

Dagger® 100 MECHANIZED AIR PLASMA SYSTEM

The Dagger 100 inverter based plasma cutting system offers cutting and marking capability using the same tools in one user-friendly system. The system eliminates the use of external marking tools. Patented **Impulse Start Technnology**™ reduces the high frequency noise level and significantly increases the consumable life compared to contact starting.

The Dagger 100 system provides superior cut quality, easy marking capability and extended consumable life.





STANDARD SYSTEM COMPONENTS

- Power Supply
- · Mechanized Torch and Lead Assembly
- System Manual

- · Consumable Spare Parts Kit
- Air Filter

FEATURES

- Extremely energy efficient inverter design that significantly lowers energy consumption.
- Pierce and production cut 0.75 in. (20 mm) mild steel maximum.
- Patented Impulse Start Technology[™] –
 Utilizes advanced starting circuit for increased consumable life and cut quality improvement over the life of the electrode and nozzle.
- Patented single gas system for cutting and marking – use the same gas for both operations.
- Universal Voltage Input eliminates the need for additional power conversion, therefore minimizing the up front costs.
- CNC Interface allows easy integration for mechanized applications. Read more about DaggerNC[™] CNC for easy integration with Dagger 100.
- Three operating modes Cutting/Marking/Expanded Metal.
- · Quick Change Torch Leads save time.
- Engineered for mechanized cutting applications.
- Voltage divider board is available as an option for use of Dagger 100 with a torch height control system.
- Extremely robust design components and testing standards achieve high product reliability. Rigorous manufacturing and testing standards deliver a robust system and maximize uptime.
- Industry leading 3 year warranty on machine and 1 year on original torch.

APPLICATIONS

Mechanized Cutting

- X-Y Tables (New and Retrofit)
- · Robotic Systems
- Track Systems
- · Pipe Systems

The Dagger 100 cutting system is ideal for upgrading our SR Series systems or competitive air plasma systems.

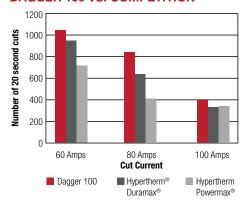
SPECIFICATIONS

Input Voltages	200 - 600 V, 3-PH, 50/60 Hz, CSA		
	230 – 400 V 3-PH, 50/60 Hz, CE		
Input current	200/208/230/240/400/480/600 V		
@ 16kW output	3-PH: 52/50/45/43/26/22/23		
Rated Output Voltage	160 VDC		
Duty Cycle @ 40°C	60% @ 200-208 V		
(104°F) @ 100 amps	70% @ 230 - 240 V		
	80% @ 400 - 600 V		
Output for 100% Duty	80 A @ 200 - 208 V		
cycle @ 40°C (104°F)	85 A @ 230 - 240 V		
	90 A @ 400 - 600 V		
Maximum OCV	300 VDC		
Dimensions	23.1 in (587 mm) D		
with handle	12.5 in (318 mm) W		
	18.7 in (479 mm) H		
Weight with torch	117 lbs (53 kg)		
Gas Supply	Clean, dry, oil-free air or nitrogen		
Flow Rate	460 scfh; 7.7 cfm (217l/min)		
1 low flato	at 90 psi (6.2 bar)		
Flow Pressure	90 psi flowing		
Warranty Period	Full 3 year power supply warranty		
	and a 1 year torch warranty		
Approvals	® (€ ((())		

STANDARD MACHINE INTERFACE

- Plasma Start
- Motion Out
- Marking
- Arc Voltage (torch height control) signal available on rear panel connector with optional voltage divider board

DAGGER 100 VS. COMPETITION



OPERATING DATA

Hypertherm®, Powermax® and DuraMax® are registered trademarks of Hypertherm, Inc.

Thickness		Current	Maximum Cut Speed	Optimal Cut Speed
gauge	in (mm)	(amps)	ipm (mm/min)	ipm (mm/min)
MILD STEEL				
18	0.048 (1.5)	40	550 (12970)	350 (8890)
10	0.135 (4)	60	265 (6731)	215 (5588)
-	0.25 (6)	80	165 (4191)	110 (2793)
_	0.5 (12)	100	81 (2057)	60 (1524)
_	0.750 (20)	100	38 (965)	30 (762)
STAINLESS STEEL				
18	0.048 (1.5)	40	550 (13970)	335 (8509)
14	0.075 (2)	40	216 (5486)	145 (3683)
_	0.25 (6)	80	156 (3962)	105 (2667)
-	0.5 (12)	100	72 (1828)	52 (1321)
ALUMINUM				
16	0.0625 (2)	40	433 (10998)	325 (8255)
_	0.125 (4)	60	340 (8636)	260 (6604)
_	0.25 (6)	80	180 (4572)	115 (2921)
_	0.5 (12)	100	105 (2667)	70 (1778)

ORDERING INFORMATION

Product Description	Product Number
200 - 600 V, 3-PH CSA - Mechanized System ⁽¹⁾ with 25 ft (7.6 m) torch with 35 ft (11.6 m) torch with 50 ft (16.6 m) torch	980025 980035 980050
230 - 400 V, 3-PH CE - Mechanized System with 25 ft (7.6 m) torch with 35 ft (11.6 m) torch with 50 ft (16.6 m) torch	980025-CE 980035-CE 980050-CE
380 V, 3-PH CCC - Mechanized System with 25 ft (7.6 m) torch with 35 ft (11.6 m) torch with 50 ft (16.6 m) torch	980025-CCC 980035-CCC 980050-CCC

⁽¹⁾ For use in North America, South America and Asia (except China)



Designed and manufactured in the U.S.A. For best cutting results and long consumable life, always use genuine Burny-Kaliburn consumables. For more information, visit: www.burnykaliburn.com.

GREEN TECHNOLOGY

We are committed to being environmentally responsible. The Dagger 100 mechanized air plasma system has an extremely high power efficiency inverter design resulting in lower power consumption per cut. Longer consumable life, high energy efficiency and responsible manufacturing processes reduce the environmental impact throughout the value chain of design, manufacturing and field use of Dagger 100 systems.



CUSTOMER ASSISTANCE POLICY

The business of Burny Kaliburn is manufacturing and selling high quality cutting equipment. Our challenge is to meet the needs of our customers and to exceed their expectations. On occasion, purchasers may ask Burny Kaliburn for information or advice about their use of our products. Our employees respond to inquiries to the best of their ability based on information provided to them by the customers and the knowledge they may have concerning the application. Our employees, however, are not in a position to verify the information provided or to evaluate the engineering requirements for the particular application. Accordingly, Burny Kaliburn does not warrant or guarantee or assume any liability with respect to such information or advice. Moreover, the provision of such information or advice does not create, expand, or alter any warranty on our products. Any express or implied warranty that might arise from the information or advice, including any implied warranty of merchantability or any warranty of fitness for any customers' particular purpose is specifically disclaimed.

Burny Kaliburn is a responsive manufacturer, but the selection and use of specific products sold by Burny Kaliburn is solely within the control of, and remains the sole responsibility of the customer. Many variables beyond the control of Burny Kaliburn affect the results obtained in applying these types of fabrication methods and service requirements.

Subject to Change - This information is accurate to the best of our knowledge at the time of printing. Please refer to www.burnykaliburn.com for any updated information.



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