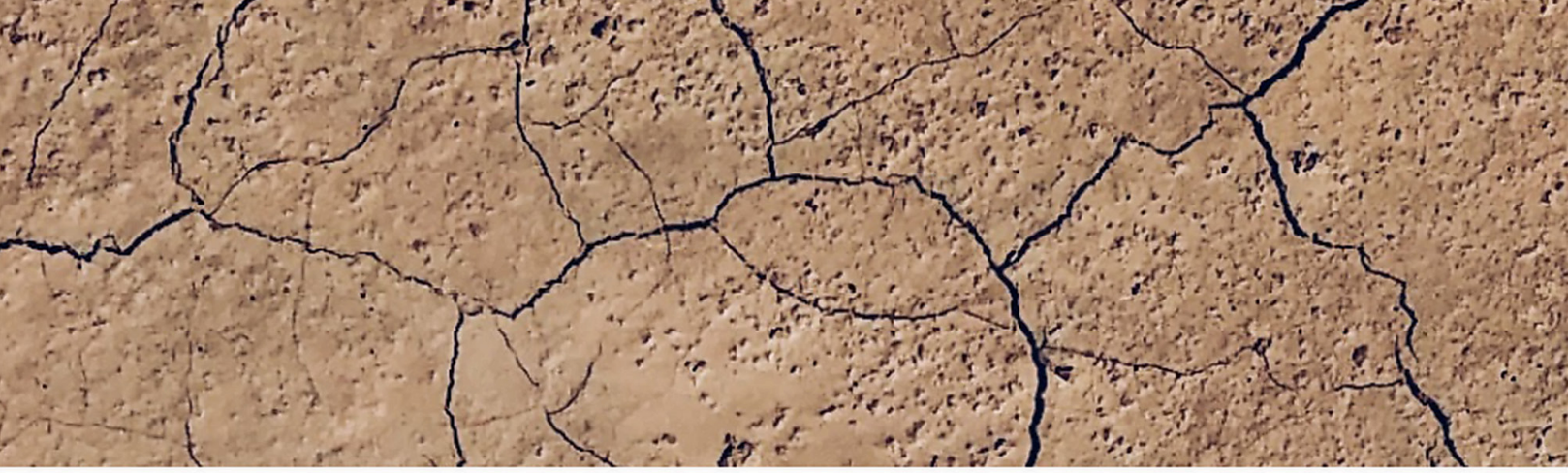


Calcined Clay
Solutions for a carbon free future

For each ton of cement clinker produced, approximately 800 kg of process-related CO_2 is emitted. Approximately 65% of these results from the chemical reaction of limestone used in the production process. Fuels and electricity for heating the limestone, together with other aggregates, are responsible for the remaining 35%. Calcined clay, which does not release CO_2 due to chemical reaction, can replace a large portion of the clinker in the cement. In contrast to clinker burning, clay calcination happens at the lower temperature of around 800°C, which reduces the amount of fuel required, therefore reducing CO_2 emitted during the hot gas generation.

+ **Reduced clinker factor**
+ **Reduced CO_2 emissions**
+ **Decreased fuel and productions costs**
+ **Increased sustainability towards decarbonization**
+ **Fuel-flexible system, suitable for alternative fuels**
+ **Increased cement production**

Company profiles

IKN is specialized in the supply of plant components to produce cement clinker. IKN provides extensive knowledge in innovative solutions from clinker cooler to complete pyro systems. Through many years of experience in the cement industry IKN will provide highly efficient solutions for the preparation, storage, and transport of raw and calcined clay

FCT is a global company that offers proven, state-of-the-art technologies, delivered by a specialist team with decades of experience in commissioning calcined clay plants across the world. FCT will provide the clay calcination unit which is either a Flash Calciner (FlashCalx™) or Rotary Kiln (RotaCalx™) system.

IKN
ENGINEERING THE FUTURE
www.ikn.eu

FCT COMBUSTION
Delivering Performance
www.fctcombustion.com

Merging the knowledge and experience of IKN and FCT we are prepared for new innovative challenges and will support you before, during and after the project phase.

IKN competence

Raw Material Handling
- Receiving the raw material
- Pre-crushing of the raw material

Integrative engineering
- Equipment integration
- Integration in existing infrastructure

Crushing and Drying
- Grinding and drying in a hammer mill
- Raw clay feeding

Storage and Transport
- Conveying from bag filter outlet to storage silo
- Storage silo

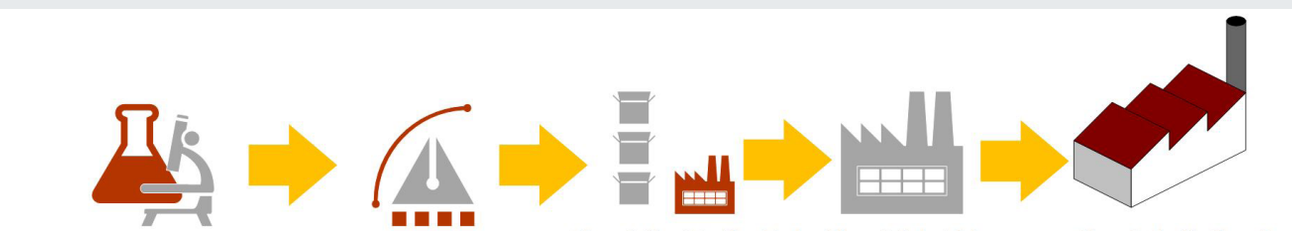
FCT competence

Clay Calcination Unit
- Flash calciner
- Rotary kiln calciner

Color Control Unit
- Atmosphere control
- Patented use of inorganic modifiers

Thermal Energy Supply
- Direct firing for easy to burn fuels
- Hot gas generators for hard to burn fuels including AF

Gas Treatment
- Sulphur removal units
- Chlorine removal units



Phase 1: Raw Material Characterisation
(a)Desktop Evaluation
(b)Laboratory Quality Assessment

Phase 2: Conceptual Design

Phase 3: Plant Test in a Flash Calciner

Phase 4: Industrial Scale Trials

Phase 5: Finalisation of Design & Equipment Supply

To assist you in selecting the most appropriate method and equipment for your unique case, we have an equipment selection diagram, articles, and video presentations, available at:
https://fctcombustion.com/clay-calcining-technologies

Contact

Please contact our sales department for a customized offer at either
clay@ikn.eu or clay@fctinternational.com

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