SECURE & PURE™ STATIC MIXERS
Pfaudler International

One single source responsibility with access to all Pfaudler Technologies, Systems, Services worldwide

Pfaudler is a global Group offering a wide range of corrosion-resistant technologies, systems and related services for the chemical, pharmaceutical and food industries.

Edlon, Interseal, Montz, Mavag, Normag and Pfaudler are our Branded Product Lines. These product lines are specialized and perfectly integrated to meet the most complex Client needs. We are in the position to offer a complete turn-key package for each of the critical aspects of chemical and pharmaceutical processing.

Technologies and process systems of our Group are installed in more than 100 countries and across six continents. Unique expertise and skills, manufacturing capabilities, targeted investments in strategic markets, innovation and competitiveness allow the Pfaudler group to be a landmark in the industry.

Around the world our Customers rely on the quality and performance of our supply to obtain efficient, reliable, profitable and safe chemical process systems.

Our network organization is designed to:
• strengthen our local presence alongside Customers and markets;
• accelerate decision-making processes through a less-centralized management;
• improve Pfaudler’s ability to attract new talent at the local level.

Edlon is the expert in polymer and fluoropolymer materials with special focus on High Purity Fluid Management, Corrosion Protection, Roll Cover and Release Applications.
Edlon® is the leader in high purity fluid containment and transport and has elevated high purity mixing technology to the next level. The Edlon Secure & Pure™ PFA-PTFE Static Mixer is the perfect solution for your CMP slurry and high purity chemical mixing needs.

**Principles of Operation**

All Edlon Static Mixers are designed based on a helical mixing element, which directs the flow of material away from the wall. The mixing element design, which combines alternating right hand and left hand elements, results in flow division and radial mixing. All material is continuously and completely mixed, eliminating gradients in temperature, velocity and material composition.

**Mixing Applications**

- **Turbulent Blending Static Mixer**
  The alternating helical elements continually divide, stretch and reorient the flow stream to produce complete mixing with minimum pressure drop.

- **Laminar Blending Static Mixer**
  The uniform turbulent shear field of the Edlon Static Mixing element quickly disperses immiscible liquids and produces a narrow drop size distribution.

- **Gas/Liquid Dispersion**
  Gases can be incorporated into turbulent liquids using the Edlon Static Mixer. Mass transfer rates are dramatically enhanced to maximize absorption or reaction.

**Benefits**

- **Residence Time Control**
  By eliminating the parabolic velocity profile characteristic of laminar flow in open pipes, the helical element of static mixing element promotes plug flow in continuous processes.

- **Application Versatility**
  Edlon’s PFA-PTFE Static Mixers produce complete radial mixing and flow division for any combination of liquids, gases or solids. Housings feature high purity PFA pipe or tubing with a number of end connections including: Flare-Type, Straight Union Reducer Adapters, NPT and FNPT.
Secure & Pure™
PTFE/PFA Static Mixers

High Purity PTFE-PFA Static Mixers.

Design
Edlon’s standard Static Mixers are six elements housed in PFA pipe or tubing. Edlon can supply custom Static Mixers with a varying number of elements. Please contact Edlon for more information on special requests.

PFA Pipe Housing

<table>
<thead>
<tr>
<th>Process Line Size (Inch)</th>
<th>Nominal Mixer Size (Inch)</th>
<th>No. of Elements</th>
<th>Approximate Overall Length (Inch)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3/8</td>
<td>9.5</td>
<td>6</td>
<td>159</td>
</tr>
<tr>
<td>½</td>
<td>12.5</td>
<td>6</td>
<td>243</td>
</tr>
<tr>
<td>¾</td>
<td>20</td>
<td>6</td>
<td>320</td>
</tr>
<tr>
<td>1</td>
<td>25</td>
<td>6</td>
<td>345</td>
</tr>
</tbody>
</table>

PFA Tube Housing

<table>
<thead>
<tr>
<th>Process Line Size (Inch)</th>
<th>Nominal Mixer Size (Inch)</th>
<th>No. of Elements</th>
<th>Approximate Overall Length (Inch)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3/8</td>
<td>9.5</td>
<td>6</td>
<td>159</td>
</tr>
<tr>
<td>½</td>
<td>12.5</td>
<td>6</td>
<td>243</td>
</tr>
<tr>
<td>¾</td>
<td>20</td>
<td>6</td>
<td>320</td>
</tr>
<tr>
<td>1</td>
<td>25</td>
<td>6</td>
<td>345</td>
</tr>
</tbody>
</table>
EDLON is part of the Pfaudler Group.

EDLON is a registered trademark of EDLON Inc.

Secure & Pure is a trademark of EDLON Inc.