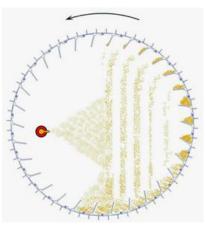


# ESTEEM ENGINEERS

#### <u>Increase Productivity (Fastest Delivery) in shortest span of time at lowest cost.</u>







**Rotary DRUM Granulator** 

**Rotary PAN Granulator** 

**Model NO.** : Drum Granulator

**Power Source**: Electric

**Application Field:** Fertilizer Production

**Operation Mode:** Continuous mode as well as Batch mode

## **Product Description:-**

Rotary Drum Granulator as one of the key equipments in fertilizer industry, the cylinder body adopts special stainless steel or rubber plate lining structure. It can remove scar and peel burl automatically. It has the advantages of high intensity of granule, high production, erosion proof, abrasion proof, low energy consumption, long service life, convenient operation and maintenance etc. Remark: If the formulation, process and raw material are different, it will affect the yield, grain rate and the diameter of the grain.

## **Working Principle of Rotary Drum Granulator:**

Raw materials to be granulated can be steam, gaseous ammonia, phosphoric acid, ammoniacal solution, ammonium phosphate slurry, and triple superphosphate slurry. After these solid fertilizer particles enter into the rotary drum, they will make reciprocating movement under functions of gravity, centrifugal force, and friction force between fertilizers. With the rotary movement of the drum, produced materials spray onto the surface of granulation nucleus. Then the coating layers become thicker and thicker until produced materials are granulated into required dimensions. Finally, those obtained products are spilled out from the discharging hole.



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### **Advantages of Rotary Drum Granulator**

- 1. The barrel body of this rotary drum granulator is made up of special rubber plate lining or acid-resistant stainless steel lining plate, thus automatic scar and burl removal is achieved. So the traditional scraper device is canceled in this rotary drum granulator.
- 2. This granulator features an attractive appearance, rational structure, high granulating intensity, good corrosive resistance, good abrasive resistance, low energy consumption, long service life, convenient operation and easy maintenance, etc.
- 3. This granulator is applicable to producing both of organic and inorganic fertilizers.

#### Capacity: - 2.5 tons/hour to 30 tons/hour

### Q. Where could we utilize a rotary drum granulator?

A rotary drum granulator, a kind of fertilizer equipment, is mainly used to complete granulation process during compound fertilizer production processes. Firstly, add raw materials into the drum. Then the materials will rotate along with drum rotation. Finally, the materials will form into granules under the condition that a certain humidity and temperature is provided. Note: When our rotary granulator is used for fertilizer production, the raw materials for producing compound fertilizer will finish chemical reaction and heat generation inside the drum. Compound fertilizer raw material may include vapor, ammonia gas, phosphoric acid or nitrogen solutions, phosphorus and ammonia slurry, and TSP slurry, etc.

# Q. Why choose our rotary drum granulator?

- 1. Granulation rate reaches 70%. A few bit of reverts with small granularity are available for new granulation.
- 2. By adopting vapor for material heating, finished granules feature low water content. Thus the load of drier is reduced and production efficiency is improved.
- 3. UHMW-PE inner drum lining features good corrosion resistance and heat preservation capability. It can effectively prevent raw materials from sticking to the drum. Therefore, our rotary granulator can help reduce labor intensity and prolong machinery lifetime.
- 4. Our rotary drum granulator features simple operation, large production, low power consumption and low maintenance cost.