Mixing Technology for Geopolymer Bonded Materials

Any consistency can be manufactured / processed:
- Dry mixes
- Granular material / press bodies
- Plastic bodies
- Suspensions / castable slip

The unique working principle

Rotating pan
for transporting the product

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

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 possibilities:
- The mixing tool can be run variably, at low or high speed.
- The input of mixing energy into the mix can thus be selectively controlled.
- Solid and liquid components are admixed easily and quickly.
- Binders are optimally distributed, therefore often smaller amounts need to be added.
- Fibers are admixed fast.
- By varying the speed, disintegration and distribution of fibers can be adjusted within wide limits.
- Suspensions can be produced containing a high content of solids.
- Plastic bodies can be prepared within a few minutes.
- By adding solids to suspensions, pourable press bodies can be produced.
- By adding toxic residues to suspensions, it is possible to obtain consistencies that are safely immobilized and suitable for depositing in landfills.
- By adding foaming agents or introducing synthetic foam into suspensions, it is possible to process lightweight materials.

Other advantages:
- No dead zones in the mixer
- Short process times
- No shaft passages in contact with the product, little wear
- Optimal separation of agglomerates and fibers without choppers
- Only 1 mixing tool for mixer sizes from 1 liter up to 3000 liters
- Suitable for alkaline and acid activation
- Different manufacturing steps performed successively in different units can often be accomplished in 1 single machine.
- Operation in batch mode or continuous mode
- Cooling in the mixer is possible.
- Heating the mixer is possible.
- Mix temperatures of up to 250 °C are possible.
- Sizes from 1 liter

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.