



# ESP-150 PLASMARC® CUTTING & GOUGING SYSTEM

## ESP-150 Plasmarc™ System

This versatile, all encompassed heavy duty water cooled plasma cutting and gouging system is ideal for manual and mechanized applications.

- Greater productivity—high speed cutting of most metals from gauge thickness to 2- in. thick plate
- Versatility—230/460/575 and 220/380/415 volt three-phase inputs
- Greater variation - adjustable output—25 to 150 A
- Built-In Water Cooler—simplifies maintenance, less hookup, no wiring issues, no extra hoses. Water flow is controlled with power supply
- Water cooled Torch PT-26
- Leather sheath wrapped torch—protects torch leads from abrasion and molten metal
- Cuts with air, nitrogen, argon-hydrogen mixtures or nitrogen-hydrogen mixtures
- Built-In CNC interface provides easy connection of automation applications
- Torch design provides perfect electrode centering—provides longer tip life by minimizing the possibility of double-arcing
- Torch spare parts kit supplied with each outfit—ample supply of spare parts at no additional cost to minimize downtime
- Thermal overload switches—prevents damage if unit overheats due to insufficient air flow
- Line voltage compensation
- Automatic intermittent cutting—additional capability, permits continuous cutting of grates, expanded metal, heavy screen material, etc.
- Wheels and cylinder rack—all provided standard at no additional cost for portability and greater utilization
- Ideal for plasma gouging
- Three year warranty on console
- One Year warranty on torch

## Specifications

Cuts 2 in. (50.8m); Severs 2 1/2 in. (63.5mm)	
Output 90% duty cycle.....	150 A @ 120 V
100% duty cycle.....	140 A @ 120 V
Open Circuit Voltage.....	370 vdc
Input 3 phase.....	112/56/45 A, 230/460/575 vac, 60 Hz
Input 3 phase.....	121/70/64 A, 220/380/415 vac, 50 Hz
Dimensions Length.....	40 in. (1016 mm)
Height.....	31.5 in. (800 mm)
Width.....	21.75 in. (552 mm)
Weight .....	756 lbs. (308 kg)

Instruction Literature 230/460/575 V ..... F-15-687  
 400V "CE" ..... 0558003744 and 0558004122  
 Sales Literature ..... PAC-21062



## Torch

PT-26 - 70°, 90° or In-Line

## How to Order

The ESP-150 package includes console, PT-26 torch with leather sheath, torch spare parts kit, 25 ft. (7.6 m) or 50 ft. (15.2 m) work cable, TR-21 truck with dual cylinder rack, regulators and gas hoses and torch coolant.

## Ordering Information

### ESP-150 with PT-26 Packages

#### 230/460/575 V, 60Hz, 3 Phase

ESP-150, 25 ft. PT-26 70° Air .....	0558002909
ESP-150, 50 ft. PT-26 70° Air .....	0558002910
ESP-150, 25 ft. PT-26 90° Air .....	0558002911
ESP-150, 50 ft. PT-26 90° Air .....	0558002912
ESP-150, 25 ft. PT-26 InLine/Air .....	0558002913
ESP-150, 50 ft. PT-26 InLine/Air .....	0558002914
ESP-150, 25 ft. PT-26 70° Ar+H <sub>2</sub> Mix.....	0558002915
ESP-150, 50 ft. PT-26 70° Ar+H <sub>2</sub> Mix.....	0558002916
ESP-150, 25 ft. PT-26 90° Ar+H <sub>2</sub> Mix.....	0558002917
ESP-150, 50 ft. PT-26 90° Ar+H <sub>2</sub> Mix.....	0558002918
ESP-150, 25 ft. PT-26 InLine/Ar+H <sub>2</sub> Mix .....	0558002919
ESP-150, 50 ft. PT-26 InLine/Ar+H <sub>2</sub> Mix .....	0558002920

### ESP-150 with PT-26 Export Packages

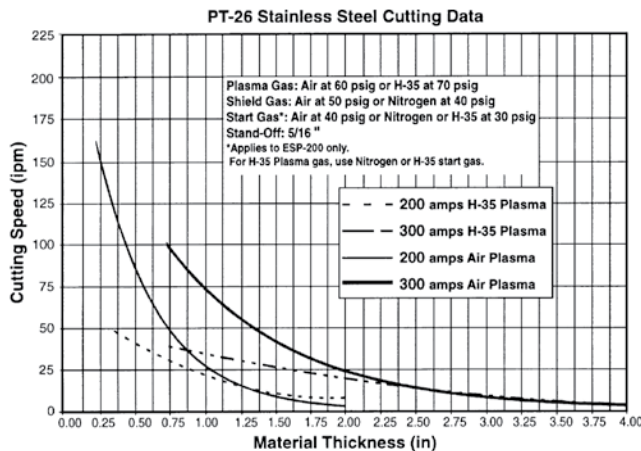
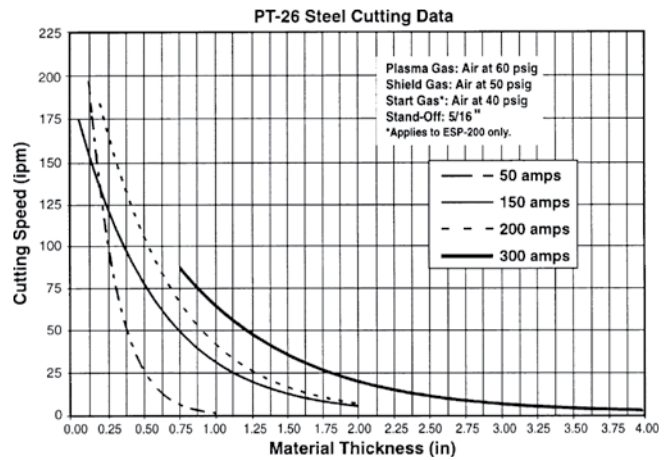
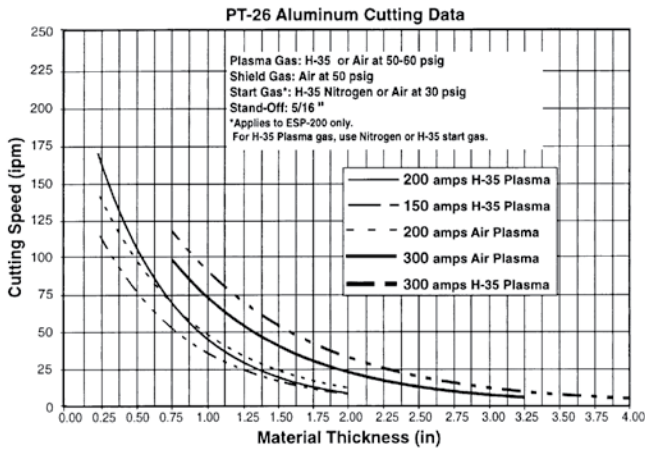
#### 380/400/415 V "CE" 50 Hz, 3 Phase

ESP-150, 25 ft. PT-26 70° Air .....	0558003472
ESP-150, 50 ft. PT-26 70° Air .....	0558003473
ESP-150, 25 ft. PT-26 90° Air .....	0558003474
ESP-150, 50 ft. PT-26 90° Air .....	0558003475
ESP-150, 25 ft. PT-26 InLine/Air .....	0558003476
ESP-150, 50 ft. PT-26 InLine/Air .....	0558003477

### ESP-150 with PT-19XLS Packages

#### 230/460/575 V, 60Hz, 3 Phase

ESP-150, 25 ft. 19XLS, Air Station Regulators.....	0558004773
ESP-150, 50 ft. 19XLS, Air Station Regulators.....	0558004578
ESP-150, 25 ft. 19XLS, Multi-Gas Station Regulators.....	0558004774
ESP-150, 50 ft. 19XLS, Multi-Gas Station Regulators.....	0558004637
ESP-150, 25 ft. 19XLS, H35/N <sub>2</sub> Cylinder Regulators...	0558004776
ESP-150, 50 ft. 19XLS, H35/N <sub>2</sub> Cylinder Regulators...	0558004775



## ESP-150 with PT-19XLS Export Packages 220/400 "CE", V50Hz, 3 Phase

ESP-150, 7.6m 19XLS, Air Station Regulators .....0558004771  
 ESP-150, 15m 19XLS, Air Station Regulators .....0558004677  
 ESP-150, 7.6m 19XLS, Multi-Gas Station Regulators 0558004772  
 ESP-150, 15m 19XLS, Multi-Gas Station Regulators .0558004638

All PT-19XLS packages include the power supply, torch, 3 gas regulators, start-up kit, torch repair & accessories kit, a remote hand switch, CNC interface cable and 4 gallons of torch coolant.

The multi-gas packages include three R-6702 regulators that can be used with any non-corrosive gas.

The cylinder regulator packages include a cylinder cart, one N<sub>2</sub> and two N<sub>2</sub>/H35 cylinder regulators and three 25' hoses.

The ESP-150 PT-19XLS can also be configured with a plumbing box for applications that require a long distance between the torch and the power supply or in automated applications that require a reduced level of high frequency emissions. Contact your ESAB representative for information on these customized packages.

## Optional Accessories

**150 amp Spare Parts Kit** .....0558002864  
**Remote Hand Switch**

Permits remote starting and stopping of cutting process; used primarily for mechanized cutting 25 ft. (7.6m) .....2075600  
 50 ft. (15m) .....0558004781

**25 ft. (7.6 m) Leather Sheath**  
 Protects torch leads from abrasion and molten metal; particularly recommended for plasma gouging .....0558002921

**50 ft. (15.2 m) Leather Sheath\*** .....0558002922

**Plasma Flow Measuring Kit**  
 This valuable troubleshooting tool allows measurement of the actual plasma gas flow through the torch.....19765

**Plasma Torch Head Protector**  
 For gouging .....20806

**Trigger Latch Kit**  
 (Factory Installed Only) .....0588000939

\* Standard on manual torches.

ESP  
Mechanized



## Plasmarc™ Package Selection Guide

Model	See Page	Output Current	Cycle	Torch Compatibility											Cut Capacity Carbon Steel		
				Duty PT-34	PT-31 XL	PT-31 XLPC	PT-32 EH	PT-37	PT-38	PT-251	PT-26	PT-35	PT-20AMX PT-21AMX	PT-19XLS PT600			
Handy Plasma® 125	8	11 A	30%	●													1/8 inch 3.18 mm
Handy Plasma® 250	9	18 A	20%		●												1/4 inch 6.35 mm
Handy Plasma® 380	10	15-30 A	35%		●												3/8 inch 9.5 mm
Handy Plasma® 550	11	15-35 A	40%		●												1/2 inch 12.7mm
PowerCut® 650	13	22-40 A	100%			●											5/8 inch 15.9 mm
PowerCut® 875	15	10-60 A	60%				●										7/8 inch 22 mm
PowerCut® 1300	17	20-70 A	60%					●	●								1 1/4 inch 32 mm
PowerCut® 1600	19	20-90 A	40%					●	●								1 1/2 inch 38 mm
ESP-50	21	20-50 A	100%									●					1/2 inch 12.7 mm
ESP-101	23	25-100 A	100%					●									1 1/4 inch 32 mm
ESP-150	24	30-150 A	90%								●			●			2 inch 50.8 mm
ESP-200	28	50-200 A	100%									●		●			2 inch 50.8 mm
Deuce Pack 150	26	30-300 A	90%							●	●				Special Order		4 inch 101.6mm

## Plasmarc™ Torch Selection Guide

Torch	See Page	Output	Torch Type	Cutting Gas	Shielding Gas	Cooling Method	Torch Head Angle	Lengths Available	Power Supply Compatibility
PT-34	8	11 A	Man	Air	N/A	Gas	75°	15 ft.	HandyPlasma® 125
PT-31XL	32	50 A	Man	Air	N/A	Gas	75°	25 & 50 ft.	PCM-500i HandyPlasma® 550, HandyPlasma® 380
PT-31XLPC	32	50 A	Man	Air	N/A	Gas	75°	25 & 50 ft.	PowerCut® 650
PT-27	41	80 A	Man	Air	N/A	Gas	75°	25 & 50 ft.	PCM-875, PCM-1125
PT-32EH	34	90 A	Man	Air	N/A	Gas	90°	25 & 50 ft.	PowerCut® 875, PowerCut® 1125, PowerCut® 1250, PowerCut® 1500
PT-37	37	100	Mech	Air	N/A	Gas	In Line	4-1/2, 17, 25, 50 ft.	PowerCut® 1300, PowerCut® 1600, ESP-101
PT-38	39	90	Man	Air	N/A	Gas	90°	25, 50 ft.	PowerCut® 1300, PowerCut® 1600, ESP101
PT-25	45	100 A Air 150 A N <sub>2</sub> ,H-35	Man	Air, N <sub>2</sub> , H-35	Air, N <sub>2</sub> ,CO <sub>2</sub>	Gas	90°	25 & 50 ft.	ESP-100i
PT-251		300 A	Man &	H-35 Mech	N/A	Water	70° & 90°	25 & 50 ft.	Deuce Pack 150
PT-26	47	300 A	Man & Mech	Air, N <sub>2</sub> , H-35	Air, N <sub>2</sub> , CO <sub>2</sub>	Water	70°, 90° & 180°	25 & 50 ft.	Deuce Pack 150, ESP-150, ESP-200
PT-20AMX PT-21AMX	51	100 A	Mech	Air	N/A	Gas	Inline	4-1/2, 17, 50 ft.	ESP-100i, PCM-150, (w/adaptor): PCM-875, PCM-1125, (PC-1250, PC-1500 w/PT-2 AMX only)
PT-35	21	50 A	Mech	Air	N/A	Gas	Inline	25 & 50 ft.	ESP-50

### Recommended Cutting Gases

**Compressed Air** is the most commonly used gas for lower current plasma cutting and works well for most metals from gauge thickness to 1 in. (25.4 mm). It leaves an oxidized cut surface. Compressed air can also be used for plasma gouging on carbon steel.

**Nitrogen** is often used for higher current plasma systems and for cutting materials up to 3 in. (76.2 mm) thick. It produces excellent quality cuts on most materials.

**Oxygen** is used when the highest quality mechanized cuts are desired on carbon steel up to 1-1/4 in. (31.75 mm) thick. The cut face is smooth, and dross is easy to remove. Oxygen can also be used on stainless steel and aluminum, but it produces a rougher cut face.

**Argon-Hydrogen Mixtures** are generally used for cutting stainless steel and aluminum. They produce a clean, high quality cut face. Argon-Hydrogen is required for mechanized cutting of any material more than 3 in. (76.2 mm) thick. This mixture also provides an excellent gas for plasma gouging on all materials.

### Plasmarc™ Cutting Package Capabilities

