Mixing Technology for the Ceramic Industry

Granules/Press bodies for
- ceramic tiles
- stove tiles
- technical ceramics

Granules for
- molecular sieves
- proppants
- grinding balls
- expanded sand / expanded clay / expanded glass

Plastic bodies for
- ceramic tiles
- roof tiles
- clay bricks
- stove tiles
- utility ceramics
- technical ceramics (catalysts, high-temperature materials)

Bodies for foamed and heat insulation ceramics
- Spray slurry for
- wall and floor tiles
- utility ceramics
- technical ceramics

Casting slurry for
- sanitary ceramics
- technical ceramics
- utility ceramics
- Nanoceramics

Fiber-reinforced ceramics
- carbon ceramics for brake disks

The unique working principle

Rotating mixing pan
for material transport

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

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 mixing principle offers the following options:
- The mixer is suitable for mixing as well as granulating, kneading and dispersing
- The mixing tool can be run variably, at low or high speed
- The input of power into the mix can thus be controlled specifically
- High tool speeds allow
  - agglomerates to be disintegrated perfectly
  - fibers to be disintegrated optimally
  - primary particles to be completely coated with an organic solvent film when dispersing
- Medium tool speeds allow high-quality mixtures to be produced
  - extrudible mixes to be kneaded effectively
  - green scrap and drying losses to be plasticized or dispersed again
- Low tool speeds allow lightweight aggregates or synthetic foams to be mixed-in gently

Further advantages:
- No areas with low flow
- Variable power input, mixing energy exactly adjusted to the respective task
- Short processing times
- Small space requirement
- The mixer can be heated
- Mix temperatures of up to 250°C are possible
- Available size from 1 L

EIRICH customers tell from experience:
- Energy savings compared to other systems
- Higher apparent densities or densities per liter achievable
- As a result, further energy and cost savings, e.g. with thermal granulation

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.