Preparation of extrusion mixes

- for honeycomb ceramics such as catalysts, diesel particulate filters, casting filters
- for ceramic pipes, boards and membranes

The unique working principle

Rotating pan
for transporting the product

A variable, low to high speed mixing tool
for mixing and kneading

The effect
The separation between material transport and the mixing or kneading process 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 possibilities:
- Dry mixing and kneading in a single unit
- High quality mixes after a short dry mixing time
- Feedstocks for plastic mixes
- Optimal distribution of small quantities even in the ppm range
- Optimal separation of agglomerates and fibers
- Quick and complete distribution/admixing of liquids without formation of lumps
- Controlled input of kneading energy into the mix by shearing forces
- Substantially shorter processing times, energy savings compared to kneaders

Other advantages:
- No dead spaces in the mixer; the material is conveyed to the mixing tool, not vice versa
- Significantly faster transition into the plastic phase than with low speed kneaders
- Short processing times, high volume specific throughput rates
- Cooling and heating in the mixer are possible, sure observation of specified temperatures
- No shaft passages in contact with the product, little wear
- Only 1 mixing/kneading tool for mixer sizes from 1 liter up to 3000 liters, good scale up potential

What EIRICH customers say:
- Reduced power draw on the extruder saves energy
- Significantly less wear on the extruder

Example: EIRICH mix is more plastic after 4 min than kneader mix after 40 min

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.