



CWP-1100-SA CWP-1100-MG Circle Welder



The **CWP-1100 Programmable Circle Welder** is designed for welding of nozzles into vessels utilizing SUB-ARC, MIG or FLUX CORED PROCESS, with gas shielding. The CWP-11 mounts on a 3-Jaw Chuck for welding diameter 6" to 50" (152 to 1270 mm) O.D. Photo shown with optional Flux Recovery System installed.

Features:

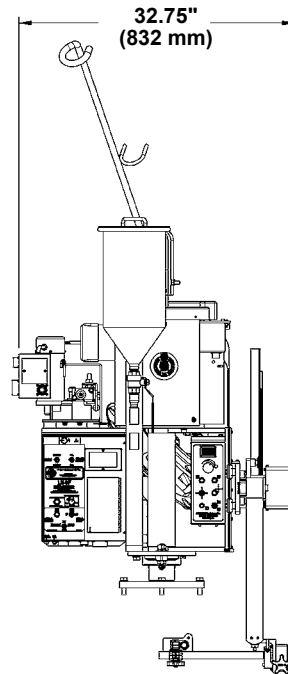
- Amperage & wire speed control.
- Wire feeder with one set of drive rolls.
- Wire sizes from 0.035 - 7/64 in (0.9 - 2.8 mm) for subarc welding.
- 1/12 HP P.M. motor and rotational speed control.
- 600 AMP gun & cable assembly.
- K231 Sub-Arc Gun
- Gas shielding kit with 120 VAC solenoid valve (MIG only).
- 5/8" (16 mm) gas cup (MIG only).
- Burn back control.
- 50 ft. (15 m) power cable.
- 50 ft. (15 m) gas shielding hose.
- 50 ft. (15 m) weld cable.
- Quick disconnects for all cables.
- Weld contact switch.
- Cold wire inch switch.
- Wire direction switch.
- Pre and post flow gas controls.
- Wire reel adaptor for 60 lb. (27 kg) spools.
- Adjustable vertical and horizontal torch positioning system
- Microprocessor controlled rise and fall.
- Brushes and collector rings for welding current, rated at 600 AMPS 100% duty cycle.
- Brushes and collector rings for all controls, eliminates cable and hose wrap.
- Flux Hopper (Sub-arc only).

Technical Data:

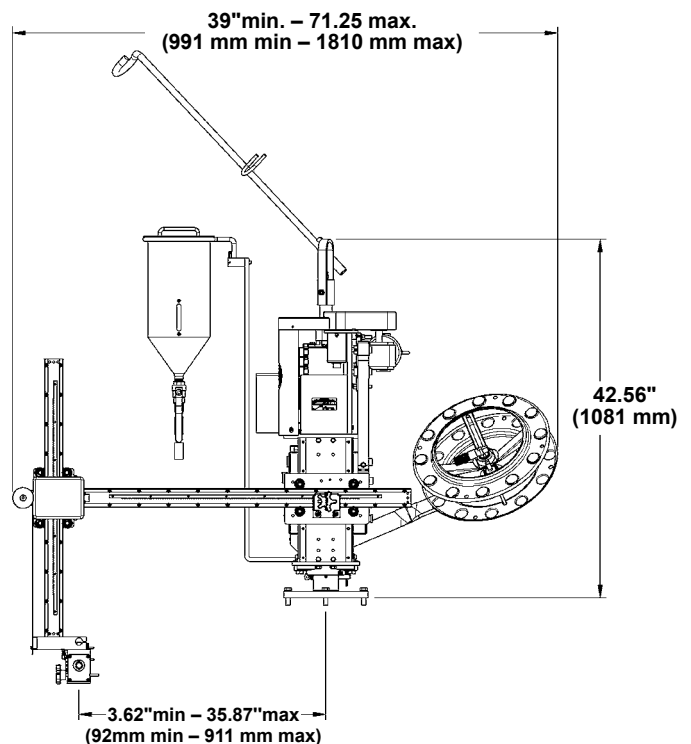
Control Voltage:	115 VAC
Welding Amperage:	0-600 amps
Welding Voltage:	0-50
Wire Sizes:	0.035 - 7/64 (0.8-2.8 mm.)
Rotation Speed:	.2-2.2 rpm
Vertical Range:	Controlled by the microprocessor and motor and encoder positioning.
Welding Diameter:	10"-50" (254-1270 mm)
Shielding Gas (MIG only):	Solenoid Control
Height:	43" (1092 mm.)
Net Weight:	360 lbs. (163.6 kg.)
Shipping Weight:	490 lbs. (222.3 kg.)

The CWP-1100 may be used with any constant voltage power source with connections for 115 VAC and weld contactor. The machine may also be used for MIG or flux cored processes.

FRONT ELEVATION



SIDE ELEVATION



Programming:

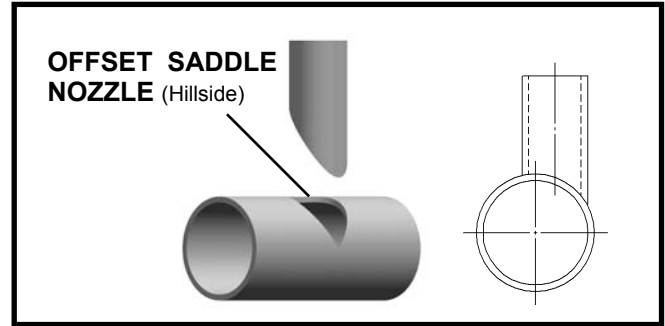
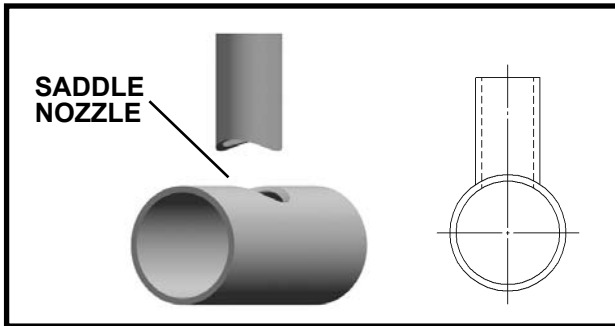
Dimensions and Program parameter data are entered on the built in terminal, with keypad and text display.

The alpha keys used are listed below with their functions:

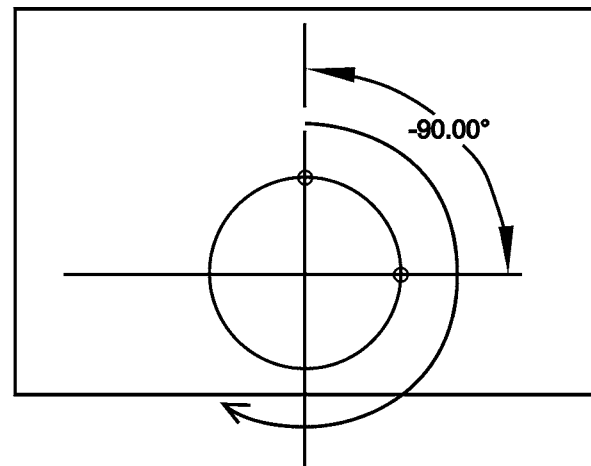
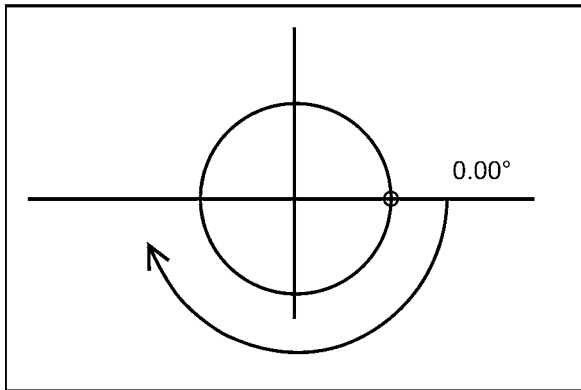
- A: To enter all dimensions
- B: To enter the time delay for puddle build-up
- C: To change the Program No. (switch to a different number) from 0 to 99
- D: To display all the programmed parameters for the current program
- E: To enter the number of passes the gun goes around the joint
- F: To enter the start angle, so the weld can be started at the preferred point around the joint

DATA REQUIRED FOR PROGRAM:

1. Small diameter (nozzle size)
2. Large diameter (main pipe)



3. Offset distance between centerlines of main pipe and nozzle, if any
4. Overlap Angle (additional rotation after 1 or more complete passes)
5. Start Angle : to specify the start point angle around the joint



Besides the above, background parameters that are retained for all programs, and are set individually, are:

1. Time Delay, from when the arc starts until the gun starts moving.
2. No. of passes : if a multiple pass weld is required. If 0 or nothing entered, the default is one rotation.

When entering Diameter values, the inside or outside diameter or anything in between can be used. The machine will move along a path where those diameters intersect. Usually the ID of the nozzle and the OD of the main pipe are used. This allows for a bevel on the nozzle so the nozzle ID fits the OD of the main pipe.