

*Imagine harnessing the power of the sun in your workshop.*

Plasma welding is a sophisticated welding process that utilizes an ionized gas known as plasma to produce an extremely high temperature arc.

This method is renowned for its precision, making it ideal for intricate work on thin or thicker metals and is more forgiving than Laser welding.

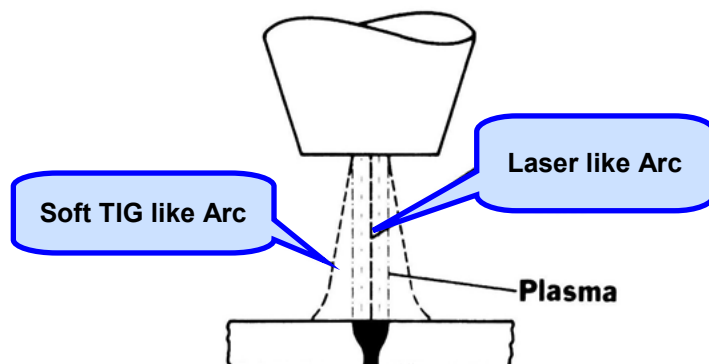
The process begins with the ionization of gas, often argon, to create plasma. This Plasma is then directed through a nozzle to generate a concentrated, high-temperature arc. The heat from this arc melts the metals, which fuse together upon cooling.

## Features and Benefits of the SANPAW 150PW

- **Precision:** The concentrated arc allows for precise control, making it suitable for delicate work.
- **Versatility:** (Handheld or Automation) Capable of welding both thin and thick materials with a Soft TIG like Arc or a stiff columnar Laser like arc.
- **Consistency:** Produces high quality welds with minimal distortion.



- **Plasma Welding Torch:** Dual Flow, with Plasma Gas and Shield Gas options.



- **Welding Arc Modes:** Soft Tig like Arc or Laser like Arc.



**Applications:** Plasma welding is widely used in industries such as aerospace, automotive, and electronics, where precision and quality are paramount.

# SANPAW 150PW

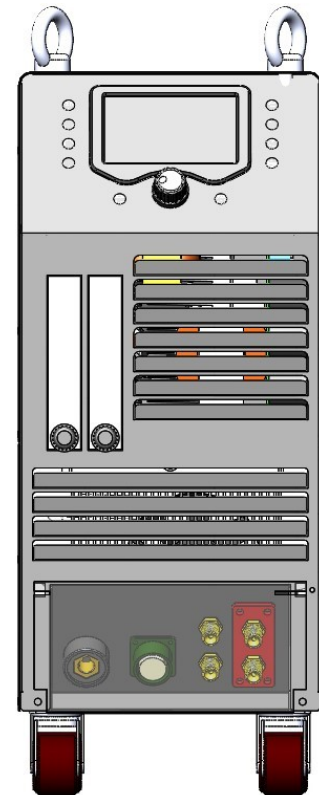
## DC Plasma Welding

The SANPAW 150PW system is shipped with a SANPAW 150PW unit, Gas Hoses, Dinse Plug, Coolant and the appropriate torch with a torch spare parts kit. Systems do not include Work Lead, Regulators or remotes. Select system and accessories below.

Torch (Rating)	System Description	w/12.5 ft. Torch and Leads	w/25 ft. Torch and Leads
P-75 (75 amps)	PWH-75, 70 degree	PAW150P7570H125	PAW150P7570H25
	PWH-75, 90 degree	PAW150P7590H125	PAW150P7590H25
	PWH-75, 180 degree	PAW150P75180H125	PAW150P75180H25
	PWM-75, 180 degree	PAW150P75180M125	PAW150P75180M25
P-15 (150 amps)	PWH-15, 70 degree	PAW150P1570H125	PAW150P1570H25
	PWH-15, 90 degree	PAW150P1590H125	PAW150P1590H25
	PWH-15, 180 degree	PAW150P15180H125	PAW150P15180H25
	PWM-15, 180 degree	PAW150P15180M125	PAW150P15180M25
P-22 (200 amps)	PWH-22, 70 degree	PAW150P2270H125	PAW150P2270H25
	PWH-22, 90 degree	PAW150P2290H125	PAW150P2290H25
	PWH-22, 180 degree	PAW150P22180H125	PAW150P22180H25
	PWH-22A, 180 degree	PAW150P22180H125	PAW150P22180H25
	PWM-22, 180 degree	PAW150P22180M125	PAW150P22180M25
	PWM-22A, 180 degree	PAW150P22180MA125	PAW150P22180MA25

- PWH designates a torch with a molded handle. **(Good for Hand Held.)**
- PWM designates a torch with rack and pinion.
- Torch amperage rating based on minimum electrode set back.

SANPAW 150PW (Unit Only)	IDU-W150PW-U1DVP
12.5 ft. Gas Hose (2 Required)	MS1000
Argon Regulator	MS1005
Hydrogen Regulator	MS1006
Note: 2 regulators required , one for Plasma Gas and one for Shield Gas.	
25ft. Foot Control	FC1001
25ft. Hand Pendant	HP1425
1ft. Adaptor, 14-Pin Amp to 14-Pin Amphenol.	ADC001
15ft. Work Lead	WCE0006
Coolant (Sold by the Gallon = 1 Gallon.)	TK1014
Coolant (Sold by the Box = 4 Gallons).	TK1014B
Running Gear Dual Cylinder Rack	MS1105



## 150PW Easy find Guide



Part No.	Description
IDU-W150PW-U1DVP	150PW
MS1105	Running Gear/Cylinder Rack
TK1014B	Coolant (Sold by Box = 4 Gallon)



**Plasma Welding Torch**  
Select Torch from Page 4  
(H = Phenolic Handle, M = Rack & Pinion)



Part No.	Description
P75-2000	P75 Torch Kit
P15-2000	P15 Torch Kit
P22-2000	P22 Torch Kit



Part No.	Description
MS1005	Argon Regulator (Plasma Welding)
MS1006	Argon/Hydrogen Regulator (Plasma Welding)



Part Number	Description
MS1000	12.5ft. Gas Hose.



Part Number	Description
WCE0006	15ft. Work Lead
WCE0008-25	25ft. Work Lead

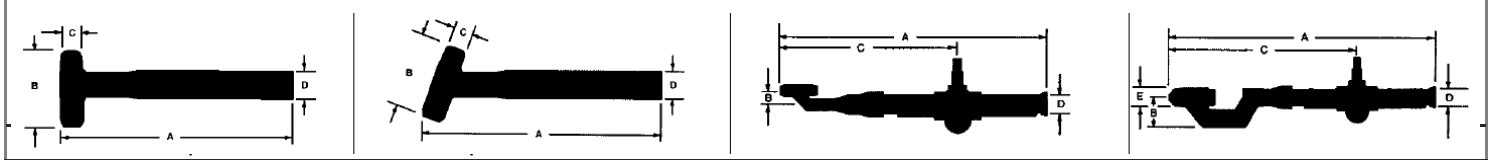


Part Number	Description
FC1000	15ft. Foot Control
FC1001	25ft. Foot Control

### Remote Controls

## Torch Specifications

	Type	Part No.	Torch Lead Length	Current Rating	Coolant Requirements	Torch Dimensions					
						A	B	C	D	E	
P75 Torch	PWH-75 70°	P75-1000(H)	12.5 ft.	75 Amps (DCSP)	2,000 BTU/hr (504 K/Cal/hr) 1/4 gpm coolant flow @ 50 PSI (0.9 lpm @ 3.7 kg/cm <sup>2</sup> )	7-15/16" (202mm)	1-11/16" (43 mm)	5/8" (16mm)	7/8" (22 mm)		
		P75-1001(H)	25 ft.								
	PWH-75 90°	P75-1002 (H)	12.5 ft.			7-3/4" (196mm)	1-11/16" (43 mm)	5/8" (16mm)	7/8" (22 mm)		
		P75-1003 (H)	25 ft.								
	PWM-75 180° Offset	P75-1004 (H)	12.5 ft.			18-1/4" (463 mm)	13/16" (21 mm)	Min. 7-1/8" (181 mm)	Max. 15" (381 mm)	1-3/8" (35 mm)	
		P75-1005 (M)	25 ft.								
15 Torch	PWH-15 70°	P15-1000 (H)	12.5 ft.	150 Amps (DCSP)	6,000 BTU/hr (1513 K/Cal/hr) 1/3 gpm coolant flow @ 50 PSI (1.25 lpm @ 3.7 kg/cm <sup>2</sup> )	8-3/4" (222 mm)	2-5/8" (67 mm)	7/8" (22 mm)	1-1/16" (27 mm)		
		P15-1001 (H)	25 ft.								
	PWH-15 90°	P15-1002 (H)	12.5 ft.			8-1/2" (216 mm)	2-5/8" (67 mm)	7/8" (22 mm)	1-1/16" (27 mm)		
		P15-1003 (H)	25 ft.								
	PWM-15 180° Offset	P15-1004 (H)	12.5 ft.			19-1/4" (489 mm)	1" (25 mm)	Min. 9-1/4" (235 mm)	Max. 16-3/4" (425 mm)	1-3/8" (35 mm)	
		P15-1005 (M)	25 ft.								
P22 Torch	PWH-22 70°	P22-1000 (H)	12.5 ft.	200 Amps (DCSP)	8,000 BTU/hr (2017 K/Cal/hr) 1/2 gpm coolant flow @ 50 PSI (1.9 lpm @ 3.7 kg/cm <sup>2</sup> )	12-1/2" (318 mm)	3-3/16" (81 mm)	1-1/4" (32 mm)	1-3/8" (35 mm)		
		P22-1001 (H)	25 ft.								
	PWH-22 90°	P22-1002 (H)	12.5 ft.			12-1/4" (311 mm)	3-3/16" (81 mm)	1-1/4" (32 mm)	1-3/8" (35 mm)		
		P22-1003 (H)	25 ft.								
	PWM-22 180° Offset	P22-1004 (M)	12.5 ft.			18" (457 mm)	1-3/4" (44 mm)	Min. 8-1/4" (209 mm)	Max. 16" (406 mm)	1-3/8" (35 mm)	1-1/4" (32mm)
		P22-1005 (M)	25 ft.								
PWM-22A 180° Inline	P22-1006 (H)	12.5 ft.	21" (.53 m)	1-3/4" (44 mm)	Min. 11-1/4" (286 mm)	Max. 19" (483 mm)	1-3/8" (35 mm)	1-1/4" (32mm)			
	P22-1007 (H)	25 ft.									



(H) designates torch with molded handle.

(M) designates torch with rack and pinion assembly.

Output @ Duty Cycle	Input	208/240/400/480 Volt 1/3 Phase			
		208 VAC	240 VAC	480 VAC	575 VAC
200A @ 35%	Power (KVA/Kw)	3 ph 9.4/9			
	Current (Amps)	3 ph 26	22.4	11.2	N/A
	Power (KVA/Kw)	1 ph 9.4/9			
	Current (Amps)	1 ph 43.7	37.8	18.9	N/A

Rated Output	Amps	0.5/200A	Contractor Control	Remote Input
	Volts	18/33V		
Output Ranges	Duty Cycle	150A @ 60%, 200A @ 35%	Analog Control	0 - 10 Volts DC Input
	Low	0.5 - 20A	Dimensions	Height: 25.49" (647.5mm)
	High	5 - 200A	Weight:	Width: 10.69" (271.5mm)
Load Volts	12 - 25V			Length: 23.23" (590mm)
OCV	60VDC			79.4 lbs (36 kg)
Input Hz	50/60Hz			
Flow Meters	Plasma	.5 - 3.0 SCFH (.25-1.5lpm)		
	Shield	5 - 30 SCFH (2.5-15lpm)		