

# 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 ores
- proppants
- 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

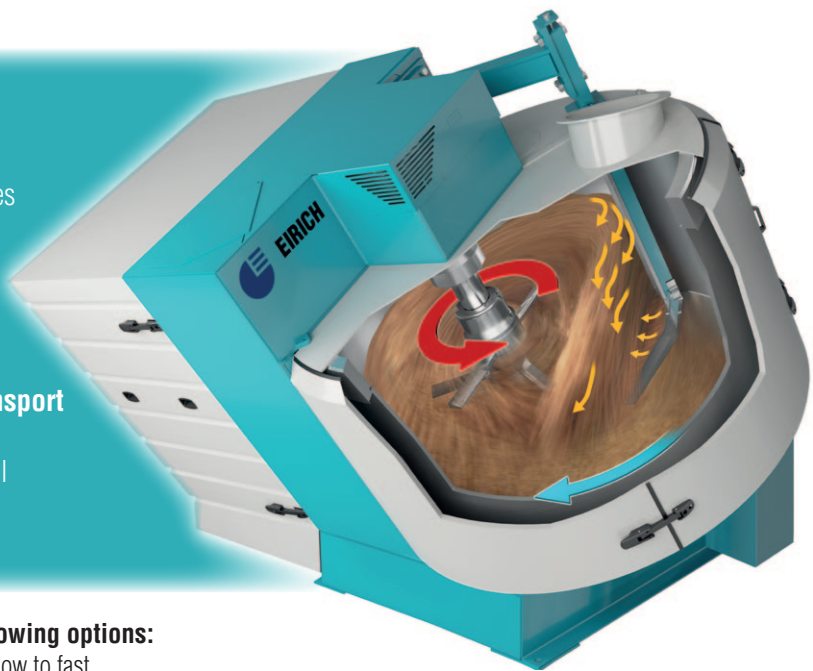
for material transport, rolling of granules

### 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 research partner for universities.  
Put us to the test. We would be glad to tell you more.**