



THERMAL DYNAMICS®

Professional

PAK® 200

MANUAL Air-Plasma Cutting & Gouging System



***Cuts Mild Steel
up to 2³/₄"***

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

Recommended

1¹/₂" (40mm)

Maximum

2³/₄" (70mm)

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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 2³/₄" 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, ArH₂ Secondary Gas: Air, N₂)
- **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

Cut Capacity:	1 ¹ / ₂ " (40mm) Recommended 2 ³ / ₄ " (70mm) Maximum 1 ¹ / ₄ " (35mm) Pierce
Output Current:	35 – 200 Amps
Input Power:	208/230-460V, 3 Phase, 50-60 Hz 400V 3 Phase, 50-60 Hz 600V 3 Phase, 50-60 Hz
Kilowatt Output:	40kW
Duty Cycle:	100% @ 200A
Dimensions:	Depth: 38.5" (978mm) Width: 27.5" (700mm) Height: 48.75" (1238mm)
Weight:	487 lbs. (221kg) Fully Assembled Power Supply

Input Amps @ Rated Output:	130A @ 208V
3 Phase	125A @ 230V 77A @ 400V 75A @ 460V 58A @ 600V

Plasma Gas:	Air, ArH ₂
Secondary Gas:	Air, N ₂

TORCH CONFIGURATION

Torch:	PCH200 Hand/Machine 70/90/180°, 25 ft. (7.6m) or 50 ft. (15.2m) Leads
Warranty:	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:

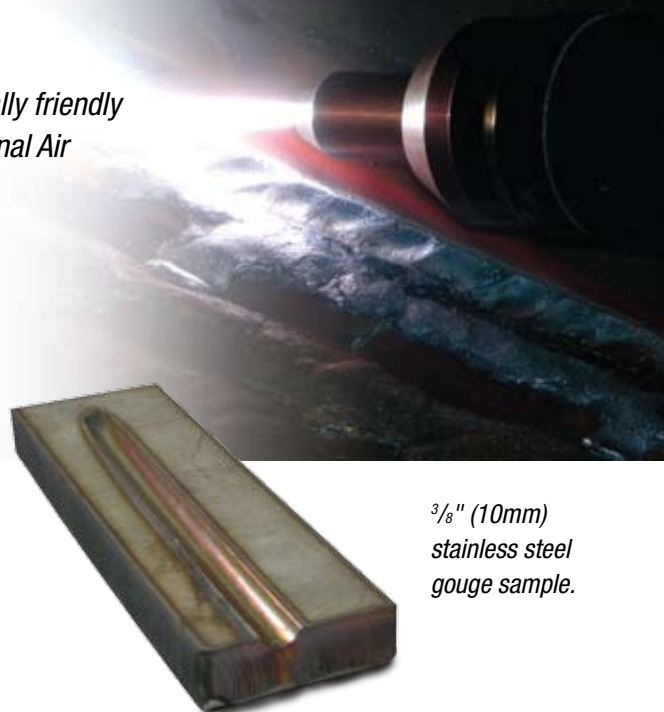
- General Fabrication of Carbon Steel, Stainless Steel and Aluminum
- Over the Road Transport Trailers
- Railroad Maintenance
- Vessel Manufacturing
- Pipe Beveling and Fabrication
- Petroleum Refineries
- Foundries
- Chemical Plants
- Mining Operations
- Ship Building

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 2³/₄" (70mm) with a Consumable Parts change**



*3/₈" (10mm)
stainless steel
gouge sample.*

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**

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

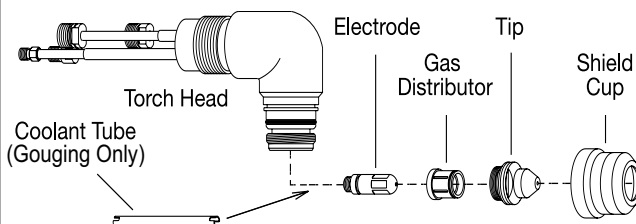
Product Description	Catalog No.			
Power Supply & Lead	230V/460V*	400V	400V CE	600V
PAK 200 - 70° Torch/25' (7.6m) Leads	1-1533	1-1539	1-1541	1-1543
PAK 200 - 70° Torch/50' (15.2m) Leads	1-1534	1-1540	1-1542	1-1544
PAK 200 - 90° Torch/25' (7.6m) Leads	1-1535			1-1545
PAK 200 - 90° Torch/50' (15.2m) Leads	1-1536			1-1546
PAK 200 - 180° Torch/25' (7.6m) Leads	1-1537			
PAK 200 - 180° Torch/50' (15.2m) Leads	1-1538			

Torch & Leads Packages Only	
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

Product Description	Catalog No.
Accessories/Options	
Torch Guide/Circle Cutting Attachment	7-7505
10' (3m) Plasma Supply Hose	9-2146
10' (3m) Secondary Supply Hose	9-2147
Remote Pendant Control	7-3460
Wheel Kit	9-9379

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 ₂ , 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



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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) 905-827-4515
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: 816-4809-8411
Fax: 816-4809-8412

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

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

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