

FLEXCUT[®] 35

PLASMA CUTTER



CLEAR CUT PERFORMANCE

The FlexCut™ 35 delivers reliable cutting performance for small projects and light fabrication work. With steady power and consistent output, it keeps you moving without interruptions. Built for versatility and ease of use, it offers precision and durability in a compact, portable package. Perfect for everyday cutting of mild steel, aluminum, stainless steel, and grating, it's designed to run efficiently while keeping setup simple. Compatible with our FlexConnect™ Torch System giving you the flexibility to switch between torch heads or cables in seconds.

Processes »

Plasma Cutting, Grid cutting,

Applications »

On-site maintenance, Small construction sites, Air ducting installation (HVAC), Demolition work, & Rental

Output »



Input »



Product Numbers »

K5821-H HANDHELD ASSEMBLY
K5821-PS POWER SOURCE ONLY

Cut Performance - Mild Steel»



VALUE-ADDED FEATURES

- **35 Amps of Cutting Power:** Tackle thicker 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.
- **Dual Voltage Flexibility:** Plug into 120V or 230V power sources.
- **Multi-Process Capability:** Drag cutting and fine cutting with one machine for maximum versatility.
- **Portable Yet Rugged:** Portable design without compromising strength—easy to move, hard to damage.
- **Engine Drive Compatible:** Easy power your Flexcut in remote locations with a Lincoln Electric—recommended engine-driven welder/generator.
- **Industrial IP23S Protection:** Resists dust and water spray for dependable performance in challenging conditions.

KEY CONTROLS

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



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.



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.



CUTTING SPECIFICATIONS

Recommended Cut Thickness / Speed	1/4 in / 20 ipm
Maximum Cut Thickness / Speed	3/8 in / 10 ipm
Severance Cut Thickness / Speed	1/2 in / 5 ipm



WHAT'S INCLUDED

		Handheld Package K5821-H	Power Source Only K5821-PS
FlexCut® 35 Plasma Cutter	N/A	•	•
FlexCut® PRO Torch 25 ft	KP5849-25	•	
Air Filter	KP5843-1	•	•
Work Clamp & Cable	KP6035-1	•	•
Input Power Cord	N/A	•	•
Shoulder Strap	KP6012-1	•	•
Consumable Starter Kit	N/A	•	
120V Input Adapter	KP6034-1	•	•

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 Torch
Includes 25 ft torch cable
Order KP5849-25



Cutting & Grinding Goggles Full coverage shade 5 goggles for plasma cutting operations
Order K3118-1



35A Drag Cutting Consumable Kit
Full consumable kit for handheld plasma cutting at 35A
Order KP5829-35

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 35	K5821-H	Handheld	120/240/1/50/60	35% @ 35A [230V] 60% @ 31A [230V] 100% @ 21A [230V] 20% @ 27A [120V]	30A	15-35A	5.5kW for 35A	90-130 psi	14.1 x 8.1 x 18.4 [359 x 205 x 468]	26.6 [12.1]
	K5821-PS	Power Source Only								

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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