

Case Study No 17

CREATING SEMI-DRY PELLETS FROM SLURRY USING THE GERICKE NIBBLER

Description

The slurry product, via a feeder, enters the Gericke Nibbler where the rotary blades rotate through the thick mass, compacting and pushing the product through a serrated screen; creating a semi dry pellet size of 8 mm. (The size can be altered at any time by changing out the screen size: pellet size options 1 mm to 25 mm).

One important thing to note is in this circumstance, we needed a precise constant feed to maintain the filling degree of the nibbler (which can be achieved by a Gericke loss

in weight feeder).

Product Powder, coming out of a fluid-bed dryer.

Grain size mm <0,5, Lumps mm 30 – 100.

< 15 mm.

Requirements Consistency on pallet size (8mm),

cheaper solution than an extruder.

Moisture

Content% < 1%

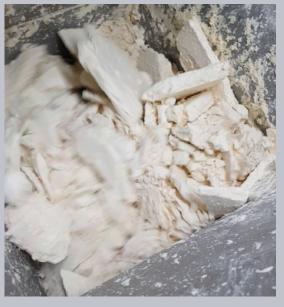
Expected

Capacity 2 T/h

Industry Chemicals/Plastics,

(solution can be used for all + industries).

Client Producer of recycled plastics.





Product when entering the nibbler and then after.

The Gericke Nibbler is a coarse grinder and pre-breaker for the size reduction in a broad range of applications. Normally it is used for deagglomeration, rework and breaking down/size reduction of lumpy or frozen product. However, after numerous testing with different customers, we have also been successfully using our Nibbler with slurry products.

Benefits of the Gericke Nibbler

- Compact and robust design but high capacity size reduction.
- · Low power consumption and low noise levels.
- Minimum product temperature rise and fines generation, due to low rotational speed.
- Consistent particle size.
- No special tools required for maintenance, easy to access.
- Adjustable paddle blades.
- Customized versions available for special applications (heating/cooling, higher pressure, heavy duty etc.).





Specification options

- Available in sizes from 200 mm up to 1200 mm, for process rates from less than 10 kg/h up to 50,000 kg/h.
- Pallet sizes from 1 mm to 25 mm.
- Screen materials perforated plate/serrated/woven wire.
- Optionally ATEX approved.
- · Hygienic options.

Gericke Testing

These applications need to be tested and can be done so at any of our testing facilities.

About Gericke

The Swiss Gericke Group has been designing and manufacturing equipment and systems for modern bulk material processes, as well as providing design and consultation services for more than 125 years. Gericke bulk materials processing technology can be found throughout the world in many sectors including the food, chemical, pharmaceutical, plastics and construction material industries.

Gericke's fully owned group companies employ more than 300 experienced professionals and are located in Switzerland, Germany, Great Britain, The Netherlands, Belgium, France, USA, Brazil, Singapore, Indonesia, Malaysia, Thailand and China.

