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

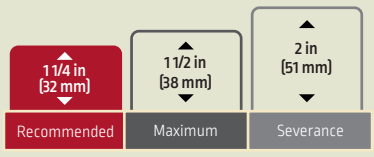
Applications »
Construction, Automation, Maintenance & Repair

Output »
DC

Input »
3 PHASE

Product Numbers »
K5827-H HANDHELD ASSEMBLY
K5827-M MECHANIZED ASSEMBLY
K5827-PS POWER SOURCE ONLY

Cut Performance - Mild Steel»



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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.
- **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™, 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



FlexCut PRO Mechanized FlexConnect Torch
Includes 25 ft torch cable and Lincoln Electric's patented mechanized FlexConnect torch head
Order KP5852-25



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

FLEXCUT TORCH BREAKDOWN

P/N	Description	FlexConnect Head	FlexConnect Cable
KP5848-12-5	FlexCut PRO 35 Air Torch - 12.5 FT	N/A	N/A
KP5849-25	FlexCut PRO Handheld Torch - 25 FT	N/A	N/A
KP5849-50	FlexCut PRO Handheld Torch - 50 FT	N/A	N/A
KP5850-25	FlexCut PRO Handheld FlexConnect Torch - 25 FT	KP5855-1	KP5839-25
KP5850-50	FlexCut PRO Handhled FlexConnect Torch - 50 FT	KP5855-1	KP5839-50
KP5852-25	FlexCut PRO Mechanized FlexConnect Torch - 25 FT	KP5853-1	KP5840-25
KP5852-50	FlexCut PRO Mechanized FlexConnect Torch - 50 FT	KP5853-1	KP5840-50

FLEXCONNECT TORCH HEADS

Part Number	Description
KP5853-1	FlexCut PRO FlexConnect Standard Mechanized Torch Head
KP5854-1	FlexCut PRO FlexConnect Mini Mechanized Torch Head
KP5855-1	FlexCut PRO FlexConnect 75° Handheld Torch Head
KP5856-1	FlexCut PRO FlexConnect 15° Handheld Torch Head
KP5838-1	FlexCut PRO FlexConnect Extended Reach Torch Head
KP5920-1	FlexCut PRO XL Extended Reach Torch Head

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 Required	Dimensions H x W x D in (mm)	Net Weight lb (kg)
FlexCut 105	K5827-H	Handheld	400-600/3/50/60	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 (41)
	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.

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