

Cutmaster® 40mm

Heavy Industrial hand plasma equipment

**THERMAL
DYNAMICS**
AN ESAB® BRAND



The CUTMASTER 40 is the heavy weight of hand held cutting systems. This unit comes in a compact-light weight package, but don't let that fool you. It offers enough cutting power to cut 50mm material. The heavy duty inverter system is specifically designed for high level applications requiring superior endurance and cutting performance.

Operating from a 400V three phase supply, the unit incorporates features such as auto-pilot re-start, True Guard roll bar and the heavy duty SL100 1Torch® for superior performance. The unit can also be used for heavy duty gouging, piercing and beveling applications when fitted with the correct torch consumables.

These features combined with a three year limited warranty make this the ideal unit for and heavy duty fabrication, construction and mining applications.

- True Cut™ – 40mm
- Quick Disconnect Torch for easy maintenance or machine torch conversion
- Auto-Restrike on mesh or expanded metal for maximum productivity
- True-Guard™ roll bar for ultimate protection
- TD Surelok® technology for better quality cuts and parts life

Visit esab.com for more information.

Industry

- Heavy Fabrication
- Ship Building
- Construction
- Manufacturing
- Structural Steel
- Rental Fleets
- Pipe and Pipelines
- Mining
- Demolition and Scrapping



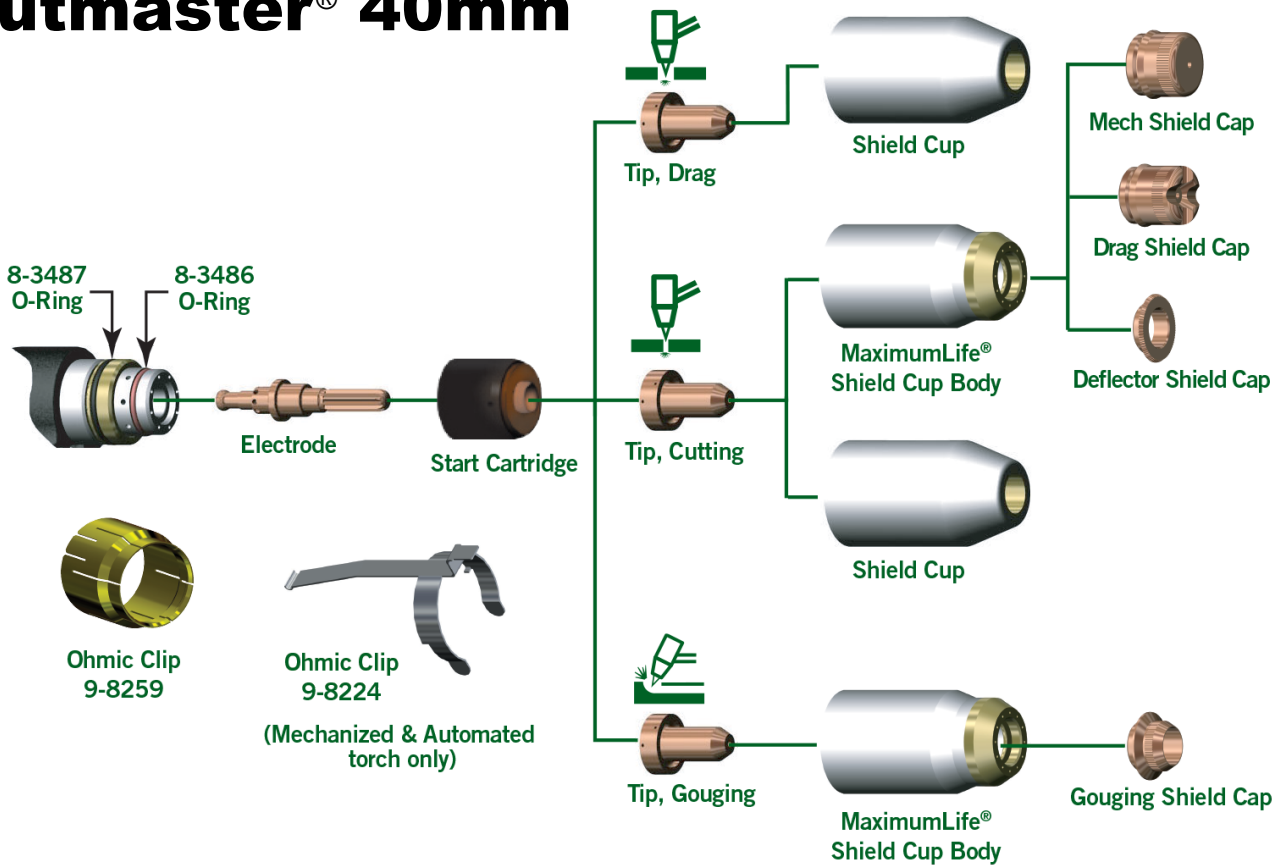
Cutmaster® 40mm

Specifications	
Amperage Output	10 – 120 A, continuously adjustable
Rated Output Power	15.4 kW
Input Voltage	400 VAC
Number of Phases	3 ph
Supply Frequency	50/60 Hz
Rated Duty Cycle	40% @ 120A
Amperage Draw	32A @ 400V, 3 ph
Work Lead	6.1m
Gas Requirements	Compressed air
Gas Pressure	5.2 bar
Air Flow Requirements (cutting & gouging)	190 l/min
Genuine Cut	40 mm
Maximum Cut	50 mm
Maximum Sever	55 mm
Torches – for use with the Cutmaster 40	SL100 1Torch (supplied) SL100 1Torch Mechanised SL100SLV 1Torch Automated
Dimensions	381 x 305 x 762 mm
Weight	28.1 kg
Warranty	3 Years Power Supply / 1 Year Torch

Ordering Information - Systems	
TD Cutmaster 40 3ph w. SL100 1Torch 6.1 m 75° Head	1-1930-4
TD Cutmaster 40 3ph w. SL100 1Torch 15.2m 75° Head	1-1931-4
Torches	
SL100 Torch and Lead 6.1 m, 75° Head	7-5206
SL100 Torch and Lead 15.2 m, 75° Head	7-5208
SL100 Mechanized Torch 25' (7.6 m) 180° Head	7-5215
SL100 Mechanized Torch 50' (15.2 m) 180° Head	7-5216

Packages Include: Cutmaster 40 power supply, SL100 75° torch with lead, 6.1 m work lead with ground clamp, spare parts kit, operating manual

Cutmaster® 40mm



Wear and Spare Parts 1Torch	
O-Ring	8-3487
O-Ring	8-3486
O-Ring Lubricant	8-4025
Electrode	9-8215
Start Cartridge	9-8213
Tip, 20A Drag	9-8205
Tip, 30A Drag	9-8206
Tip, 40A Drag	9-8207
Tip, 60A Drag	9-8252
Tip, 40A Standoff	9-8208
Tip, 50/55A Standoff	9-8209
Tip, 60A Standoff	9-8210
Tip, 70A Standoff	9-8231
Tip, 80A Standoff	9-8211
Tip, 90/100A Standoff	9-8212
Tip, 120A Standoff	9-8253
Tip A, Gouging	9-8225
Tip B, Gouging	9-8226
Tip C, Gouging	9-8227
Tip D, Gouging	9-8228
Tip E, Gouging	9-8225

Wear and Spare Parts 1Torch	
Shield Cup	9-8218
Shield Cup Max Life	9-8237
Shield Cap, Drag, 40A	9-8244
Shield Cap, Drag, 50-60A	9-8235
Shield Cap, Drag, 70-100A	9-8236
Shield Cap, Drag, 120A	9-8258
Shield Cap, Mechanised, 40A	9-8245
Shield Cap, Mechanised, 50-60A	9-8238
Shield Cap, Mechanised, 70-100A	9-8239
Shield Cap, Mechanised, 120A	9-8256
Shield Cap, Deflector	9-8243
Shield Cap, Gouging	9-8241
Ohmic Clip (mechanised torches)	9-8224
Ohmic Clip (manual torches)	9-8259

GOUGING PROFILES				
	Output Range	Depth	Width	Profile
Tip A	40 Amps (MAX)	Shallow	Narrow	
Tip B	50-100 Amps	Deep	Narrow	
Tip C	60-120 Amps	Moderate	Moderate	
Tip D	60-120 Amps	Shallow	Wide	
Tip E	120 Amps	Moderate	Wide	

Cutmaster® 40mm

Options & Accessories	
Standoff Cutting Guide	9-8281
Cutting Guide Kit (Deluxe)	7-8910
Circle Cutting Guide Kit	7-3291
Radius/Roller Cutting Guide Kit	7-7501
Straight Line Cutting Guide	7-8911
Lead Extension, 4.6 m	7-7544
Lead Extension, 7.6 m	7-7545
Lead Extension, 15.2 m	7-7552
Leather Lead Covers 6.1 m	9-1260
Multi-Purpose Cart	7-8888
Single Stage Air Filter Kit	7-7507
Two Stage Air Filter Kit	9-9387

1 Torch Consumables Parts Application Guide



Drag Tip Cutting

The preferred method of cutting light gauge metal up to 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 A or less; now with Thermal Dynamics TRUE Cut Drag Tip Series™ technology, it is possible to cut up to 60 A. For best results, use the Shield Cup with the torch tip in direct contact with the work (up to 60 A).



Drag Shield Cutting

This is an operator-friendly method of cutting between 70 to 120 A while maintaining a constant standoff distance. For metal thickness greater than 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 6 mm and at current levels above 60 A. Provides maximum visibility and accessibility. Shield cup for 'standoff' cutting (with the torch tip 3 mm to 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.



ESAB / esab.com

