FLEXCUT® 105

PLASMA CUTTER



CLEAR CUT PERFORMANCE

The FlexCut™ 105 delivers reliable, high-duty-cycle performance built for demanding industrial environments. Advanced CNC integration includes built-in ports, automatic table detection, and machine torch compatibility for seamless automated cutting. With an industrial IP23-rated enclosure, reinforced components, and shock-resistant housing, it stands up to dust, water spray, and the rigors of daily use. Compatible with our FlexConnect™ Torch System, giving you the flexibility to switch between torch heads or cables in seconds.

Processes »

Drag Cutting, Grid Cutting, Mechanized, Extended, Precision Cutting, Gouging and Marking

Applications »

Construction, Automation, Maintenance & Repair





Product Numbers »

K5827-H HANDHELD ASSEMBLY K5827-M MECHANIZED ASSEMBLY K5827-PS POWER SOURCE ONLY

Cut Performance - Mild Steel»







VALUE-ADDED FEATURES

- 105 Amps of Cutting Power: Tackle thick materials with confidence and precision.
- High Duty Cycle: Built for demanding applications without overheating or slowing down.
- LCD Display: Bright, easy-to-read screen with simple controls for quick and precise adjustments.
- Input Power Flexibility: Compatible with both
 1-phase and 3-phase power.
- Plug-and-Play CNC Integration: Seamless integration with CNC tables with automatic table detection for fast, precise setup—no extra kits required.
- Multi-Process Capability: Drag cutting, fine cutting, gouging, and marking with one machine for maximum versatility.
- Rugged by Design: Heavy-duty construction built for real-world conditions— hard to damage, and ready to withstand impact, dust, and daily wear.
- Industrial IP23 Protection: Resists dust and water spray for dependable performance in challenging conditions.

KEY CONTROLS

- 1. Handle
- 2. User Interface
- 3. Main Control Knob
- 4. Torch Connection
- 5. Work Connection
- 6. Remote Connection (14-pin)
- 7. Input Power Cable
- 8. On/Off Switch
- 9. Cooling Fan
- 10. Air Inlet





USER INTERFACE

- 1. Amperage
- 2. Process
- 3. Adjust Air Pressure
- 4. Guided Cutting Setup
- 5. Advanced Settings
- 6. Gas Purge



GUIDED CUTTING SETUP

From power-on to precision cutting in seconds

Don't waste time with complicated setup. With FlexCut $^{\text{TM}}$, you're ready to cut in seconds.

- 1. Adjust machine amperage to recommended setting.
- 2. **Select the Cutting Guide** icon on the main user interface.
- 3. Enter your material type and thickness.
- 4. **View the recommended cutting amperage**—automatically calculated for clean, precise results.



FLEXCUT PRO™ TORCH WITH FLEXCONNECT™

One Torch. Endless Flexibility.

Patented FlexConnect™ Torch System: Switch between torch heads or cables in seconds—no tools required.

Customizable Options: Choose from multiple torch heads and cable lengths to fit your application.

Universal Machine Compatibility: Use one torch across the entire FlexCut[™] machine lineup—no need for separate torches for different systems

Lower Repair Costs: Replace only the damaged part—head or cable—without buying a whole new torch.



MORE CUTS. LESS COST. ZERO HASSLE.

Long-Life Consumables: Advanced electrode design and optimized airflow deliver more cuts per consumable, reducing replacement frequency and lowering operating costs.

Threadless Electrode Connection: No more seized threads—just smooth, quick changes every time.

Snap-In Installation: Tool-free design means you can

replace consumables in seconds.



CNC INTEGRATION

Plug-and-Play CNC Integration: Built-in ports for easy setup - no extra kits required.

Automatic Table Detection: Fast, precise setup.

CNC Torch Options: Compatible with machine torches for automated cutting.



CUTTING SPECIFICATIONS

Recommended Cut Thickness / Speed	1 1/4 in / 15 ipm		
Maximum Cut Thickness / Speed	1 1/2 in / 10 ipm		
Severance Cut Thickness / Speed	2 in / 5 ipm		
Pierce Thickness	7/8 in		
Gouge Rate	11.5 lbs/hr		



WHAT'S INCLUDED

		Handheld Package K5827-H	Mechanized Package K5827-M	Power Source Only K5827-PS
FlexCut® 105 Plasma Cutter	N/A	•	•	•
FlexCut® PRO FlexConnect® Handheld Torch 25 ft	KP5850-25	•		
FlexCut® PRO FlexConnect® Mechanized Torch 25 ft	KP5852-25		•	
Air Filter	KP5844-1	•	•	•
Work Clamp & Cable	KP6035-1	•	•	•
Input Power Cord	N/A	•	•	•
Complete Consumable Kit - Handheld	KP5829-105	•		
Complete Consumable Kit - Mechanized	KP5830-105		•	

RECOMMENDED ACCESSORIES



Plasma Circle Cutting Guide Kit For cutting circles 3-33in in diameter. Works with all Lincoln Electric FlexCut PRO torches Order KP5916-1

Plasma Straight & Angle Cutting Kit Guide for making straight cuts with any plasma cutting torch Order KP5917-1



OMNIShield™ Face Shield Shade 5 IR lens provides infrared light protection for plasma cutting applications Order K3754-1



FlexCut PRO FlexConnect Torch Includes 25 ft torch cable and Lincoln Electric's patented handheld FlexConnect torch head Order KP5850-25





105A Drag Cutting Consumable Kit Full consumable kit for handheld plasma cutting at 105A Order KP5829-105A

PRODUCT SPECIFICATIONS

Product Name	Product Number	Package Type	Input Power Voltage/Phase/ Hertz	Rated Output Current/Voltage/ Duty Cycle	Recommended Circuit Breaker	Output Range	Engine Drive Auxiliary Power Requirement	Gas Pressure	Dimensions HxWxD in (mm)	Net Weight Ib (kg)
FlexCut105	K5827-H	Handheld	200-600/3/50/60	80% 105 A 400-600 V 3-PH 100% 94 A 400-600 V 3-PH	50A	30A-105A	30kW for 105A	90-130 psi	27.2 (691)	90.6
	K5827-M	Mechanized							11.5 (292.1)	
	K5827-PS	Power Source Only							18.6 (472)	

For best cutting results with Lincoln Electric* equipment, always use Lincoln Electric consumables. Visit www.lincolnelectric.com for more details.

CUSTOMER ASSISTANCE POLICY

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