CRACK-U-LATOR®

...A Revolutionary Granule Handling Innovation

Model 4541

MATSUBO Corporation

Toranomon 33 Mori-Bldg.
3-8-21, Toranomon, Minato-ku,
Tokyo 105-0001, Japan
URL: http://www.matsubo.co.jp/
No Other Method Can Match The Performance Or End Product Of This Unique Process

CRACK-U-LATOR offers an improved method of obtaining granules that is more efficient, more uniform and more cost effective than any other processor on the market today.

Rather than crushing or grinding, the CRACK-U-LATOR literally cracks the material into a uniform, narrow range of particle sizes through a series of corrugated rollers. This unique roller surface applies a linear stress in the circumferential direction to the particles being fed into it. Each peak on the rollers acts as a fulcrum point to particles bridged across the corrugation of the mating roller.

Successive sets of rollers are arranged with narrower gap clearance and steeper pitch. As a result, particles smaller than the gap clearance can pass through, while those that are larger, are cracked before passing through.

Unlike conventional grinders or roller mills that rely on facial compression or friction, the CRACK-U-LATOR employs only local stress cracking, thus minimizing the problems of overgrinding, abrasion, excess roller surface heat and rapid roller wear.

**Typical Example**

Unmatched Particle Distribution — no other conventional grinder, hammermill or roll-mill can produce a product that shows as sharp a distribution curve as the CRACK-U-LATOR. In many cases, screens and recycling of grindings are even eliminated.
Depend On **CRACK-U-LATOR** To Take Your Pre-Processed Materials To Finished Granule Form

Applications for the CRACK-U-LATOR cover a wide variety of industries with requirements that range from 8 mesh to 150 mesh. Shown here are just a few of the applications and results currently being enjoyed by satisfied customers.

**TYPICAL APPLICATIONS**

- **PHARMACEUTICAL** — Flakes, extruded material, dried material, tablets, etc.
- **FOOD** — Coffee, garlic, nuts, juice powder, freeze dried products, etc.
- **CHEMICAL** — Thermo-set plastics including urea, epoxy, phenol, etc.
- **CERAMIC** — Ferric oxide, coal, oxidized material, pigment, etc.
- **OTHERS** — Brass
CRACK-U-LATOR Helps You
Hold The Line On Costs
As You Produce
A Better Product

The process used in the CRACK-U-LATOR virtually eliminates any problems associated with friction heat rise on the rollers. In addition, because the contacting surface area of the roller with the raw material is so much smaller than in other types of processors, abrasion is minimized thus greatly reducing maintenance costs.

The CRACK-U-LATOR was originally introduced in 1956 and has been widely used in the coffee industry ever since. To this day, not a single roller has needed to be replaced. Rollers in conventional mills, on the other hand, must be replaced or sharpened on the average of every 7 to 12 months.

Additional cost savings can be realized, since the production rate of the CRACK-U-LATOR is much larger than conventional roller mills with the same power consumption. The sharp distribution of particle size also contributes greatly to the overall savings that result from these units.

Models and Capacities Available

<table>
<thead>
<tr>
<th>Model</th>
<th>Size of Roll x L (mm)</th>
<th>Number of Rolls</th>
<th>Capacity</th>
<th>Motor</th>
<th>Weight</th>
<th>Dimensions W x L x H (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>GRN 1031</td>
<td>4.6  x 9.1 (115 x 250)</td>
<td>6</td>
<td>110 lbs/hr (50 kg/hr)</td>
<td>2 HP</td>
<td>1.5 Kw</td>
<td>1'000 lbs (450 kg)</td>
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<tr>
<td>GRN 1531</td>
<td>4.6  x 9.1 (115 x 250)</td>
<td>6</td>
<td>660 lbs/hr (300 kg/hr)</td>
<td>5 HP</td>
<td>3.7 Kw</td>
<td>2'000 lbs (900 kg)</td>
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<tr>
<td>GRN 2531</td>
<td>4.6  x 9.1 (115 x 250)</td>
<td>6</td>
<td>275 lbs/hr (125 kg/hr)</td>
<td>2 HP</td>
<td>1.5 Kw</td>
<td>1'400 lbs (650 kg)</td>
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<td>4.6  x 9.1 (115 x 250)</td>
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<td>410 lbs/hr (185 kg/hr)</td>
<td>3 HP</td>
<td>2.2 Kw</td>
<td>2'370 lbs (1000 kg)</td>
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<tr>
<td>GRN 4531</td>
<td>4.6  x 9.1 (115 x 250)</td>
<td>6</td>
<td>660 lbs/hr (300 kg/hr)</td>
<td>5 HP</td>
<td>3.7 Kw</td>
<td>2'600 lbs (1150 kg)</td>
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<tr>
<td>GRN 6031</td>
<td>4.6  x 9.1 (115 x 250)</td>
<td>6</td>
<td>660 lbs/hr (300 kg/hr)</td>
<td>5 HP</td>
<td>3.7 Kw</td>
<td>3'000 lbs (1350 kg)</td>
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<td>GRN 6031</td>
<td>8.2  x 9.1 (200 x 250)</td>
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<td>1,540 lbs/hr (700 kg/hr)</td>
<td>7 HP</td>
<td>5.5 Kw</td>
<td>3'600 lbs (1600 kg)</td>
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<td>GRN 10031</td>
<td>10  x 9.1 (250 x 250)</td>
<td>6</td>
<td>2,270 lbs/hr (1000 kg/hr)</td>
<td>10 HP</td>
<td>7.5 Kw</td>
<td>4'640 lbs (2100 kg)</td>
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NIPPON GRANULATOR CO. LTD.
28-1 NISHIMACHI FUJINOMIYA SHIZUOKA, JAPAN 418
Telephone: 0544(271)3369 Facsimile: 0544(2)2307

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