kit	7-7501
Circle Cutting Guide Kit	7-3291
Straight Line Cutting Guide	7-8911
CNC Remote Cable 7.6 m (25 ft)	7-8911
CNC Remote Cable 15.2 m (50 ft)	9-8312
Leather Lead Cover 6.1 m (20 ft)	9-8313
Leather Lead Cover 15.2 m (50 ft)	9-1260
Multi-Purpose Cart	7-8888
Shoulder Strap	0445197880

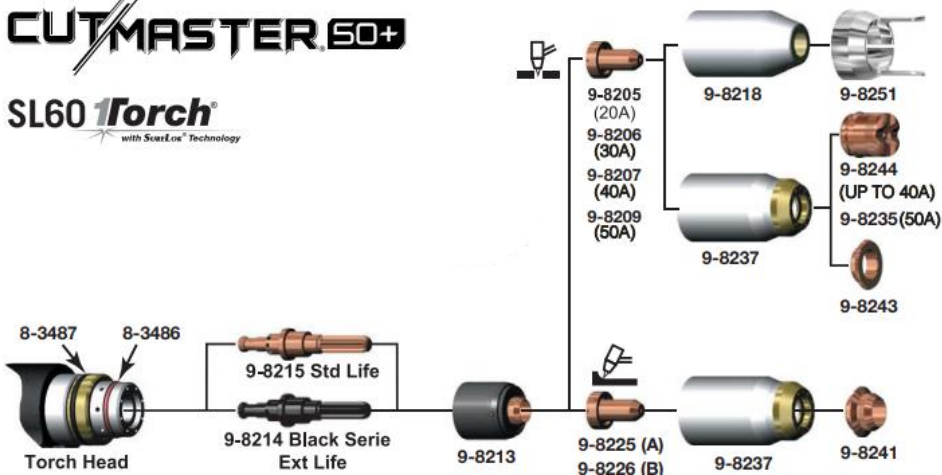
Cutmaster® 50+

Wear & Spare Parts 1Torch

Description	Part Number
O-ring, 70-801, Black, BUNA N, 5/pack, SL60/SL100	8-3487
O-ring, 56-614, Red, SILICONE, 5/pack, SL60/SL100	8-3486
Lubricant O-ring, SL60/SL100	8-4025
Electrode, Standard, 5/pack, SL60/SL100	9-8215
Electrode, Black Series, 5/pack, SL60/SL100	9-8214
Start Cartridge, SL60/SL100	9-8213
Start Cartridge, Heavy Duty, SL60/SL100	9-8277
Shield Cup, Standard, for exposed tip, SL60/SL100	9-8218
Shield Cup, Max Life, for shielded tip, SL60/SL100	9-8237
Cutting/Drag Tip, 20A, 5/pack, SL60/SL100	9-8205
Cutting/Drag Tip, 30A, 5/pack, SL60/SL100	9-8206
Cutting/Drag Tip, 40A, 5/pack, SL60/SL100	9-8207
Cutting Tip, 40A, 5/pack, SL60/SL100	9-8208
Cutting Tip, 50-55A, 5/pack, SL60/SL100	9-8209
Gouging Tip A (MAX 40 A), 5/pack, SL60/SL100	9-8225
Gouging Tip B (50-100A), 5/pack, SL60/SL100	9-8226
Shield Cap, Drag, 40 A, SL60/SL100	9-8244
Shield Cap, Drag, 50-60A, SL60/SL100	9-8235
Shield Cap, Gouging (A – D), SL60/SL100	9-8241
Shield Cap, Mechanised, 40 A, SL60/SL100	9-8245
Shield Cap, Mechanised, 50-60A, SL60/SL100	9-8238
Shield Cap Deflector, SL60/SL100	9-8243
Standoff Cutting Guide, 40 A, SL60/SL100	9-8251
Standoff Cutting Guide, 60-100A, SL60/SL100	9-8281
Ohmic Clip, for Max Life Shield Cup, SL60/SL100	9-8224
Ohmic Clip, for Standard Cup, SL60/SL100	9-8259

CUTMASTER 50+

SL60 torch
with SwaLose® Technology



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

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.



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