

# **CRACK-U-LATOR**



**...A Revolutionary  
Granule  
Handling  
Innovation**

# No Other Method Can Match The Performance Or End Product Of This Unique Process



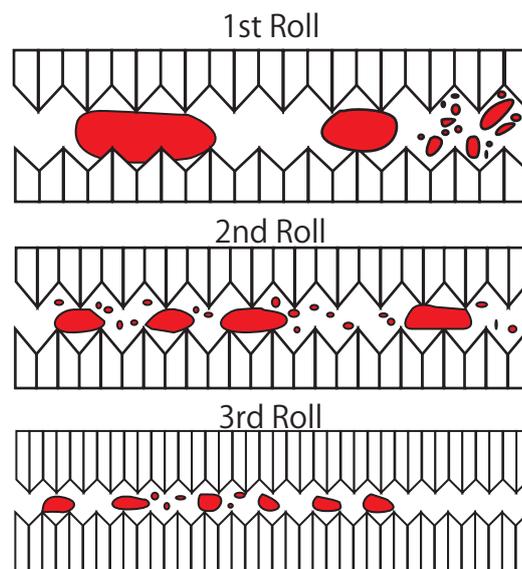
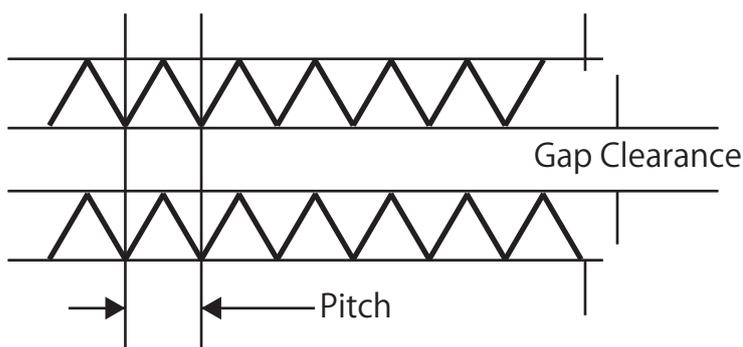
CRACK-U-LATOR offers an improved method of obtaining granules that is more efficient, more uniform and more cost effective than any other processor on the market today.

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.

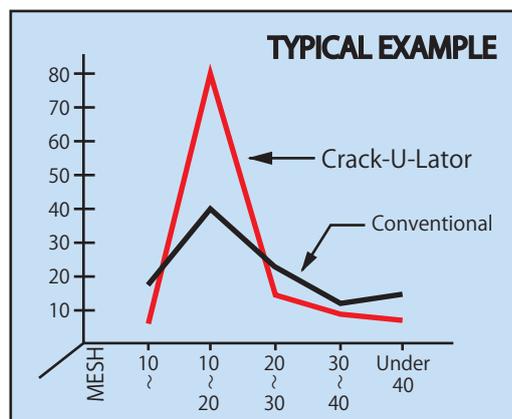
Succeeding sets of rollers are arranged with narrower gap clearance and steeper pitch.

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 over grinding, abrasion, excess roller surface heat and rapid roller wear.



Patented rollers crack the material in stages until desired particle size is achieved.



Unmatched Particle Distribution no other conventional grinder, hammermill or roll mill can produce that shows as sharp a distribution curve as the CRACK-U-LATOR. In many cases, screens and recycling of grindings are even eliminated.

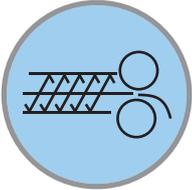
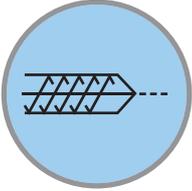
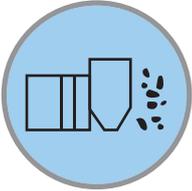
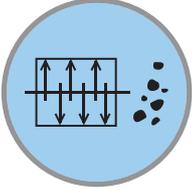
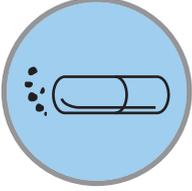
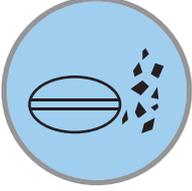
# Depend On CRACK-U-LATOR

## 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** - Flake, 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, cobalt, oxidized material, pigment, etc.
- OTHERS** - Soap

	Sample	Before Treatment	After Treatment
Compactor		 Compactor Processed Material	 CRACK-U-LATOR Processed Material
Extruder		 Extruder Processed Material	 CRACK-U-LATOR Processed Material
Dryer		 Dryer Processed Material	 CRACK-U-LATOR Processed Material
Mixer		 Mixer Processed Material	 CRACK-U-LATOR Processed Material
Capsules		 Capsules Processed Material	 CRACK-U-LATOR Processed Material
Coffee Beans		 Coffee Beans Processed Material	 CRACK-U-LATOR Processed Material

# CRACK-U-LATOR Helps You

Hold On The Line Costs

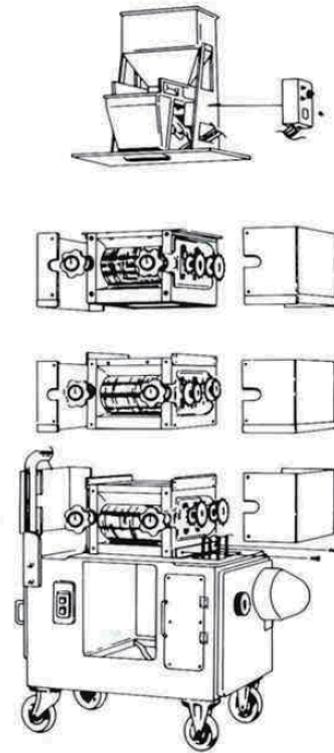
As You Produce A Better Product

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 1966 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 unit.

Maintenance  
Is Made Easy  
To Hold  
Downtime  
To A Minimum



The units are designed so that they can be disassembled and rebuilt in 30 minutes. Washing down the unit takes only 5 minutes. Moderate RPM of drive train assures long life of bearings and chains.

## Models and Capacities Available

Model	Size of roll ( $\varphi$ x L)	Number of rolls	Capacity	Motor	Weight	Dimensions (W x L x H)
GRN1031	4.6" x 4" (115 x 100mm)	6	110 lbs / hr (50kg / hr)	2 HP 1.5 kW	1100 lbs (500kg)	24" x 20" x 40" (600 x 500 x 1000mm)
GRN1531	4.6" x 6" (115 x 150mm)	6	165 lbs / hr (75kg / hr)	2 HP 1.5 kW	1320 lbs (600kg)	28" x 20" x 40" (700 x 500 x 1000mm)
GRN2531	4.6" x 10" (115 x 250mm)	6	275 lbs / hr (125kg / hr)	2 HP 1.5 kW	1540 lbs (700kg)	32" x 20" x 48" (800 x 500 x 1200mm)
GRN3531	4.8" x 14" (120 x 350mm)	6	410 lbs / hr (185kg / hr)	3 HP 2.2 kW	2270 lbs (1000kg)	59" x 28" x 80" (1470 x 700 x 2000mm)
GRN4531	6" x 18" (150 x 450mm)	6	660 lbs / hr (300kg / hr)	5 HP 3.7 kW	2860 lbs (1300kg)	70" x 32" x 84" (1750 x 800 x 2100mm)
GRN6031	6" x 24" (150 x 600mm)	6	880 lbs / hr (400kg / hr)	5 HP 3.7 kW	3300 lbs (1500kg)	76" x 32" x 94" (1900 x 800 x 2350mm)
GRN8031	8" x 32" (200 x 800mm)	6	1540 lbs / hr (700kg / hr)	7 HP 5.5 kW	3960 lbs (1800kg)	84" x 40" x 102" (2100 x 1000 x 2550mm)
GRN10031	10" x 40" (250 x 1000mm)	6	2270 lbs / hr (1000kg / hr)	10 HP 7.5 kW	4540 lbs (2000kg)	92" x 48" x 110" (2300 x 1200 x 2750mm)

## SOLE DISTRIBUTOR



**MATSUBO Corporation**

Hamamatsucho Square (12F), 1-30-5,  
Hamamatsucho, Minato-ku, Tokyo 105-0013 JAPAN  
TEL: +81-3-5472-1731

## MANUFACTURER

NIPPON GRANULATOR CO.,LTD.  
28-1 Nishimachi, Fujinomiya Shizuoka  
418-0056 Japan  
TEL +81-544-27-3369  
FAX +81-544-26-2307