

Granulating in the EIRICH-mixing granulator

Build-up agglomeration in the ceramic industry

- refractory materials: press bodies for isostatic pressing
- wall and floor tiles
- molecular sieves

varistors

- dental ceramics
- cutting ceramics
- abrasives, hard metals
- oxide and non-oxide ceramics
- grinding balls
- ferrites

Other applications

- pelletizing of oresproppants
- filter media,
- catalyst carriers
- fertilizers
- animal feed

- glass batches, foamed glass
- coloring pigments
- welding flux
- dusts, cyclone dusts
- building materials,
 - e.g.gypsum
- sand of expanded clay

The unique working principle

Rotating mixing pan

for material transport, rolling of granules

Variable-speed mixing tool, slow to fast for mixing, granulating,

increase of rolling energy

Separation between material transport and the mixing process This allows the speed of the mixing tool (and thus the power input into the mix)

to be varied within wide limits.

This working principle offers the following options:

- The mixing tool can be run variably, slow to fast
- The input of power into the mix can thus be controlled specifically
- High tool speeds allow
 - dry basic materials to be homogenized optimally
 - microgranules to be formed after addition of liquids
- Low tool speeds allow bigger granules to be formed and rounded, granules up to 6 mm possible
- Special tools enable high yields of fine granules to be obtained (e. g. 0.2 to 0.8 mm)

Further advantages:

- The EIRICH-mixing granulator was developed from the disk pelletizer, high-quality granules are formed
- Mixing and granulating in one and the same machine
- Short processing times, low space requirement
- Discontinuous operation possible

- Already the first batch produces correctly sized grain
- Filter cakes and sludges can be granulated together with dusts
- Combination with disk pelletizer possible:
 - grain spectrum adjustable within narrow limits
 - pellets with a diameter of up to 30 mm producible
- The mixer can be heated
- Mix temperatures of up to 250 °C are possible
- Available size from 1 L

EIRICH customers tell from experience:

- Significant cost savings compared to thermal granulation and fluid-bed agglomeration
- Less wear compared to press agglomeration

Top-name manufacturers around the world work with EIRICH mixing technology. We would be glad to provide references on request. EIRICH is a reserach partner for universities. Put us to the test. We would be glad to tell you more.

MIXING TECHNOLOGY

MR 1862-1-en 11/2014