Granulators

Granulators range

DEAGGLOMERATE MATERIALS HAVING TENDENCY TO CAKE

**PRESENTATION**

The implementation of a granulator greatly facilitates the flow of product and its further use. It deagglomerates the product by the action of rotary blades forcing the product to pass through a sizing screen.

PALAMATIC PROCESS granulators can be implemented on various dumping units or storage hoppers: big bag emptying stations, bag opening units, silos...

The implementation of the granulator can be performed on new or existing equipment. Our design office ensures its integration to your existing line.

**OPERATING PRINCIPLE**

The granulator is made of three or four chamfered paddles or scraper blades mounted on the radius of a 90° shaft. Lumps come against a sieve which mesh size should be defined (standard mesh 5x5, 10x10, 30x30, 50x50 mm).

Depending on the material, removable bars provide a first «breaking» of the clods. The granulator can be installed transversely (over the entire width of the machine) to ensure a high flow rate.

Granulators range

<table>
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<th>Models</th>
<th>GR20</th>
<th>GR35</th>
<th>GR50</th>
<th>GR70</th>
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</thead>
<tbody>
<tr>
<td>Dimensions of the passing flange in mm</td>
<td>200 x 200</td>
<td>200 x 450</td>
<td>300 x 650</td>
<td>400 x 900</td>
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<tr>
<td>Theoretical flow in m³/h</td>
<td>2</td>
<td>3</td>
<td>10</td>
<td>15</td>
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Thanks to its robust design and the numerous applications already effected, the granulator offers excellent reliability of desagglomeration.

Designed with a high mechanical resistance, it does not only offer safety and efficiency of use but also easy maintenance and cleaning. The risk of cross contamination is nil.

PALAMATIC PROCESS granulators are available in painted steel, stainless steel 304L and 316L and adapt well the requirements of each process.

Granulator GR35 fitted with 3 interchangeable grids according to the materials to be treated

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Option
Pre-crushing bars for extremely caked products with high hardness level
Granulators

4 standard models:
GR20 - GR35 - GR50 - GR70

GRANULATOR GR20

**Model**

- Material passage in mm: 200 x 200
- Theoretical flow in m³/hr: 2
- Engine power in kW: 2.2
- Rotation speed in rev./min: 30

GRANULATOR GR35

**Model**

- Material passage in mm: 200 x 450
- Theoretical flow in m³/hr: 3
- Engine power in kW: 3.3
- Rotation speed in rev./min: 30

GRANULATOR GR50

**Model**

- Material passage in mm: 300 x 650
- Theoretical flow in m³/hr: 10
- Engine power in kW: 5.5
- Rotation speed in rev./min: 20

GRANULATOR GR70

**Model**

- Material passage in mm: 400 x 900
- Theoretical flow in m³/hr: 15
- Engine power in kW: 7.5
- Rotation speed in rev./min: 15

Available custom made.

Granulators

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Granulators

Advantages

- Removable and interchangeable trough: depending on the material to be treated, the operator selects a proper calibration grid.
- Removable grid: the grid is easily removable (disassembly time <1 min). A security strike provides operator’s protection.
- Ease of maintenance and cleaning: the hygienic design as well as wide access flanges make the equipment easy to clean with clean in place options.
- Optional mirror polished finish: depending on the materials to be treated and cleaning constraints, specific finishes are available: mirror polished, PTFE or Teflon.
- High flow rates: the range of PALAMATIC PROCESS granulators GR ensures a wide choice of flow rates up to 20 t./hr. (standard version).
- Security strike: all removable parts of the granulator (inspection doors, grid) are secured by the setting up of inviolable 3-state strikes (open / closed / locked).
- Detached bearing: the design focuses on use in difficult given to the shaft passage: detached bearing on plate and plated sealing strips. Option: rotation and temperature sensors.

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- Multi-products:
PALAMATIC PROCESS’ experience ensures operation over a wide range of materials. For very specific materials, tests can be carried out in our testing stations.

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**TECHNICAL CHARACTERISTICS**

- Calibration grid easily removed and cleaned (drawer system)
- Passing diameter is adjustable to each material
- Full aperture of the inlet and outlet flange
- Separated bearings with grounding straps and connection sealing
- Chamfered knives or scrapers blades
- Rotation speed adjustable with frequency drive

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**EXAMPLES OF TESTS**

- **Zucchini**
- **Boric acid**

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**TEST PLANT**

Our equipment is available for testing. We can perform tests on granulator, lump breaker and grinding mill. Such flexibility allows us to define with you the most suitable PALAMATIC PROCESS equipment for your material.

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**AVAILABLE CUSTOM MADE**

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Discover our lump breaker tests on our YouTube channel: www.youtube.com/user/Palamaticprocess