

FLEXCUT[®] 35 AIR

PLASMA CUTTER



CLEAR CUT PERFORMANCE

The FlexCut™ 35 Air delivers reliable cutting performance for small projects and light fabrication work. With steady power, consistent output, and a built-in air compressor, it keeps you moving without the need for shop air. The self-contained design makes setup faster, enhances portability, and ensures clean, reliable cuts anywhere you work. Built for versatility and ease of use, it offers precision and durability in a compact package. Perfect for everyday cutting of mild steel, aluminum, stainless steel, and grating, it's designed to run efficiently while keeping operation simple.

Processes »

Plasma Cutting, Grid cutting,

Applications »

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

Output »



Input »



Product Numbers »

K5822-H HANDHELD ASSEMBLY
K5822-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 grid cutting with one machine.
- **Portable Yet Rugged:** Portable design without compromising strength—easy to move, hard to damage.
- **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 Source |
| 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.



BUILT-IN AIR COMPRESSOR

Integrated Air Supply: Built-in compressor eliminates the need for an external air source, making setup faster and easier.

Consistent Air Pressure: Provides steady, regulated airflow optimized for cleaner, more reliable cuts.

Compact Footprint: Self-contained design allows you to cut anywhere, even on jobsites or locations without shop air.

Enhanced Portability: Delivers full cutting performance in any environment where mobility matters.

MORE CUTS. LESS COST. ZERO HASSLE.

Long-Life Consumables: Advanced electrode design and optimized airflow deliver more cuts per part, 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 K5822-H	Power Source Only K5822-PS
FlexCut® 35 Plasma Cutter	N/A	•	•
FlexCut® PRO Air Torch	KP5848-12-5	•	
Air Filter	KP5843-1	•	•
Work Clamp & Cable	KP6035-1	•	•
Input Power Cord	N/A	•	•
Shoulder Strap	KP6012-1	•	•
Complete Consumable Kit	KP5829-35A	•	
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



FlexCut PRO Torch
Includes 12.5 ft torch cable
Order KP5848-12-5



35A Drag Cutting Consumable Kit
Full consumable kit for handheld plasma cutting at 35A with the FlexCut Air's internal air compressor
Order KP5829-35A

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



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



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

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 [External Air Only]	Dimensions H x W x D in (mm)	Net Weight lb (kg)
FlexCut 35 Air	K5822-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	90-130PSI	18.4 [468] 8.1 [205] 14.1 [359]	35 [15.9]
	K5822-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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