CR-11 Idler/Roller Welder Specifications

MACHINE DIMENSIONS

<table>
<thead>
<tr>
<th></th>
<th>Weight</th>
<th>Width (in)</th>
<th>Height (in)</th>
<th>Length (in)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main Welder</td>
<td>5000 lbs (2270 kg)</td>
<td>90 (2.3 m)</td>
<td>130 (3.3 m)</td>
<td>80 (2.0 m)</td>
</tr>
<tr>
<td>Power Supplies (X 2)</td>
<td>800 lbs (370 kg) each</td>
<td>24 (0.7 m)</td>
<td>36 (0.9 m)</td>
<td>42 (1.1 m)</td>
</tr>
<tr>
<td>Flux Recovery Pump</td>
<td>200 lbs (90 kg)</td>
<td>19 (0.5 m)</td>
<td>30 (0.8 m)</td>
<td>37 (1.0 m)</td>
</tr>
<tr>
<td>Water Cooling System</td>
<td>150 lbs (70 kg)</td>
<td>15 (0.4 m)</td>
<td>27 (0.7 m)</td>
<td>30 (0.8 m)</td>
</tr>
</tbody>
</table>

Operating Temperature Range ..... 40° to 110° F (4° to 43° C)

WORKPIECE DIMENSIONS

- Maximum Weight ................. 2000 lbs (910 kg)
- Maximum Diameter ............... 52 inches (1320 mm)
- Maximum Width .................. 26 inches (660 mm)

MACHINE SUPPLY

- Compressed Air Requirement - 80 to 120 p.s.i. (5.5 to 8.3 atm) 5.0 ft³/min (0.15 m³/min)

WELDING POWER SUPPLIES

Two Welding power supplies -

<table>
<thead>
<tr>
<th>Output</th>
<th>Power Requirements - (26.0 kVA each)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Voltage</td>
</tr>
<tr>
<td>Maximum Current ..........</td>
<td>600 Amperes</td>
</tr>
<tr>
<td>Maximum Voltage .........</td>
<td>50 Volts</td>
</tr>
<tr>
<td>Duty Cycle.................</td>
<td>100%</td>
</tr>
<tr>
<td></td>
<td>Other voltages available</td>
</tr>
</tbody>
</table>

FLUX RECOVERY SYSTEM

- Flux Pump Type ....... 2-Lobe “Roots” Type
- Flux Hopper Capacity ...... 4900 in³ (81 liters)

<table>
<thead>
<tr>
<th>Power Requirements - (1½ Hp 1.1 kW)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Voltage</td>
</tr>
<tr>
<td>230 Volts</td>
</tr>
<tr>
<td>380 Volts</td>
</tr>
<tr>
<td>460 Volts</td>
</tr>
<tr>
<td>Other voltages Available</td>
</tr>
</tbody>
</table>

WIRE PAY-OUT PAK

Two Pay-out Paks -

- Capacity sized for all popular welding wire barrel containers

- Maximum Wire Barrel Diameter ............ 24 in (628 mm)
- Minimum Wire Barrel Diameter ............ 6 in (152 mm)
- Maximum Wire Barrel Weight ............... 1200 lb (540 kg)

WATER COOLING SYSTEM (Optional)

- Used in roller service, the Water Cooling System transfers heat from the roller currently being welded to next roller to be welded. This eliminates bore shrinkage, and shortens pre-heat time. The included Adapter Kit allows use with most undercarriage types.

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE
**Control Identification**

AIR CLAMP CONTROL – clamps and releases the idler or roller. Pressing down on the control clamps the idler or roller, and pulling up on the control releases the workpiece.

YOKE TILT SWITCH - tilts the yoke and workpiece clockwise or anti-clockwise.
Control Identification (Continued)

1) ARC STOP - Stops the welding cycle
2) ARC START - Starts the welding cycle
3) LEFT VOLTAGE - Controls the voltage of the Left Torch Head – shown on the Left Voltmeter (6)
4) INCH - Manually moves the Left and Right welding wire, at the speed set by the Electrode Inch Control (28)
5) SPINDLE INDEX - Lights at the Step-over point
6) LEFT VOLTOMETER - Displays the voltage of the Left Torch Head, as set by the Left Voltage Control (4)
7) LEFT TORCH CARRIAGE MANUAL – Moves the Left Torch Carriage in the direction set by the Left Torch Carriage Direction Switch (9)
8) LEFT TORCH CARRIAGE SPEED – Sets the speed for the Left Torch Carriage both for manual moves and for automatic step-over. The Nozzle Beam Speed Control (22) also affects to the Left Torch Carriage speed.
9) LEFT TORCH CARRIAGE DIRECTION – Sets the direction of the Left Torch Carriage, for both manual moves and for automatic step-over
10) LEFT WIRE FEED METER - Shows the speed of the Left welding wire, as set by Electrode Inch (28) and Left Feed Rate Control (11). This is directly related to the amperage and size of the left weld bead
11) LEFT FEED RATE - Sets the speed of the Left welding wire, once welding begins. The speed is shown on the Left Feed Rate Meter (10), and controls the amperage and size of the left weld bead
12) BEAM LIFT - Raises and lowers the Upper Beam, along with the Left and Right Torch Heads
13) RIGHT TORCH CARRIAGE DIRECTION – Sets the direction the Right Torch Carriage moves both for manual moves and automatic step-over
14) RIGHT TORCH CARRIAGE SPEED – Sets the speed for the Right Torch Carriage, both for manual moves and for automatic step-over. The Nozzle Beam Speed Control (22) also affects to the Right Torch Carriage speed.
15) RIGHT VOLTOMETER - Shows the Right Torch Head voltage, as set with the Right Voltage Control (18)
16) LEFT TORCH CARRIAGE MANUAL – Moves the Right Torch Carriage in the direction selected by the Right Torch Carriage Direction Switch (13)
17) LEFT WIRE FEED METER - Shows the speed of the Right welding wire, set by Electrode Inch (28) and Right Feed Rate Control (19). This is directly related to the amperage and size of the right weld bead
Control Identification (Continued)

18) RIGHT VOLTAGE - Controls the voltage of the Right Torch Head – shown on the Right Voltmeter (17)

19) RIGHT FEED RATE - Sets the speed of the Right welding wire, once welding begins. The speed controls the amperage and size of the right weld bead, and is shown on the Right Feed Rate Meter (18)

20) RIGHT ELECTRODE UP/OFF/DOWN - selects the direction of the right welding wire. Welding happens in the DOWN position

21) NOZZLE BEAM MOVE - Manually moves both the left and right torch carriages in the directions set by the Left and Right Torch Direction Switches. Use this to set and check the step-over distance.

22) NOZZLE BEAM SPEED – Master control for the speed of the left and right torch carriages. move from side-to-side

23) FLUX RECOVERY ON/OFF - Starts and stops the flux recovery system

24) LEFT ELECTRODE UP/OFF/DOWN - Sets the direction of the left welding wire. Welding happens in the DOWN position

25) SPINDLE SPEED - Sets how fast the idler or roller turns

26) SPINDLE FWD / REV - Sets whether the idler rotates forward (top away from the front) or reverse (top towards the front)

27) SPINDLE JOG - Manually rotates the idler or roller

28) DWELL TIME (Right Side of Control Console) - Sets how long Left and Right Torch Carriage travel (or “Step-over”) after each turn of the idler or roller (the “Step-over Point”)

29) ELECTRODE INCH - sets how fast the left and right welding wire moves before an arc is struck. This is usually set to 30, but increased when loading and unloading welding wire.