

# The Cutmaster 60i: ESAB's cutting marvel

With the introduction of the new Cutmaster® 60i, ESAB is offering the most powerful air plasma cutting machine on the market today. The unit can cut through 20 mm (¾-inch) mild and stainless steels, or aluminium of up to 32 mm (1¼-inch) thick. Eugene van Dyk of ESAB South Africa talks about this and other cutting 'wonders'.



The extended life consumables in the Cutmaster Black Series are designed to operate for 60% longer than standard.

**T**he new ESAB Cutmaster 60i is extremely powerful, can cut through a multitude of metals and never backs down, from first cut to clean up. It really does take plasma cutting to the next level," begins Van Dyk.

Compared to its predecessor, the Cutmaster 60i now has 16.6% more cutting and piercing capacity, enabling it to get jobs done faster with cleaner cuts. With a mass of only 16.8 kg, this is a compact and lightweight air plasma unit designed with portability in mind. "But neither power nor performance is sacrificed to achieve this. With a wide range of available cutting and gouging nozzles, fabricators can harness the Cutmaster 60i's power like never before," he continues.

Key improvements include:

- Increased cut capacity and cut speed:

The Cutmaster 60i's recommended quality cut capacity is 20 mm, with a maximum sever capacity of 38 mm and a 20 mm pierce capability.

- Superior duty cycle: The machine's duty cycle of 50% at 60 A while cutting mild steel equates to a 7.6 kW power supply rating, the highest output in its class. This enables more and faster cutting for longer periods of time.
- Rugged roll cage: With multiple lift points, the sturdy four-handle roll cage makes it easy to transport the Cutmaster 60i to where it is needed – including outdoors. The machine's IP23S protection rating makes it is ready to face the most rugged of African environments.
- Generator reliable: Power factor correction embedded in the 60i ensures no disruptions in cutting performance emerge due to power spikes when connected to a generator.

"The Cutmaster 60i comes alive when cut capacity or cut speed are imperatives. It slices cleanly through mild steel, aluminium and stainless steel with ease and creates a perfect groove when gouging. The improved SL60QD™ 1Torch® with ESAB's innovative Cutmaster Black Series extended life consumables also help fabricators to achieve the best cuts currently possible from any machine in this class," says Van Dyk.

The extended life consumables in the

operator can better focus on cutting accuracy.

ESAB can offer many more cutting options, both small and large, including a full range of green Thermal Dynamics (TD) cutting machines.



Cutmaster Black Series include Cutmaster Black Series electrodes designed to operate for 60% longer than standard consumables before needing to be replaced. "So operators get maximum productivity and excellent performance from consumables that really do last longer," he adds.

In addition, the Series carries only three consumable parts so fewer replacement parts need to be held in stock and torch changes are quicker, which keeps cutting downtime to a minimum.

Other enhancements include:

- Long arc stretch: When in an odd position or trying to hit a corner, Cutmaster 60i's extra-long arc will stretch to keep constant contact with the workpiece.
- Additional modes of operation: The machine now has four modes of operation – twice as many as competitors – ie, cutting mode; expanded metal cutting mode; gouging mode; and latch mode, which allows the torch trigger to be locked so an

operator can better focus on cutting accuracy.

- ESAB's SL60QD 1Torch: This torch has a lot to offer. First, it is compatible with the entire Cutmaster family – as well as with other cutting systems in the industry. Second, 'QD' stands for quick disconnect, which gives the option of replacing only what is needed to be replaced, the torch or the lead, for example, which saves money in the long run.

The system's large and durable LED display offers high-visibility for easy viewing of all machine settings from a distance. Intuitive and easy-to-use, the display instantly provides the necessary feedback for keeping settings and cut quality optimised.

The Cutmaster 60i also incorporates a gas optimiser to precisely regulate air pressure, ensuring premium cut quality and performance. When amperage is set and the torch type, torch lead length and mode of operation selected, a visual prompt tells the operator to adjust the gas pressure required, while still offering the flexibility to tweak the settings to suit individual preferences.

Cutmaster 60i's end-of-life indicator continuously monitors the remaining life of the consumable parts and sends out an alert when it is time for replacements, so maintaining optimal performance and cut quality. In addition, a consumables configuration guide is displayed on top of the power source, giving easy-to-follow instructions on how the consumables work together. There is also a quick-start guide in the box that helps customers to be up and running in no time.

"Every Cutmaster 60i delivery includes a full range of consumables with several amperage sizes of cutting and gouging nozzles. Whether drag cutting,

gouging, shield cap cutting, or working on another application, the Cutmaster 60i comes ready to rumble," says Van Dyk.

As with all Cutmaster plasma cutters, ESAB's MechPak mechanised package is also available for the Cutmaster 60i, making it easy to hook up to a cutting table for semi-automatic cutting processes. MechPak comes with everything needed to get started, including an SL100 mechanised torch (7.6 m or 15.2 m), a remote pendant, a lead with its ATC connection, and all torch consumables.

Complementing the package is the Sentinel™ A50, an excellently balanced auto-darkening helmet with a full range of shades, including matched plasma cutting shades 6 to 7.

"And if both cutting and welding are required, the Rebel™ 215 multi-process welding machine offers the most innovative welding technology available. Combined with the Cutmaster 60i, onsite maintenance teams and workshop fabricators gain the ability to cut or weld almost anything, anywhere," Van Dyk says.

"The Cutmaster 60i, like every ESAB machine, is backed by our commit-



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ment to superior customer service and support. Our skilled customer service department is prepared to answer any questions, address problems and help with maintenance and upgrading of machines.

"And if this is not exactly what you need, we at ESAB can offer many more cutting options, small and large. These include the Cutmaster 40, Cutmaster 80, Cutmaster 100, or Cutmaster 120," Van Dyk concludes. ■



Use the QR code to watch a video clip of the Cutmaster 60i in action. Or to find out how more and take control of the latest plasma technology yourself, visit [esab.com/marvel](http://esab.com/marvel).

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ESAB Cutmaster 60i specifications table	
Amperage output:	10–60 A, continuously adjustable
Open-circuit voltage (OCV):	300 V
Input voltage	400 Vac
Number of phases	3
Supply frequency	50/60 Hz
Rated duty cycle	50% @ 60 A; 60% @ 50 A; 100% @ 40 A
Amperage draw	13.2 A @ 400 V
Enclosure rating	IP23S
Input power cable and plug	2.7 m three phase 14 AWG 4/C
Work lead with ground clamp	6 m work cable with 50 mm connection
Gas requirements	compressed air
Operating temperature range	0 °C to 50 °C
Input pressure	8.6 bar (max)
Air flow requirements	142–235 l/s
Power supply gas filtering ability	particulates to 5.0 µm
Maximum recommended cut	up to 20 mm
Maximum sever	38 mm
Pierce rating	20 mm