One pass type gravity blender

G-Blender GRAVITY BLENDER

The Gravity Blender provided by Denka Consultant & Engineering Co., Ltd., (DCE) is a gravity type blender that blends powder and granular materials when extracting them from the blender, and it does not require motive power.

Denka Consultant & Engineering Co., Ltd., (DCE) introduced the technology from Allied Industries Co., Ltd., of the USA.

The system is suitable for blending a large amount of materials and is especially useful for adjusting quality of materials between lots and homogenizing the deviations of quality in a continuous process.

## Features of Gravity Blender

- (1) The materials are blended by the force of gravity. It is an energy-saving blender that does not require motive power.
- (2) Since the system utilizes the force of gravity, the crushing of granules can be kept to a minimum.
- (3) The system is suitable for blending a large amount of materials.
- (4) The system does not have moving parts, so it can be operated with a minimal amount of maintenance.
- (5) Since the circulation of granular materials is not generally required, the blending time can be short. Circulation may be performed for achieving high blending ratio.



A number of blend tubes are concentrically installed inside the blend tank. Each tube has some holes at random heights, and granular materials that enter from the hole will flow down inside the tube by the force of gravity.

A blend chamber is installed at the lower part of the blend tank, where blending is implemented.

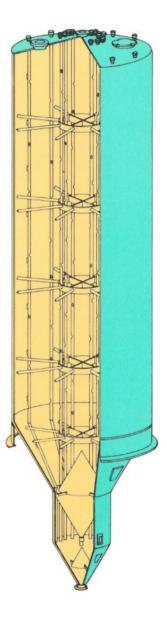
## Application

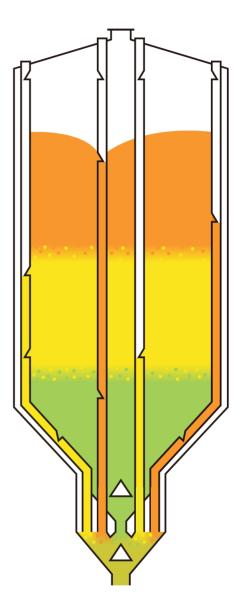
- For blending resin pellets (PE, PP, PVC, PS, PVA, nylon, polyurethane, polyacetal).
- Powders with good fluidity (granular iron sand and etc.)
  - Blenders are standardized up to the capacity of 450 m<sup>3</sup>. Blenders larger than 450 m<sup>3</sup> can be manufactured.
  - A blending test will be implemented in the blending test facility in our company prior to adoption, and the applicability will be judged.

## System Structure of Gravity Blender

Each tube has some holes at random heights, and installed in the blend tank.

Granular materials that enter from the hole will flow down inside the tube by the force of gravity and will be blended inside the blend chamber installed at the lower part of the blend tank.





**Cross section of Gravity Blender** 

Image of blending in Gravity Blender



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