



**THERMAL DYNAMICS®**  
**Professional**



## **PAK® 200**

**MANUAL Air-Plasma Cutting & Gouging System**



**Cuts Mild Steel  
up to 2 3/4"**

- **200 Amps Cutting Power**
- **100% Duty Cycle**
- **Dual Gas for Non-Ferrous**
- **High Gouging Removal Rate**
- **Tip Save for Optimal Tip Life**



Maximum

Recommended

**1 1/2" (40mm)**

**2 3/4" (70mm)**

# **PAK® 200 Plasma Cutting System**

- **200 Amps of Cutting Power** – This unit is capable of hand cutting at 200 Amps with the ability to cut up to 2<sup>3/4</sup>" on Mild Steel. At full output this unit will cut 10 ipm (254mm/min) on 2" (51mm) carbon steel.
- **100% Duty Cycle** – This machine offers 100% duty cycle at full output.
- **Dual Gas Capability** – The dual gas system ensures superior quality and performance on ferrous and non-ferrous materials.  
 (Plasma Gas: Air, ArH<sub>2</sub> Secondary Gas: Air, N<sub>2</sub>)
- **High Gouging Removal Rate** – With the ability to remove up to 25 lbs. (11.3kg) of carbon steel per hour.
- **Tip Saver for Optimal Tip Life** – This ensures that any accidental contact between the tip and the work at high power levels will not damage the tip.



## **Specifications**

<b>Cut Capacity:</b>	1 <sup>1/2</sup> " (40mm) Recommended 2 <sup>3/4</sup> " (70mm) Maximum 1 <sup>1/4</sup> " (35mm) Pierce	<b>Input Amps @ Rated Output:</b> 3 Phase 130A @ 208V 125A @ 230V 77A @ 400V 75A @ 460V 58A @ 600V
<b>Output Current:</b>	35 – 200 Amps	
<b>Input Power:</b>	208/230-460V, 3 Phase, 50-60 Hz 400V 3 Phase, 50-60 Hz 600V 3 Phase, 50-60 Hz	<b>Plasma Gas:</b> Air, ArH <sub>2</sub>
<b>Kilowatt Output:</b>	40kW	<b>Secondary Gas:</b> Air, N <sub>2</sub>
<b>Duty Cycle:</b>	100% @ 200A	<b>TORCH CONFIGURATION</b>
<b>Dimensions:</b>	Depth: 38.5" (978mm) Width: 27.5" (700mm) Height: 48.75" (1238mm)	<b>Torch:</b> PCH200 Hand/Machine 70/90/180°, 25 ft. (7.6m) or 50 ft. (15.2m) Leads
<b>Weight:</b>	487 lbs. (221kg) Fully Assembled Power Supply	<b>Warranty:</b> 2 Years Parts & Labor (Power Supply) 1 Year Parts & Labor (Torch)

## **Features and Applications**

### **Features:**

- Up to 200 Amps Output for Faster Cuts
- 100% Duty Cycle at 200 Amps
- Energy Efficient Inverter Technology
- Dual Gas Capability for Significant Improvement in Cut Quality Control
- MaximumLife® Parts
- Exclusive Tip Saver™ Circuit
- Smart Start™ Auto Pilot Restart
- Smart Logic™ Over Voltage Protection

### **Applications:**

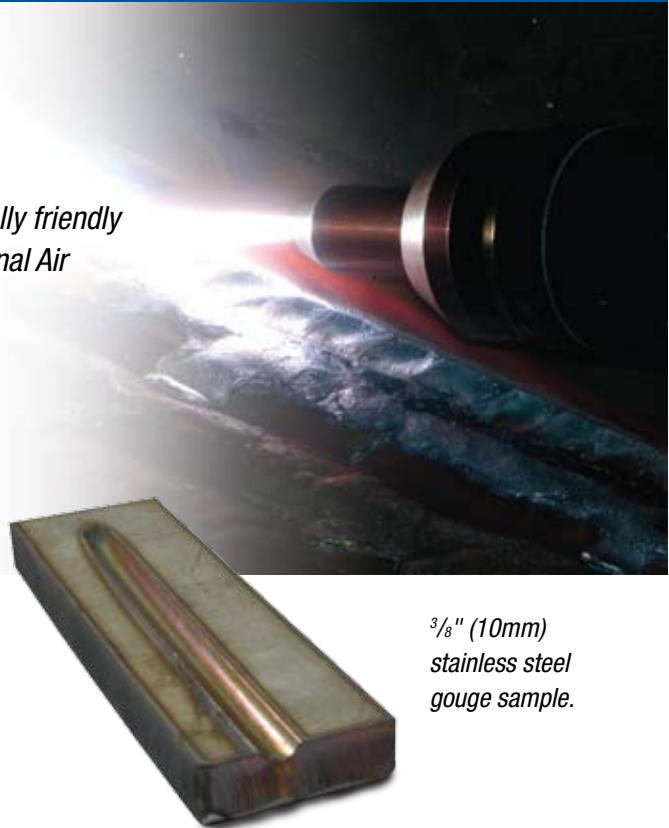
- General Fabrication of Carbon Steel, Stainless Steel and Aluminum
- Over the Road Transport Trailers
- Railroad Maintenance
- Vessel Manufacturing
- Pipe Beveling and Fabrication
- Petroleum Refineries
- Foundries
- Chemical Plants
- Mining Operations
- Ship Building

# **PAK® 200**

## **Plasma Arc Gouging (PAG)**

*Plasma Arc Gouging is fast, economical and an environmentally friendly method for removing metal. When compared with Conventional Air Carbon Arc gouging (CAC-A), Plasma Arc Gouging offers:*

- **Simple Operation**
- **Easy Acceptance from Operators**
- **Clear Visibility of Gouging Area**
- **High Material Removal Rates**
- **Reduced Noise for Operator and Other Personnel in Surrounding Area**
- **Reduced Smoke in Workplace**
- **Cutting Capability of up to 2<sup>3</sup>/<sub>4</sub>" (70mm) with a Consumable Parts change**



*Plasma Arc Gouging may be used on many metals, including: carbon steel, stainless steel, cast iron, aluminum, brass and bronze. Some common applications for Plasma Arc Gouging are:*

- **Railroad Car Repair – Removing Journal Liners, Repairing Brakes in Boilers and Fire Boxes, Preparing Worn Wheels for Re-welding**
- **Chemical Plants/Refineries – Preparing Joints on Non-ferrous Piping and Equipment**
- **Over the Road Vehicle Repair – Steel, Aluminum and Stainless Steel Tanker Repair**
- **Tank Manufacturing – Automated and Manual Back Gouging of Welds**
- **Heavy Equipment Repair – Removal of Hard Surfacing Material**
- **Food & Beverage Facilities – Repairing Stainless Steel Equipment**
- **Power Plant Maintenance – Removing Cavitation from Power Plant Turbines, Repairing Tube Sheets**
- **Foundry Work – Removal of Gates and Risers**

# Manual Plasma Cutting System

## Cuts Mild Steel up to 2<sup>3/4</sup>"

**Thermal Dynamics**  
Professional

## PAK® 200 Manual System

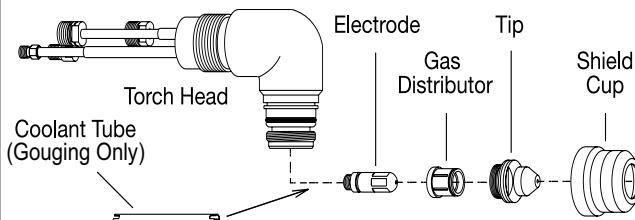
All manual systems include Power Supply, Torch and Leads, Spare Parts Kit, 25 ft. (7.6m) Work Cable & Clamp, and Torch Coolant.

### Ordering Information

Product Description	Catalog No.				Product Description	Catalog No.
Power Supply & Lead	230V/460V*	400V	400V CE	600V	Accessories/Options	
PAK 200 - 70° Torch/25'(7.6m) Leads	1-1533	1-1539	1-1541	1-1543	Torch Guide/Circle Cutting Attachment	7-7505
PAK 200 - 70° Torch/50'(15.2m) Leads	1-1534	1-1540	1-1542	1-1544	10'(3m) Plasma Supply Hose	9-2146
PAK 200 - 90° Torch/25'(7.6m) Leads	1-1535			1-1545	10'(3m) Secondary Supply Hose	9-2147
PAK 200 - 90° Torch/50'(15.2m) Leads	1-1536			1-1546	Remote Pendant Control	7-3460
PAK 200 - 180° Torch/25'(7.6m) Leads	1-1537				Wheel Kit	9-9379
PAK 200 - 180° Torch/50'(15.2m) Leads	1-1538					
<b>Torch &amp; Leads Packages Only</b>						
PCH-200 / 70° / 25'(7.6m) Leads		2-0009				
PCH-200 / 70° / 50'(15.2m) Leads		2-0010				
PCH-200 / 90° / 25'(7.6m) Leads		2-0012				
PCH-200 / 90° / 50'(15.2m) Leads		2-0013				
PCH-200 / 180° / 25'(7.6m) Leads		2-0015				
PCH-200 / 180° / 50'(15.2m) Leads		2-0016				

\*Shipped in 460V configuration

### Consumable Part Identifier



### Torch Consumable Parts

Catalog No.	Parts Description
32-1325	Shield Cup, Standard
32-1326	Crown Shield Cup (manual cutting)
32-1527	Shield Cup Gouging
32-1323	Tip, 200A
32-1330	Tip, 150A
32-1321	Tip, 70A
32-1322	Tip, 55A
32-1320	Tip, 35A
32-1512	Tip (0.110) Gouging
32-1513	Tip (0.125) Gouging
32-1514	Tip (0.156) Gouging
32-1515	Tip (0.171) Gouging
32-1315	Gas Distributor, Cutting
32-1509	Gas Distributor, Gouging
32-1310	Electrode, Air Cutting
32-1311	Electrode, Multi-Gas Cutting
32-1504	Electrode, Air, Gouging
32-1505	Electrode, ArH <sub>2</sub> , Gouging
32-1502	Coolant Tube Extension, Gouging
20-0001	Wrench
8-4025	O-Ring Lubricant
9-4173	Parts Box

**U.S. Customer Care: 800-426-1888 / FAX 800-535-0557 • Canada Customer Care: 905-827-4515 / FAX 800-588-1714  
International Customer Care: 905-827-9777 / FAX 905-827-9797 • www.thermal-dynamics.com**



WORLD HEADQUARTERS: 16052 Swingley Ridge Road, Suite 300 • St. Louis, Missouri 63017 U.S.A.

#### THE AMERICAS

Denton, TX USA  
U.S. Customer Care  
Ph: (1) 800-426-1888

Fax: (1) 800-535-0557

Miami, FL USA  
Sales Office, Latin America  
Ph: (1) 954-727-8371  
Fax: (1) 954-727-8376

Oakville, Ontario, Canada  
Canada Customer Care  
Ph: (1) 800-827-4515  
Fax: (1) 800-588-1714

International Customer Care  
Ph: (1) 905-827-9777  
Fax: (1) 905-827-9797

#### EUROPE

Chorley, United Kingdom  
Customer Care  
Ph: (44) 1257-261755

Fax: (44) 1257-224800

Milan, Italy  
Customer Care  
Ph: (39) 0236546801  
Fax: (39) 0236546840

#### ASIA/PACIFIC

Cikarang, Indonesia  
Customer Care  
Ph: 62 21+ 8983-0011 / 0012  
Fax: 62 21+ 893-6067

Osaka, Japan  
Sales Office  
Ph: (39) 0236546801  
Fax: (39) 0236546840

Melbourne, Australia  
Australia Customer Care  
Ph: 1300-654-674  
Fax: 613+ 9474-7391

International  
Ph: 613+ 9474-7508  
Fax: 613+ 9474-7488

Rawang, Malaysia  
Customer Care  
Ph: 603+ 6092-2988  
Fax: 603+ 6092-1085

International  
Ph: 613+ 9474-7508  
Fax: 613+ 9474-7488

Shanghai, China  
Sales Office  
Ph: 86-21-64072626  
Fax: 86-21-64483032

Singapore  
Sales Office  
Ph: 65+ 6832-8066  
Fax: 65+ 6763-5812