Increasing concern for the safety and integrity of food, dairy and pharmaceutical products combined with the need to bring biopharmaceutical products to market in a timely fashion has led to improvements in industry standards to facilitate clean and sterilized product contact surfaces.

The biopharmaceutical industry recognizes that the orbital welding process makes it possible to consistently achieve crevice-free welds with a smooth surface which decreases the affinity for colonization and growth of microorganisms and increases the efficacy of CIP (Clean-In-Place). Orbitally welded systems, installed with proper fabrication techniques and documentation, are in compliance with 21 CFR §211 Subpart D facilitating piping system validation as well as providing excellent performance in service. This has made orbital welding the preferred joining technology for the biopharmaceutical industry in the United States.

The cost of orbital welding and other advances in fabrication technology must be considered in light of the high cost of contamination of food and pharmaceutical products.

The use of orbital welding is expanding in Latin America. Cosmetics plants, breweries, food, and dairy processing plants are upgrading their standards by using technology previously limited to the so-called high-purity industry.

To read the full story, visit www.arcmachines.com

For further information, call AMI at 1-818-896-9556 or e-mail sales@archmachines.com
**M8 Series Weld Heads**

<table>
<thead>
<tr>
<th>OD Range</th>
<th>Travel Motor</th>
<th>Head Weight</th>
<th>Electrode Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>M8-4000: 0.50&quot; - 4.00&quot;</td>
<td>D.C., P.M., D.C. Tachometer</td>
<td>M8-4000: 10 lbs. (4.5 kg)</td>
<td>1/16&quot; and 3/23&quot;</td>
</tr>
<tr>
<td>(12.70 mm - 101.60 mm)</td>
<td></td>
<td>M8-6625: 17 lbs. (7.7 kg)</td>
<td>(1.6 mm and 2.3 mm)</td>
</tr>
<tr>
<td>M8-6625: 2.00&quot; - 6.625&quot;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(50.8 mm - 168.275 mm)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Rotor RPM**
- M8-4000: 0.1 - 10.0
- M8-6625: 0.1 - 2.0

**Cable Length**
- 25 ft. (7.6 m) when connected to adapter cable
- (extensions available)

- Water cooling is recommended
- Compatible with all AMI Power Supplies

**M9 Series Weld Heads**

<table>
<thead>
<tr>
<th>OD Range</th>
<th>Travel Motor</th>
<th>Head Weight</th>
<th>Electrode Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.093&quot; to 7.500&quot;</td>
<td>D.C., P.M., D.C. Tachometer</td>
<td>11 lbs. - 35 lbs.</td>
<td>0.040&quot;, 1/16&quot;, 3/32&quot;</td>
</tr>
<tr>
<td>(2.362 mm - 190,500 mm)</td>
<td></td>
<td>(4.9 kg - 15.9 kg)</td>
<td>(1 mm, 1.6 mm, 2.3 mm)</td>
</tr>
</tbody>
</table>

**Rotor RPM**
- 0.1 - 20

**Cable Length**
- 25 ft. (7.6 m) when connected to adapter cable
- (extensions available)

- Removable tube clamps
- Pre-plumbed for water-cooling
- Compatible with all AMI Power Supplies