Rama products are the strongest and most versatile industrial heaters on the market. We design and manufacture Rama® Flex heaters to provide moderate heat and even distribution on both irregular and smooth surfaces. The Rama® Flex heater is designed for use with industrial equipment in limited access spaces. We are extremely proud of our Rama® Flex heaters and welcome you to try one of the most durable, flexible, heaters available.

**FLEX SPECIALTIES:**

- We manufacture large, high-amp load flex heaters with multiple internal circuits. Each circuit would have its own leads which are wired external to the heater.
- Dual voltage and three phase designs available
- Flexible heaters manufactured in a variety of shapes and sizes.
- Standard color iron oxide red. Other colors available green and black.
- Silk screening to customers artwork available upon request

**CONSTRUCTION FEATURES:**

In addition to rigid manufacturing specifications, Rama® Flex heaters are durable and reliable. Construction features are as follows:

1. The sheath or outer covering consists of a fiberglass-reinforced silicone rubber, which is resistant to damage by oils, and most chemicals: it will not crack with age.
2. A resistance element is interwoven with a glass thread to provide additional strength against breaking. The resistance element is completely covered on both sides by the fiberglass-reinforced silicone rubber sheath.
3. The entire unit is fully vulcanized to provide a tough, tear-resistant blanket heater, with maximum dielectric strength.
4. We also can supply integral thermostats to meet various customer requirements.
5. Teflon-insulated or silicone lead wires available. Lead wires can exit any edge or surface of the heater. Cord may also be available upon customer request. For confirmation of MIL specs and UL recognized components consult factory.
6. 1/8” and 1/4” thick closed cell silicone sponge insulation available.
APPLICATION METHODS:

One of the most important attributes of the Rama® Flex heaters, is their easy installation ability. They can be attached to parts using a variety of methods including:

- Hooks and Springs
- Lacing Eyelets
- Vulcanized to Customer Part
- Velcro Straps and D-Rings
- RTV Adhesives
- Pressure Sensitive Adhesives
- Consult Factory For Additional Options
Specifications:

**SIZE:**
Width 1/2” minimum to 36” maximum.
Length 1-1/2” minimum to 115” maximum.
Note: Larger units can be furnished with splice.

**THICKNESS:**
Approximate .050” standard, .030” minimum.
Heaters can be manufactured to customers specifications.

**WEIGHT:**
7oz/sq. ft. standard, to as low as
2oz/sq. ft. for extra thin construction.

**TOLERANCES:**
Width or length
Up to 5.99” +/- .06”
6” to 19.99” +/- .12”
20” to 36” +/- .19” for each 36” of length
Wattage + 5%, - 10%
When ordering please specify critical tolerances

**TEMPERATURES:**
-50°F minimum, 450°F maximum for continuous operation.
Higher temperatures may be used for short periods of operating time.

**RESISTANCE:**
56 ohms/square inch maximum, .08 ohms/square inch minimum.
Rama is pleased to announce that we have available, direct to the consumer, our own line of PVC Blanket Heaters. For over fifty years, Rama’s name has stood for quality in the industrial heater industry. Now, Rama brings to the electrical, plumbing and landscape contractors a patented design that has been proven in the field for many years. This heater is portable, rugged, and easy to use. Simply wrap the blanket heater around the section of PVC pipe you wish to bend, secure the strap around the heater, and plug into any 120 VAC outlet. When PVC conduit or pipe becomes pliable, remove the heater and bend by hand.

The heater temperature is maintained by an internal, automatic thermostat that allows for the heater to get to temperature quickly but will not allow the heater to go above 145°C (~300°F). Bending a schedule 40 PVC 1/2 inch pipe at a 90° angle can be accomplished in as little as 3 to 4 minutes! Bending a 4 inch diameter, schedule 80 PVC pipe can be done with the largest of the heaters in as little as 12 minutes! The unique circuit design and the way the heater is constructed ensure controlled, even heating for uniform bending time after time. The use of heavy duty materials; including t-stat, power cord, velcro® strap, and fiberglass re-enforced silicone rubber; allow for long service life in the field.

**SPECIFICATIONS**

<table>
<thead>
<tr>
<th>RAMAS PART NUMBER:</th>
<th>F-3418</th>
<th>F-3419</th>
<th>F-3420</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CAPACITY:</strong></td>
<td>Up to 1 1/2” PVC All schedules</td>
<td>2”-3” PVC All Schedules</td>
<td>3 1/2”-4” PVC All schedules</td>
</tr>
<tr>
<td><strong>POWER SOURCE:</strong></td>
<td>120 Volts A/C</td>
<td>120 Volts A/C</td>
<td>120 Volts A/C</td>
</tr>
<tr>
<td><strong>SIZE:</strong></td>
<td>13” x 8 1/4 (330.2mm x 209.6mm)</td>
<td>30” x 13 1/4” (762.0mm x 336.6mm)</td>
<td>38” x 16 1/4” (965.2mm x 412.8mm)</td>
</tr>
<tr>
<td><strong>WEIGHT:</strong></td>
<td>1.7 Lbs (.8 kg)</td>
<td>3.3 Lbs (1.5 kg)</td>
<td>4.9 Lbs (2.2 kg)</td>
</tr>
</tbody>
</table>

Stock Available Shipment Within 24 Hours
**RA**MA® FLEX DRUM HEATERS

**EASY TO INSTALL:** Simply wrap around and fasten with spring.

**JUST PLUG IN:** Comes with 6 ft. cord, The 120 volt heater comes with plug set standard.

**SAFE:** Heater is shielded internally with grounded mesh wire for electrical protection.

**RUGGED:** Made of high strength silicone rubber over woven fiberglass: resistant to moisture, shock, vibration and abrasion.

**HEATING APPLICATIONS**
- Oils
- Greases
- Fats
- Paints
- Plastics
- Adhesives
- Parafins
- Chemicals
- Molasses
- Chocolate
- Honey

Rama® Flex drum heaters are 3” wide. One or more heaters can be applied to 5, 30 and 55 gallon drums, depending on heat-up time and temperature requirements. See graph below for time-to-temperature graph when using one or more heaters.

<table>
<thead>
<tr>
<th>RAMA PART NUMBER</th>
<th>SIZE (INCHES)</th>
<th>WATTS</th>
<th>VOLTS</th>
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<tbody>
<tr>
<td>FB1797/CGD</td>
<td>1&quot; X 20&quot;</td>
<td>40</td>
<td>110/120</td>
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<tr>
<td>FB1797/LUZ</td>
<td>1&quot; X 20&quot;</td>
<td>40</td>
<td>220/240</td>
</tr>
<tr>
<td>FB1797/CGH</td>
<td>1-1/2&quot; X 20&quot;</td>
<td>60</td>
<td>110/120</td>
</tr>
<tr>
<td>FB1797/LVD</td>
<td>1-1/2&quot; X 20&quot;</td>
<td>60</td>
<td>220/240</td>
</tr>
<tr>
<td>FB1797/CGP</td>
<td>1-3/4&quot; X 28&quot;</td>
<td>100</td>
<td>110/120</td>
</tr>
<tr>
<td>FB1797/LVL</td>
<td>1-3/4&quot; X 28&quot;</td>
<td>100</td>
<td>220/240</td>
</tr>
<tr>
<td>FB1797/CGZ</td>
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<td>145</td>
<td>110/120</td>
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<tr>
<td>FB2767/CIP</td>
<td>2-1/4&quot; X 42&quot;</td>
<td>350</td>
<td>110/120</td>
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