

# Mixing Technology for Refractory Materials

## ■ Shaped products

- brick press bodies of any kind
- bodies for insulating firebricks
- kiln furniture press bodies
- bodies for isostatic pressing
- bodies for ceramic filters

## ■ Unshaped products

- dry mixes (e. g. refractory concretes)
- plastic bodies
- ramming mixes
- mixing of concretes for prefabricated parts
- mortar and putties

### The unique working principle

#### Rotating mixing pan

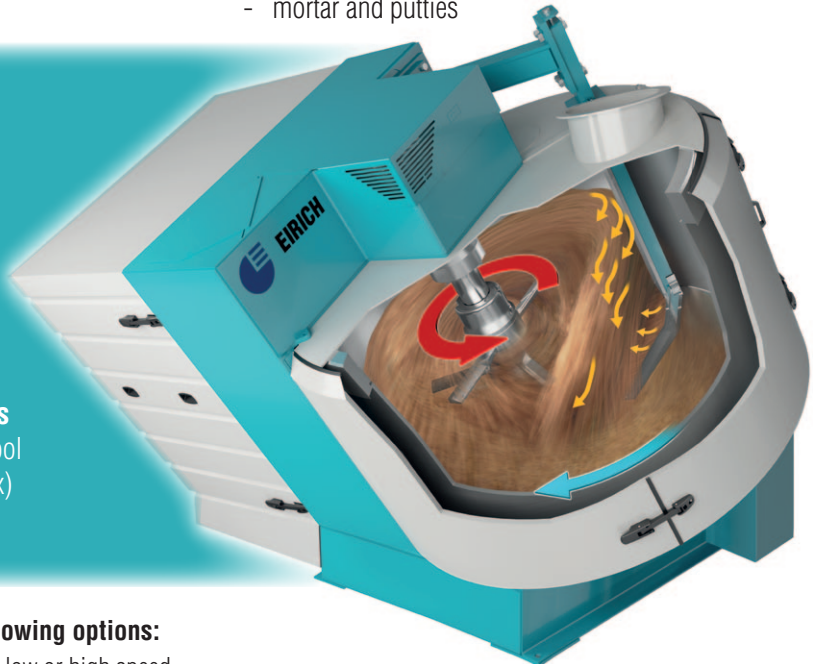
for material transport

#### Variable-speed mixing tool, slow to fast

for mixing, kneading etc.

#### 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, at low or high speed. The input of power into the mix can thus be controlled specifically.
- High tool speeds allow
  - fibers (synthetic, ceramic, steel) to be disintegrated optimally
  - very small amounts of additives to be mixed-in optimally
- Medium tool speeds allow high-quality mixtures to be produced
- Low tool speeds allow lightweight aggregates to be mixed-in gently

### Further advantages:

- Mixing processes and mixing speeds can be adjusted to suit the respective formula
- The mixer is suitable for both mixing and kneading. This allows to also prepare silica brick press bodies without muller and to produce plastic / extrusible bodies without kneader.
- The mixer is suitable for mixing and granulating. This provides a cost-effective solution for the production of granules (for isostatic presses or alternatively to thermal granulation)

- Operation under protective gas / redrying of granules and bodies under vacuum is possible
- Dry mixers can be supplied with an automatic pneumatic interior cleaning system
- The mixer can be heated
- Mix temperatures of up to 250°C are possible
- Available size from 1 L

### EIRICH customers tell from experience:

- Mixing result and mixing quality remain unchanged even if only partial quantities are mixed, down to 30% of the nominal capacity
- Dry mixing: Distinctly fewer repairs due to wear compared to cylindrical mixers
- Substantially less water is required for manufacturing prefabricated components, less porosity

**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.**

**Maschinenfabrik Gustav Eirich GmbH & Co KG**

Postfach 11 60, 74732 Hardheim, Germany  
Phone: +49 6283 51-0, Fax: +49 6283 51-325  
E-Mail: eirich@eirich.de, Internet: www.eirich.com

**CERAMICS**