Mixing Technology for Molding Material Preparation

- for synthetic molding sand
- for semi-synthetic molding sand
- for natural sand

The unique mixing principle

Rotating mixing pan
for material transport

High-speed rotor tool
for mixing

The effect
The separation between material transport and the mixing process allows a maximum input of power to be introduced into the molding material with a minimum of wear.

This working principle offers the following options:
- Optimal disintegration of bentonite
- Quick and homogeneous distribution of water
- Complete and even coating of sand grains with binder, carbon carrier and fines
- Increase in productivity through higher molding material quality

EVACTHERM®-process:
Mixing and cooling in one single machine!
- Quick activation of bentonite binding forces through steam atmosphere and temporary overmoistening
- Constant prepared sand temperature, independent of climatic conditions
- Less amount of recycled sand possible
- Strongly reduced exhaust air quantities, smaller dust extraction system
- Small space requirement
- Less conveying technology necessary
- Recirculation of process water as condensate - thus lower salinization - resulting in: lower deactivation of bentonite

Further advantages:
- Precision control of molding material quality by:
  - Moisture measuring and correction with moisture correction probe FK
  - Online control of sand quality by QualiMaster AT1
- Mixers, scales and control systems of own production
- Planning and construction of complete sand preparation systems possible

EIRICH customers report their experience:
- Saving in binders, particularly bentonite
- Substantially reduced preparation costs of molding material
- Higher product quality by reduction of casting defects induced by molding sand
- Lower scrap rates
- Reproducible molding material quality by the interaction of moisture correction probe and QualiMaster AT1
- High availability of machines and systems

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.