

## AUTOMATED PLASMA CUTTING

## CUTTING SPEED CHART

Material	Amps	Plasma/ Shield	Thickness [mm]	Speed mm/min
Mild Steel	20	Air/Air	1.5	4,57
	30	Air/Air	1.5	6,10
	40	Air/Air	1	3990
			2	2920
			3	1810
			5	1345
	60	Air/Air	4	3650
			6	2145
			10	1190
			12	795
	80	Air/Air	6	2745
			10	1060
			12	1025
			15	610
	100	Air/Air	10	1790
		12	1310	
		20	490	
120	Air/Air	10	2100	
		12	1860	
		15	1320	
		20	720	
Stainless Steel	20	Air/Air	1.5	4,57
	30	Air/Air	1.5	6,10
	40	Air/Air	2	1140
			3	980
			5	715
	60	Air/Air	4	2865
			6	1790
			10	725
			12	580
	80	Air/Air	6	2765
			10	1070
			12	765
	100	Air/Air	10	1375
			12	1255
			15	685
120	Air/Air	10	2390	
		12	1750	
		15	1160	
Aluminium	20	Air/Air	1.5	4,57
	30	Air/Air	1.5	6,10
	40	Air/Air	2	3500
			3	2350
			5	1740
	60	Air/Air	4	5230
			6	2640
			10	1085
			12	845
	80	Air/Air	6	3190
			10	1330
			12	1060
			15	745
	100	Air/Air	10	1575
			12	1255
		20	470	
120	Air/Air	10	2660	
		12	2100	
		15	1445	

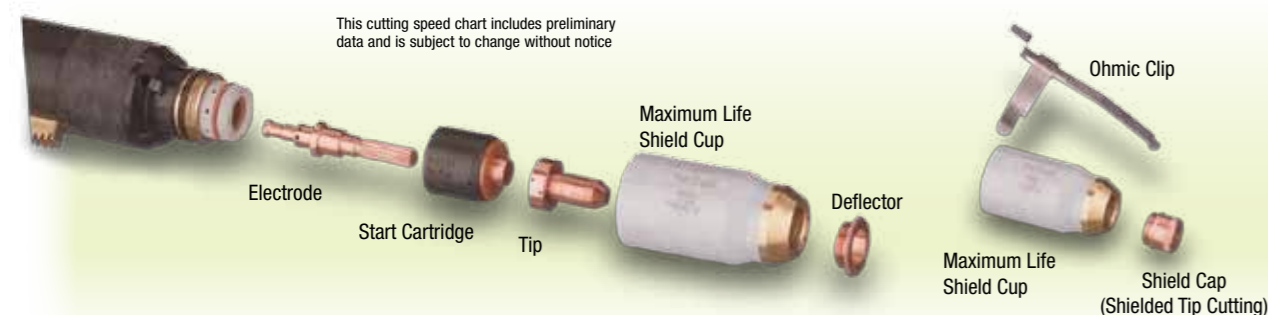
NOTE: Speeds reflected in this cutting chart are representative of optimum quality and speed. The chart data comes directly from the operating manual. BEWARE of competitor's claims, as the data represented in their brochure does not come from their operating manuals. Cut speeds in the competitor's brochure may be inflated by as much as 30-40% over the cut charts in their operating manuals.

## SL100®SV Automation Torch



- Valve In Torch Design
- Patented 1Torch Consumable
- ATC Quick Disconnect

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## AUTOMATED PLASMA CUTTING

## SUPERIOR CUTTING PERFORMANCE

## SureLok® Electrode Technology

The innovative, patented, self-locking electrode mechanism eliminates the need for an installation tool and ensures precise electrode and tip alignment. Both the electrode and tip are stationary which results in a highly defined arc and precise cuts. SureLok alignment also means longer tip and electrode life and reduced operating costs.



## Total Gas Management™

The SL100®SV 1Torch® introduces a completely new tip technology which eliminates the need for a separate plasma gas distributor. Each tip includes plasma gas ports uniquely tuned to optimize cutting performance at its rated current. Select from 20, 30, 40, 60, 80, 100 or 120 Amp tips to optimize your cutting. The result is Total Gas Management. Precision gas control, longer consumable parts life and better cut performance.



## Superior Quality at All Amperages

Whether you are fabricating thick plate or cutting ornamental shapes, the CUTMASTER® Automation Series is perfect for the job. At 120 Amp output, the CUTMASTER A120 produces the BEST CUT on 12 mm mild steel plate at 1.86m/min. For those cutting intricate shapes, select low amperage tips for kerf widths less than 1.14 mm wide. Whether you cut plate, HVAC duct work or ornamental shapes, the CUTMASTER Automation Series is right for you.

## Start Cartridge

High Frequency has been completely eliminated from the plasma system. A patented component called the "Start Cartridge" sits between the tip and electrode. The Start Cartridge is in contact with the tip while the torch is inactive. When a start signal is given, air forces the cartridge to break contact with the tip and the pilot arc is started. This unique design allows the pilot arc to start without moving either the tip or electrode, resulting in better parts life, cut performance and reliability.



The start cartridge is the only moving part in the SL100SV torch. Unlike competitive torches, where the moving part is in the torch head. If the moving parts of a competitor's torch fails, the entire torch head has to be replaced. This is expensive, complicated, and time consuming.

## Choice of Tip Shielding

Choose from two consumable styles:

- Exposed Tip for cutting thin sheet at low power & narrow kerf



Exposed Tip

- Shielded Tip for heavier plate piercing and cutting



Shielded Tip

Note: Use the Ohmic Clip with the Shielded Tip design if ohmic plate sensing is required

## ACCESSORIES

## CNC Interface Cable

Shielded multi pair cable includes start/stop, OK to move, and divided arc voltage.

7,6 m	9-8312	30,5 m	9-8316
15,2 m	9-8313	38,0 m	9-8317
22,8 m	9-8315		

## CNC cable for start/stop and OK to move only

7,6 m	9-1008	15,2 m	9-1011
10,6 m	9-1010		

## 1Torch® Automation Leads Packages

SL100® SV180® - (Torch/Leads)			
7,6 m	7-4001	23 m	7-4004
10,6 m	7-4002	30,5 m	7-4005
15,2 m	7-4003		

## Pinion Assembly

Cat. No. 7-2827 35 mm Diameter

## Single Stage Air Filter Kit

Cat. No. 7-7507 (Filter Body 9-7740, Hose 9-7742, Filter Element 9-7741)

## Two Stage Air Filter Kit

Cat. No. 9-9387  
1st Stage Replacement Cartridge 9-1021  
2nd Stage Replacement Cartridge 9-1022

## Remote Pendant Control

6.1 m Cat. No. 7-3460  
Remote Pendant Control for your mechanized application.

## Hand Pendant Extension

7.6 m Cat. No. 7-7744



**VICTOR**  
TECHNOLOGIES™

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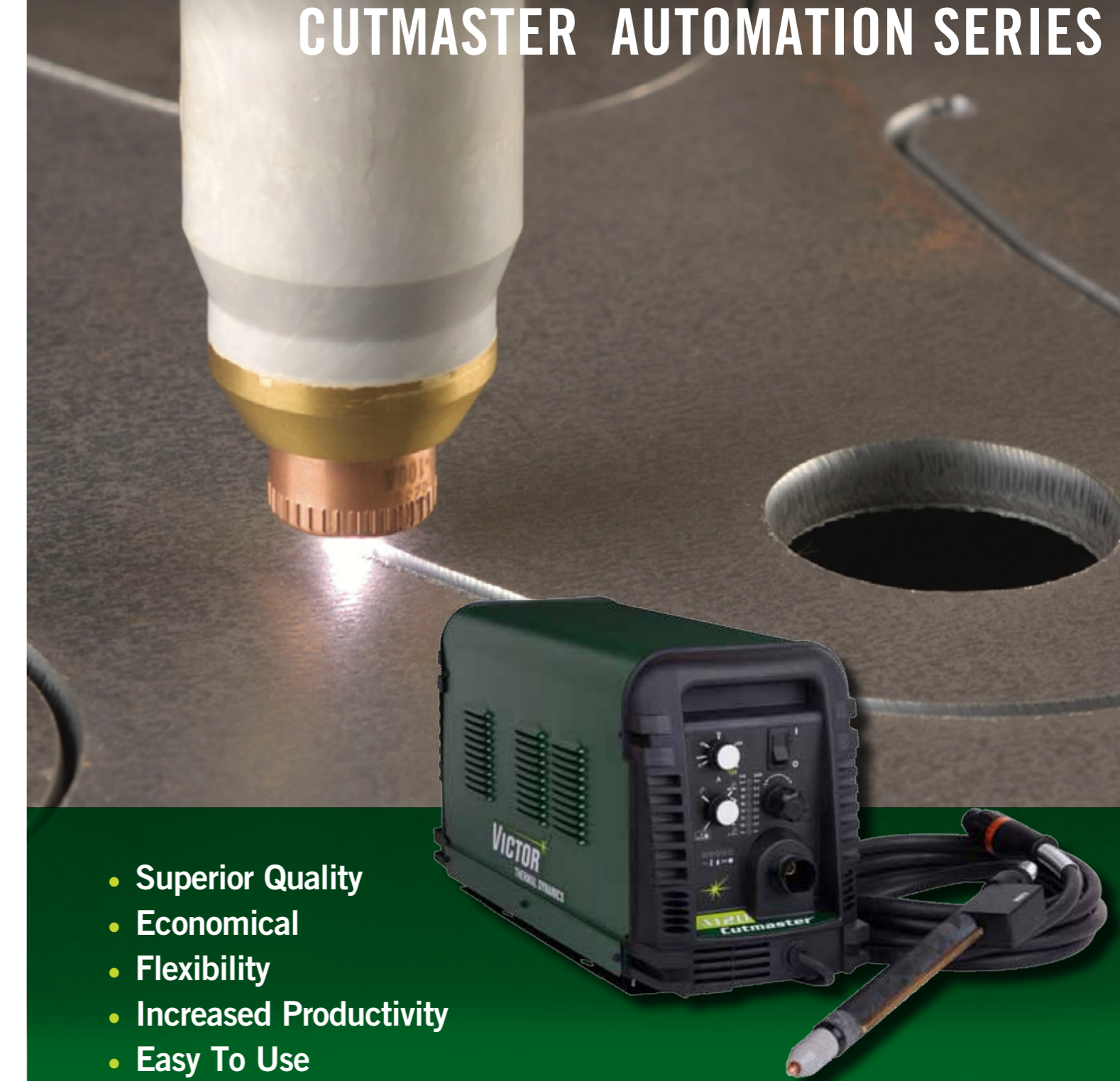
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## AUTOMATED PLASMA CUTTING SYSTEMS

## CUTMASTER AUTOMATION SERIES

Victor® Thermal Dynamics®



- Superior Quality
- Economical
- Flexibility
- Increased Productivity
- Easy To Use

*We Bring Intelligence to the Table.™*

# AUTOMATED PLASMA CUTTING

## CUTMASTER® Automation Series

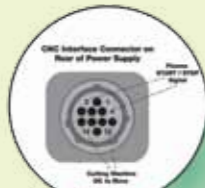
The Cutmaster A Series is a range of 4 compact air-plasma cutting systems that take advantage of the reliability of the Cutmaster platform and proven 1Torch technology to offer the following advantages:

- A powerful 80% Duty Cycle to handle all-day production cutting in the toughest environments
- Light-weight, compact design and convenient mounting feet allow for easy mounting in any application
- Valve in torch design reduces cycle time between parts and increases productivity
- CNC Interface connection located on the rear of the power supply offering "Start/Stop", "OK to MOVE" and Divided Arc Voltage
- Full arc voltage is available using an internal terminal connection
- Dedicated automation software improves cycle time and performance in many applications

The new A-Series includes the SL100®SV 1Torch® with standard ATC Quick Disconnect in lengths of 7.6m, 10.6m and 15.2m (Longer torch leads up to 30.5m available). Our 1Torch start technology eliminates the electronic interference that can occur with other designs. 1Torch provides quick, reliable starts and a strong pilot arc to pierce heavy plate. With auto-pilot restart, it can also cut expanded metal quickly and easily.

### FEATURES

- Power switch
- Mode selection
- Current control
- Pressure control
- Status display LED's
- Pressure / Error indicators



- Start / Stop input
- "OK To MOVE" output
- Standard 7.6 m, 10.7 m, or 15.2 m CNC cable
- Divided arc voltage board
- Easy access to arc voltage via separate knock out hole and ring terminals inside



- ATC® Quick Disconnect
- Torch Detection Allows Fast Change From An Automation Torch To A Hand Torch

- Standard Keyhole Mounting Feet

## CUTMASTER® Automation Series



### Specifications

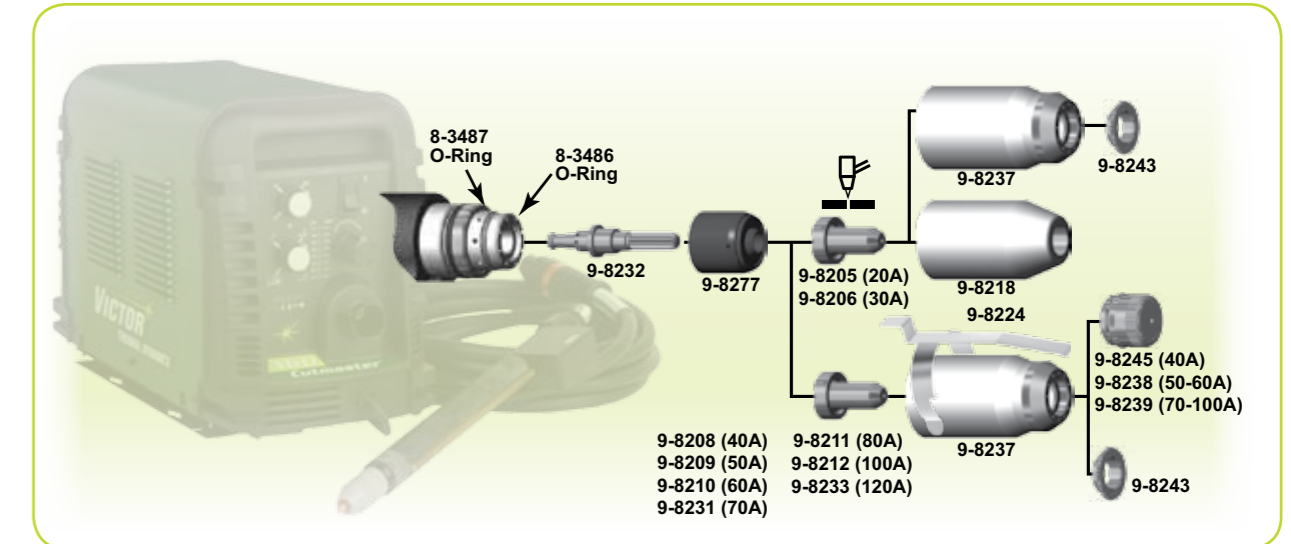
	CUTMASTER® A40	CUTMASTER® A60	CUTMASTER® A80	CUTMASTER® A120
<b>Rated Output</b>	40 Amps	60 Amps	80 Amps	120 Amps
<b>Output Range</b>	20 - 40 Amps, 60 Amps Max., Adjustable	20 - 60 Amps, 80 Amps Max., Adjustable	30 - 80 Amps, 100 Amps Max., Adjustable	30 - 120 Amps, 120 Amps Max., Adjustable
<b>Production Piercing and Cutting Capacity</b>	6 mm	10 mm	12 mm	15 mm
<b>Maximum Piercing and Cutting Capacity</b>	12 mm	15 mm	20 mm	20 mm
<b>Maximum Edge Start</b>	25 mm	25 mm	30 mm	40 mm
<b>Input Volts</b>	380/400V, 3 ph, 50/60 Hz	380/400V, 3 ph, 50/60 Hz	380/400V, 3 ph, 50/60 Hz	380/400V, 3 ph, 50/60 Hz
<b>Input Amps @ Max Output</b>	16 (380V, 3 ph) 16 (400V, 3 ph)	17 (380V, 3 ph) 17 (400V, 3 ph)	29 (380V, 3 ph) 28 (400V, 3 ph)	35 (380V, 3 ph) 36 (400V, 3 ph)
<b>Kilowatt Output</b>	6.3 kW	9 kW	12 kW	15.4 kW
<b>Duty Cycle</b>	<b>80% @ 40 Amps</b> 100% @ 30 Amps	<b>80% @ 60 Amps</b> 100% @ 50 Amps	<b>80% @ 80 Amps</b> 100% @ 70 Amps	<b>80% @ 120 Amps</b> 100% @ 100 Amps
<b>MAX OCV</b>	260 VDC	260 VDC	260 VDC	260 VDC
<b>Gas Type</b>	Air @ 5.2 bar @ 189 lpm	Air @ 5.2 bar @ 189 lpm	Air @ 5.2 bar @ 189 lpm	Air @ 5.5 bar @ 189 lpm
<b>Pilot</b>	Start Cartridge	Start Cartridge	Start Cartridge	Start Cartridge
<b>Weight</b>	19.5kg - Unit, Power Cable, (Torch and Leads)	19.5kg - Unit, Power Cable, (Torch and Leads)	28.6kg - Unit, Power Cable, (Torch and Leads)	28.6kg - Unit, Power Cable, (Torch and Leads)
<b>Dimensions</b>	H 343 mm x W 248 mm x L 533 mm	H 343 mm x W 248 mm x L 533 mm	H 343 mm x W 248 mm x L 660 mm	H 343 mm x W 248 mm x L 660 mm
<b>Work Cable</b>	6.1m	6.1 m	6.1 m	6.1 m
<b>Control</b>	CNC rear panel connector, Start/Stop OK to Move, and divided arc voltage	CNC rear panel connector, Start/Stop OK to Move, and divided arc voltage	CNC rear panel connector, Start/Stop OK to Move, and divided arc voltage	CNC rear panel connector, Start/Stop OK to Move, and divided arc voltage
<b>Input Power Cable</b>	2 m without plug (400V)	2 m without plug (400V)	2 m without plug (400V)	2 m without plug (400V)
<b>Warranty</b>	3 Years Power Supply & 1 Year Torch	3 Years Power Supply & 1 Year Torch	3 Years Power Supply & 1 Year Torch	3 Years Power Supply & 1 Year Torch
<b>Certifications</b>	IP-23C, CSA, NTRL/C, CE, CCC	IP-23C, CSA, NTRL/C, CE, CCC	IP-23C, CSA, NTRL/C, CE, CCC	IP-23C, CSA, NTRL/C, CE, CCC
<b>Torch Configuration</b>	SL100®SV w/ATC®, 180° Automation			
<b>Torch</b>	SL100®SV w/ATC®, 180° Automation			

\*Systems include: power supply, automation torch with 1 3/8" (35 mm) diameter non-metallic mounting tube / 32 pitch rack (detachable), pinch block assembly, CNC interface cable, spare parts kit (15 tips, 3 electrodes, start cartridge), input power cable (selected systems), work cable, and clamp.

(subject to change without notice)

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## CONSUMABLE PARTS



## PRODUCT SELECTION

Light

Medium

Heavy

CUTMASTER A40

CUTMASTER A60

CUTMASTER A80

CUTMASTER A120



Production Piercing & Cutting Capacity

Applications

Duty

