**FIG. HAMX-31: I.D. GIRTH WELD**

Heated and automatic mixing pressure feed and recover system for I.D. girth weld. MM-3000X or MM-5000X vacuum with HPFR-HMX-3000-H300-H3000, and FH-1-LD-3 or HHF-H-1-LD-3 (Typical component configuration).

**NOTE A:** HPFR-HAX-3000-H300-H300
HPFR-HAX-3000-H300-H300 is a complete system: heated automatic mixing separator and heated pressure tank with controls. Electronic level sensors are available for tank and hopper (i.e., if tank is at low level, a loud buzzer sounds and light flashes).

**NOTE B:** Inside diameter of the feed hose determines the maximum flux feed rate and flux feed nozzle size.

<table>
<thead>
<tr>
<th>Inside Diameter</th>
<th>Max. Feed Rate</th>
<th>Flux Feed Nozzle</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/2&quot;</td>
<td>1 1/2 lbs. (.68 kg)</td>
<td>USE T-NOZ-1/2&quot;</td>
</tr>
<tr>
<td>3/4&quot;</td>
<td>4 to 6 lbs. (1.81-2.72 kg)</td>
<td>USE T-NOZ-3/4&quot;</td>
</tr>
<tr>
<td>1&quot;</td>
<td>6 to 8 lbs. (2.72-3.63 kg)</td>
<td>USE T-NOZ-1&quot;</td>
</tr>
</tbody>
</table>

Based on agglomerated flux and maximum hose length of 50 ft. (Consult factory for details).

**NOTE C:** MIGHTY-MAC VACUUM SELECTION

MM-3000X for single, twin and tandem wire, with 2" vacuum hose up to 50 ft.
MM-5000X for single, twin and tandem wire, with 2" vacuum hose up to 100 ft.

**NOTE D:** Cable Track

All hoses must be in a suitable cable track which does not reduce the minimum bend radius.

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The diagram shows the system order list and detailed components required for the welding process, including flux feed hose, recovery hose, welder, and various control and mounting brackets.