

The SANPAW 200PW Plasma welding system has many advantages over traditional automated TIG welding including: increased productivity, consistent arc starting, improved process control and reduced electrical emission interference.

This unique plasma welding system is self contained in a small package with a 200 amp power

supply, coolant recirculator and control console. Our design reduces floor space and simplifies installation, making the initial price competitive with automated TIG systems while its increased productivity and repeatable performance allow it to pay for itself in a shorter period of time.

Features and Benefits of the SANPAW 200PW

- 0.5-200 Amp current range - providing quality performance on a wide variety of applications.
- Smooth DC arc - repetitive, high quality welds.
- Pilot Arc - repeatable arc starting reducing defects and rework .
- Multiple Voltage Input - 200-240/480VAC, 1/3 phase, 50 or 60 hz (575VAC with optional module)
- Current Limiter - limits power source output to torch capability to avoid torch damage.
- Preview Set Current - eliminates costly test set-ups/displays actual current/voltage.
- Included Weld Sequencer (Current Sloper/Pulser).
- Internal Torch Coolant Recirculator.
- Save 30 Programs.
- Protection devices:
 - Coolant flow protection/interlock
 - Coolant temperature protection/interlock
 - Console temperature overload detection/interlock
- Simple interface - automated or manual control
- Can utilize a number of competitive torches.
- Approvals — CSA (pending); IP23S; IEC 60974-1 (CE)
- 3 Year Warranty



SANPAW 200PW

DC Plasma Welding

The SANPAW 200PW system is shipped with an SANPAW 200PW unit, Gas Hoses, coolant and the appropriate torch with a torch spare parts kit. Systems do not include Work Lead, Regulators and remotes.

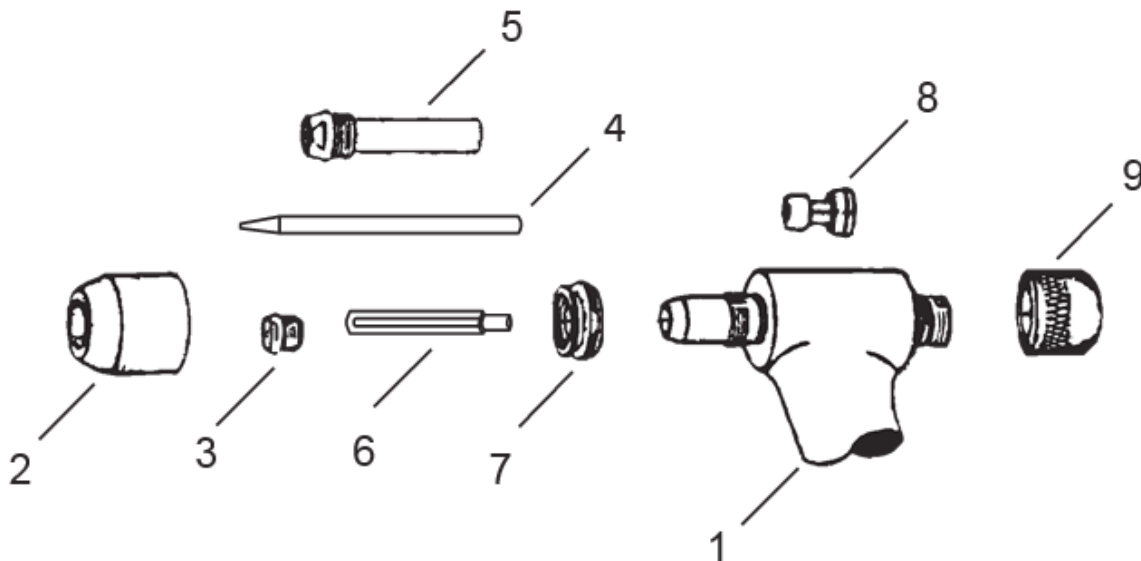
| Torch (Rating) | System Description | w/12.5 ft. Torch and Leads | w/25 ft. Torch and Leads |
|--------------------|---------------------|----------------------------|--------------------------|
| P-75 (75 amps) | PWH-75, 70 degree | PAW200P7570H125 | PAW200P7570H25 |
| | PWH-75, 90 degree | PAW200P7590H125 | PAW200P7590H25 |
| | PWH-75, 180 degree | PAW200P75180H125 | PAW200P75180H25 |
| | PWM-75, 180 degree | PAW200P75180M125 | PAW200P75180M25 |
| P-15 (150 amps) | PWH-15, 70 degree | PAW200P1570H125 | PAW200P1570H25 |
| | PWH-15, 90 degree | PAW200P1590H125 | PAW200P1590H25 |
| | PWH-15, 180 degree | PAW200P15180H125 | PAW200P15180H25 |
| | PWM-15, 180 degree | PAW200P15180M125 | PAW200P15180M25 |
| P-22 (200 amps) | PWH-22, 70 degree | PAW200P2270H125 | PAW200P2270H25 |
| | PWH-22, 90 degree | PAW200P2290H125 | PAW200P2290H25 |
| | PWH-22, 180 degree | PAW200P22180H125 | PAW200P22180H25 |
| | PWH-22A, 180 degree | PAW200P22180H125 | PAW200P22180H25 |
| | PWM-22, 180 degree | PAW200P22180M125 | PAW200P22180M25 |
| | PWM-22A, 180 degree | PAW200P22180MA125 | PAW200P22180MA25 |

- PWH designates a torch with a molded handle.
- PWM designates a torch with rack and pinion.
- Torch amperage rating based on minimum electrode set back.

| | |
|--|---------------|
| SANPAW 200PW (Unit Only) | ID-2000PW-U1E |
| 12.5 ft. Gas Hose | MS1000 |
| Regulators | |
| • Argon | MS1005 |
| • Hydrogen | MS1006 |
| Note: 2 regulators required , one for Plasma Gas and one for Shield Gas. | |
| Remote Controls | |
| • 25ft. Foot Control | FC1001 |
| • 25ft. Hand Pendant | HP1425 |
| • 1ft. Adaptor, 14-Pin Amp to 14-Pin Amphenol. | ADC001 |
| Coolant (Sold by the Gallon. (3.79ltr.)) | TK1017 |
| 575 Volt Module | TBD |



Torch Parts



Common Torch Consumables included in Spare Parts Kit.

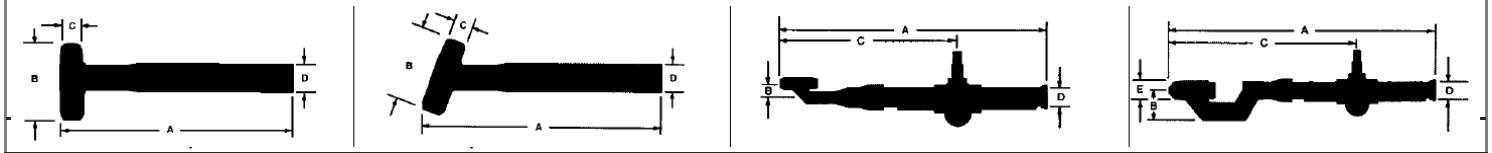
| ITEM NO. | PART DESCRIPTION | P-75 TORCH P75-2000 | P-15 TORCH P15-2000 | P-22 TORCH P22-2000 |
|----------|---------------------|--|---|--|
| 2 | Shield Cup | P75-3001 | P15-3001 | P22-3001 |
| 3 | Tip | P75-3006 (.045) 25A-Ig P75-3007 (.062) 35A-Ig P75-3008 (.081) 50A-Ig | P15-3011 (.046) 50A-ext P15-3013 (.081) 100A-ext P15-3014 (.093) 130A-ext | P22-3006 (.062) 100A-ext P22-3007 (.093) 125A-ext P22-3009 (.125) 150A-ext |
| 4 | Electrode | P75-3009 (.093) std | P15-3015 (.093) std. | P22-3010 (.187) ext. |
| 5 | Liner | N/A | N/A | P22-3011 |
| 6 | Gas Distributor | P75-3013 (.093-electrode) | P15-3017 | P22-3012 |
| 7 | Gas Diffuser | N/A | P15-3019 | P22-3015 |
| 8 | Collet Assembly | P75-3017 (.093-electrode) | P15-3021 | P22-3018 |
| 9 | Back Cap | P75-3019 (std-electrode) | P15-3022 (std-electrode) | P22-3020 (ext-electrode) |
| N/S | Collar | N/A | N/A | P22-3016 |
| N/S | O-ring (liner) | N/A | N/A | P22-3024 |
| N/S | O-ring (internal) | N/A | N/A | P22-3025 |
| N/S | O-ring (back-cap) | P75-3016 | P15-3020 | P22-3017 |
| N/S | Gasket (shield cup) | P75-3015 | P15-3018 | P22-3013 |
| N/S | Lubricant | PAW-LUBE | PAW-LUBE | PAW-LUBE |
| N/S | Gauge/Wrench | P75-2006 Not Included | P15-2006 Not Included | P22-2020 Not Included |

NOTE: Tip ratings @ minimum electrode setback.

*Tip maximum current rating not to exceed the maximum output of SANPAW 200PW.

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 ²) | 7-15/16" | 1-11/16" | 5/8" | 7/8" | | |
| | | P75-1001(H) | 25 ft. | | | (202mm) | (43 mm) | (16mm) | (22 mm) | | |
| | PWH-75 90° | P75-1002 (H) | 12.5 ft. | | | 7-3/4" | 1-11/16" | 5/8" | 7/8" | | |
| | | P75-1003 (H) | 25 ft. | | | (196mm) | (43 mm) | (16mm) | (22 mm) | | |
| | PWM-75 180° Offset | P75-1004 (H) | 12.5 ft. | | | 18-1/4" | 13/16" | Min. | Max. | 1-3/8" | |
| | | P75-1005 (M) | 25 ft. | | | (463 mm) | (21 mm) | 7-1/8" (181 mm) | 15" (381 mm) | (35 mm) | |
| 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 ²) | 8-3/4" | 2-5/8" | 7/8" | 1-1/16" | | |
| | | P15-1001 (H) | 25 ft. | | | (222 mm) | (67 mm) | (22 mm) | (27 mm) | | |
| | PWH-15 90° | P15-1002 (H) | 12.5 ft. | | | 8-1/2" | 2-5/8" | 7/8" | 1-1/16" | | |
| | | P15-1003 (H) | 25 ft. | | | (216 mm) | (67 mm) | (22 mm) | (27 mm) | | |
| | PWM-15 180° Offset | P15-1004 (H) | 12.5 ft. | | | 19-1/4" | 1" | Min. | Max. | 1-3/8" | |
| | | P15-1005 (M) | 25 ft. | | | (489 mm) | (25 mm) | 9-1/4" (235 mm) | 16-3/4" (425 mm) | (35 mm) | |
| 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 ²) | 12-1/2" | 3-3/16" | 1-1/4" | 1-3/8" | | |
| | | P22-1001 (H) | 25 ft. | | | (318 mm) | (81 mm) | (32 mm) | (35 mm) | | |
| | PWH-22 90° | P22-1002 (H) | 12.5 ft. | | | 12-1/4" | 3-3/16" | 1-1/4" | 1-3/8" | | |
| | | P22-1003 (H) | 25 ft. | | | (311 mm) | (81 mm) | (32 mm) | (35 mm) | | |
| | PWM-22 180° Offset | P22-1004 (M) | 12.5 ft. | | | 18" | 1-3/4" | Min. | Max. | 1-3/8" | 1-1/4" |
| | | P22-1005 (M) | 25 ft. | | | (457 mm) | (44 mm) | 8-1/4" (209 mm) | 16" (406 mm) | (35 mm) | (32mm) |
| PWM-22A 180° Inline | P22-1006 (H) | 12.5 ft. | 21" | 1-3/4" | Min. | Max. | 1-3/8" | 1-1/4" | | | |
| | P22-1007 (H) | 25 ft. | (.53 m) | (44 mm) | 11-1/4" (286 mm) | 19" (483 mm) | (35 mm) | (32mm) | | | |



(H) designates torch with molded handle.

(M) designates torch with rack and pinion assembly.

| Output @ Duty Cycle | Input | 208 - 460 Volt Three Phase | | | | |
|---------------------|----------------|----------------------------|---------|---------|---------|-----|
| | | 208 VAC | 240 VAC | 480 VAC | 575 VAC | |
| 200A @ 60% | Power (KVA/Kw) | 3 ph | 9.4/9 | | | |
| | Current (Amps) | 3 ph | 26.1 | 22.7 | 11.3 | 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 | 20/200A | Contractor Control | Remote Input |
| | Volts | 18/25V | Current Control | Remote or Panel |
| Output Ranges | Duty Cycle | 150A @ 100%, 200A @ 60% | Analog Control | 0 - 10 Volts DC Input |
| | Low | .5 - 20A | Dimensions | Height: 23.63" (600mm) |
| | High | 5 - 200A | | Width: 9.84" (250mm) |
| Load Volts | 12 - 25V | | Weight: | Length: 26.77" (680mm) |
| OCV | 60VDC | | Shipping Weight: | 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) | | |