## Typical Applications and Specifications

### COSMETIC/PERSONAL CARE
- Perfumes
- Toothpastes
- Hair Dyes
- Creams & Lotions
- Shampoos
- Soaps

### FOOD & BEVERAGE
- Yogurt
- Salad Dressings
- Mayonnaise
- Cheese Sauce
- Condiments
- Creams
- BBQ Sauce
- Spreads

### PHARMACEUTICAL
- Antibiotics
- Topical Creams & Gels
- Ointments
- Injectables
- Suppositories
- Nutritional Drinks
- Oral Suspensions

### CHEMICAL
- Asphalt Emulsions
- Fungicides & Insecticides
- Toners
- Pigments
- Lacquers
- Resins

### MODEL

<table>
<thead>
<tr>
<th></th>
<th>Z1</th>
<th>Z3 (l/s)</th>
<th>Z5 (l/s)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>POWER (Maximum)</strong></td>
<td>HP (kW)</td>
<td>10 (7.5)</td>
<td>25 (18.5)</td>
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<tr>
<td><strong>CAPACITY</strong></td>
<td>gpm (lpm)</td>
<td>30 (115)</td>
<td>100 (380)</td>
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<tr>
<td><strong>RPM</strong></td>
<td></td>
<td>6000</td>
<td>3600</td>
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<tr>
<td><strong>ROTOR &amp; STATOR SETS</strong></td>
<td></td>
<td>1 to 3</td>
<td>1 to 3</td>
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<tr>
<td><strong>OPERATING PRESSURE</strong></td>
<td>psi (bar)</td>
<td>0 - 120 (0 - 8)</td>
<td>0 - 120 (0 - 8)</td>
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<tr>
<td><strong>INLET &amp; DISCHARGE FITTING</strong></td>
<td>in (mm)</td>
<td>1.5 (38)</td>
<td>2 (50)</td>
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</table>

*Actual capacities may vary depending on inlet pressure, tooling selection and product characteristics.
High differential velocities
Incorporating up to three sets of toothed rotor/stator heads, the Z Emulsifier processes product while passing multiple shear zones in a single pass. The result is consistent, repeatable quality at capacities exceeding conventional multi-pass technology.

Tooling flexibility
Rotor/stators for the Z Emulsifier are available in a variety of slot sizes which allows for a high degree of fine tuning. Through tooling selection aided by our application engineering team, as well as varying rotor tip speed, the amount of shear can be precisely controlled.

Scalable throughput
Four sanitary models are available from pilot plant capacities to >300 gpm (1136 lpm). Throughput can be scaled without altering product characteristics, texture or particle size distribution with the unique implementation of Quadro’s turbulent kinetic energy model.