

Tomahawk® 1000

Processes

Plasma Cutting, Gouging

For These Materials

Mild Steel, Brass, Stainless Steel, Copper, Aluminum

Product Number

K2808-1 Tomahawk® 1000 with Hand Torch

K2808-2 Tomahawk® 1000 with Machine Torch

Input Power

208-575/1/3/50/60

Rated Output Current/Duty Cycle

50% 60A@104V

100% 40A@96V

Output Range

20-60A

Air Pressure Required

87-109psi (6-7.5 Bar)

Air Flow Rate

80psi@275 SCFH

(5.5 bar@130 Liters/min)

Weight/Dimensions (H x W x D)

45 lbs. (20.4 kg)

15.2 x 8.5 x 22.1 in.

(385 x 215 x 561 mm)

See back for complete specs

Plasma Cutting - Anywhere, Anytime

The Tomahawk® 1000 plasma cutting system is portable enough to use on the jobsite and rugged enough to use on up to one inch material in a production environment. Hook up the compressed air, grab the torch and start cutting.

FEATURES

- ▶ **PowerConnect® Technology** – Automatically senses and adjusts to input power for a range of 200 up to 600 volts, single or three phase, 50 or 60 hertz. Cutting output remains constant throughout the entire input voltage range.
- ▶ **Continuous Output Control** – Focus the arc for different material thicknesses.
- ▶ **Touch Start™ System** – Reliable plasma arc initiation without high frequency.
- ▶ **Front Panel Purge Control** – Makes it easy to set the air flow rate without initiating the plasma arc.
- ▶ **Cool Operation, Long Consumable Life** – New electrode and nozzle design save you money in the long run
- ▶ **Added Safety** – Our Parts-in-Place™ system detects correct installation of consumables and torch.
- ▶ **Engine Drive Compatible** – Select a Lincoln Electric Ranger® or Vantage® to power your Tomahawk® in remote locations.
- ▶ **CNC (Computer Numeric Control) and Robotic Plasma Cutting** – Set up a fast, reliable production cutting cell with the optional machine torch.

APPLICATIONS

- ▶ On site maintenance
- ▶ Service tasks
- ▶ Construction sites
- ▶ Demolition work
- ▶ Rental
- ▶ Production/Fabrication
- ▶ Robotic plasma cutting



K2808-1 Shown

WHAT'S INCLUDED

K2808-1 Includes:

- ▶ LC65 hand torch
- ▶ 25 ft. (7.5 m) cable
- ▶ Air regulator and pressure gauge
- ▶ Internal water separator
- ▶ Work clamp and cable
- ▶ Spare consumables
- ▶ Input power cord

CUT PERFORMANCE - MILD STEEL

CNC Machine Torch		Hand Torch	
CNC Pierce/Cut	Recommended	Maximum	Severance
1/2 in (12.7 mm)	3/4 in (19.01 mm)	1 in (1.0 in) (25.4 mm)	1-1/4 in (31.75 mm)
Rated Cut @ 25 ipm (0.64 m/min)	Rated Cut @ 19 ipm (0.51 m/min)	Maximum cut @ 10 ipm (0.30 m/min)	Sever Cut @ 5 ipm (0.13 m/min)

INPUT



OUTPUT



Two Year Extended Warranty Available. One Year Warranty On Torch.

IP23 Rated



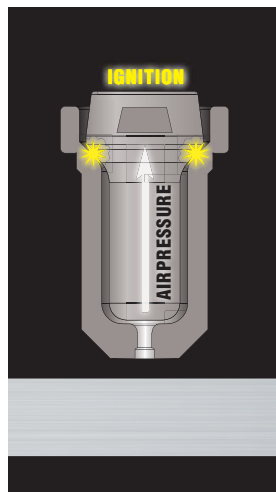
KEY CONTROLS

- 1 Mode Pushbutton
- 2 Air Pressure Gauge
- 3 Regulator Adjustment
- 4 Torch Connection
- 5 CNC Connector - for automation integration
- 6 Work Lead Connection
- 7 Output Current and Air Purge Control
- 8 Parts-in-Place (PIP) LED Indicator (Yellow)
- 9 Gas Pressure LED Indicator (Yellow)
- 10 Thermal Status LED Indicator (Yellow)
- 11 Output Status LED Indicator (Red)
- 12 Power On/Off LED Indicator (Green)
- 13 Gouge Mode – for removing material (Red)
- 14 Expanded Metal Mode – for cutting on grid work (Red)
- 15 Cut Mode LED Indicator - for solid piece (Red)
- 16 On/Off Power Switch
- 17 Input Cable
- 18 Cooling Fan
- 19 Air Inlet For External Compressed Air



LINCOLN ELECTRIC TORCH HEAD DESIGN

TORCH DESIGN FOR OPTIMAL STARTING AND PERFORMANCE

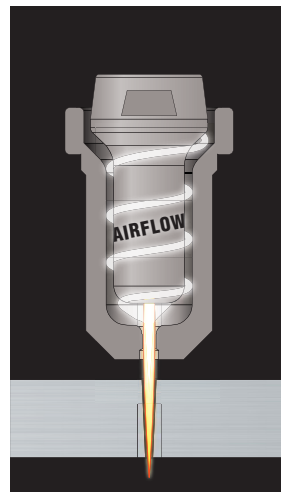


Starting

- Air pressure pushes the electrode back
- Ignition takes place on the 'shoulder'
- No damage to the tip



- Extended consumable lifetime
- Consistent starting without high frequency

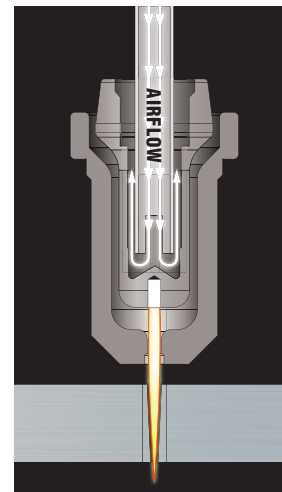


Performance

- Enhanced swirling airflow
- Improved radius and electrode/nozzle design



- More concentrated arc
- Faster cutting times
- Greater thickness cutting capacity



Lifetime

- Internal cooled electrode keeping the tip cool
- New torch head and electrode and nozzle design



- Increases life of consumable components
- Lower operating costs

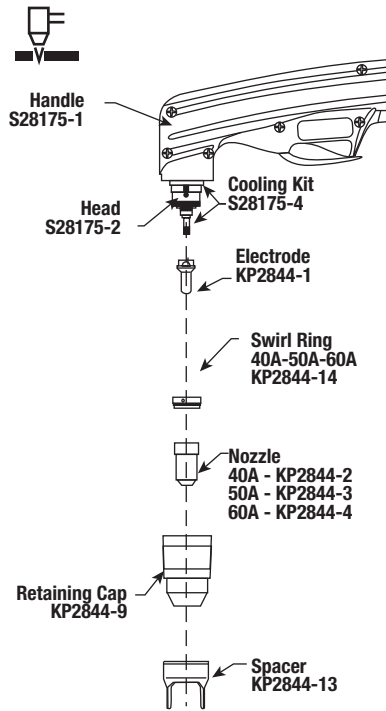
CUTTING CONFIGURATIONS

LC65 Parts

Standard

In the standard cutting configuration, the nozzle is designed for a user-maintained gap between the nozzle and the workpiece, unless the spacer is attached. Standard cutting allows maximum arc visibility and is recommended for higher current levels and thicker plate. Standard cutting parts are included with the torch.

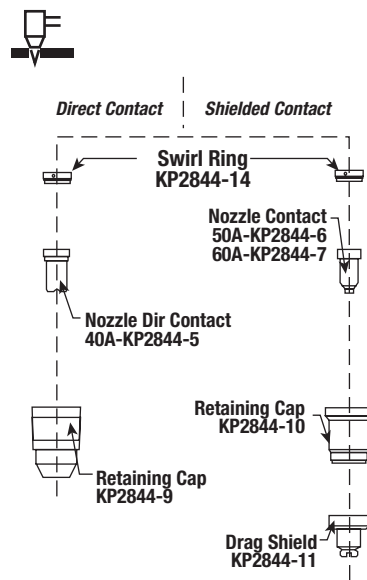
Standard



Direct Contact

Direct contact cutting uses special expendable parts that allow the torch to touch the work piece. This technique is recommended for low amperages and thinner plate thicknesses. A special optional nozzle is required for direct contact cutting. See consumables.

Contact



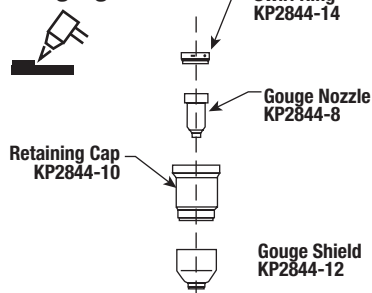
Shielded Contact

Shielded contact cutting uses special expendable parts that allow the torch to touch the work piece. A special optional nozzle and drag shield are required for shielded contact cutting. Recommended for 50-60 amp operation. See consumables.

Gouging

When gouging metal, a special optional gouging nozzle is used in conjunction with a shield to protect the nozzle from molten metal blow back. See consumables.

Gouging



TOMAHAWK® 1000 TORCH CONSUMABLES

Product Number	Description	
K2848-1	LC65 Handheld Plasma Torch 25 ft (7.5 m)	
K2848-2	LC65 Handheld Plasma Torch 50 ft (15 m)	
KP2844-1	Electrode (60A)	Standard
KP2844-4	Nozzle (60A)	Standard
KP2844-9	Retaining Cap (40A-60A)	Standard
KP2844-13	Spacer	Standard
KP2844-14	Swirl Ring (40,50,60A)	Standard
Optional Nozzles & Related Accessories: (Not Included in K2848-1 or -2)		
KP2844-2	Nozzle (40A)	Optional
KP2844-3	Nozzle (50A)	Optional
KP2844-5	Nozzle (Direct Contact) (40A)	Optional
KP2844-6	Nozzle (Shielded Contact) (50A)	Optional
KP2844-7	Nozzle (Shielded Contact) (60A)	Optional
KP2844-8	Nozzle (Gouging)	Optional
KP2844-10	Retaining Cap (Shielded Contact or Gouging)	Optional
KP2844-11	Drag Shield (50,60A)	Optional
KP2844-12	Gouge Shield	Optional
K2848-3	LC65M Machine Plasma Torch 25 ft (7.5m)	
KP2844-1	Electrode	Standard
KP2844-4	Nozzle (60A)	Standard
KP2844-9	Retaining Cap (40,60A)	Standard
KP2844-14	Swirl Ring (40,50,60A)	Standard
Optional Nozzles & Related Accessories: (Not Included in K2848-3)		
KP2844-2	Nozzle (40A)	Optional
KP2844-3	Nozzle (50A)	Optional
KP2844-6	Nozzle (Shielded Contact) (50A)	Optional
KP2844-7	Nozzle (Shielded Contact) (60A)	Optional
KP2844-8	Nozzle (Gouging)	Optional
KP2844-10	Retaining Cap (Shielded Contact or Gouging)	Optional
KP2844-12	Gouge Shield	Optional
KP2844-13	Spacer (50,60A)	Optional

- It is normal for the electrode to wear during operation.
- Electrodes should typically be replaced when erosion reaches 0.060 in. (1.5 mm).
- A green and erratic arc will indicate the end of electrode life. The electrode should be immediately replaced.
- It is recommended that the KP2844-1 Electrode and KP2844-4 Nozzle (60A) be replaced as a complete set.

RECOMMENDED ACCESSORIES



GENERAL OPTIONS

Accessory Bag
Canvas bag can be used to store your welding accessories and tools.
Order K3071-1



LC65M Machine Plasma Torch 25'
Add this machine torch for use on CNC plasma cutting tables.
K2848-3 25 ft (7.5 m)



LC65 Hand Plasma Replacement Torch
Includes 25 ft. (7.5 m) or 50 ft. (15 m) torch cable and one set of all required torch expendable parts.
Order K2848-1 25ft (7.5 m)
K2848-2 50ft (15 m)



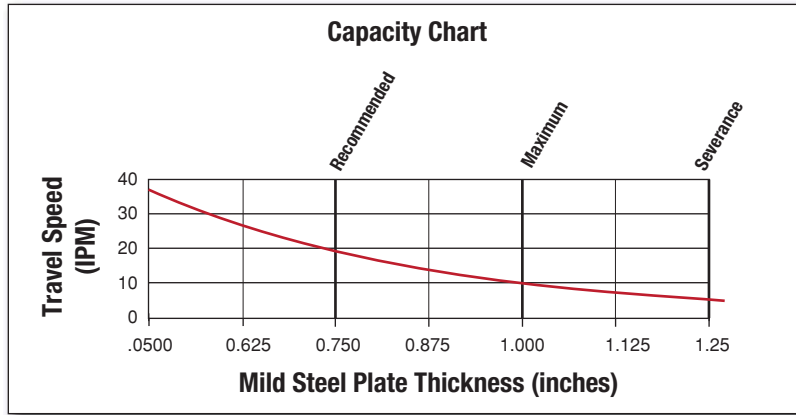
Small Canvas Cover
Protect your Tomahawk® when not in use. Made from red canvas that is flame retardant, mildew resistant and water repellent. Order K2377-1

PLASMA CUTTING OPTIONS



Plasma Circle Cutting Guide Kit
For cutting circles from 2 in. to 40 in. (50.8 - 1016 mm) in diameter. Works with all LC series plasma torches.
Order K2886-1

CUTTING PERFORMANCE – MILD STEEL



- Aluminum cutting speeds are typically 10-20% faster than mild steel.
- Stainless steel cutting speeds are typically 10-20% slower than mild steel.

COMPATIBLE ENGINE DRIVES ⁽¹⁾



(1) When run in the high idle mode

PRODUCT SPECIFICATIONS

Product Name	Product Number	Input Power	Rated Output Current Duty Cycle	Input Current @ Rated Output	Pilot Current	Output Range	Air Pressure Required	Air Flow Rate	Dimensions H x W x D in. (mm)	Net Weight Without Torch lbs (kg)
Tomahawk® 1000 with Hand Torch	K2808-1	208-575/1 /3/50/60	100% 40A@96V 50% 60A@104V	37.8A (Max)	20A	20-60A	87-109psi (6-7.5 Bar)	80psi@275-SCFH 5.5 Bar@ 130 Liters/min.	15.2 (385) 8.5 (215) 22.1 (561)	45 (20.4)
Tomahawk® 1000 with Machine Torch	K2808-2									

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THE WELDING EXPERTS®