



# SERVICE AGREEMENTS FOR CALCINED CLAY PLANTS

**Get more from your investment with bespoke expert services;  
custom packages to best match your plant's requirements.**

Building and commissioning your calcined clay facility is an achievement, but actually achieving your business case also requires successful operation for the long term. We have you covered. Our service agreements provide the support you need to achieve the intended high substitution rates and low CO<sub>2</sub> emissions.

## **Global OEM support**

Through a combination of digital/online and onsite services, training, and spare/wear parts management, we can help you keep reliability high and OPEX low. Though some of the equipment may be new to your operators, we designed it – and can offer full flowsheet support to all aspects of your process.

## **Optimise production and eliminate bottlenecks**

You will have the support of a global network of experts with OEM knowledge and skills to help:

- Optimise calcined clay reactivity and cement quality to maximize substitution rates
- Implement a proactive maintenance strategy, including inventory planning
- Optimize overall equipment efficiency; productivity
- Ensure the efficacy of the colour control technology

## **Clay testing and feasibility studies**

Our purpose-built pilot plant in Dania, Denmark is one of the world's most advanced laboratories for the analysis of materials in cement production. It was reconfigured in 2020 for SCM activation and colour control. Everything you and your customers need to have confidence in product quality.

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## Online services

ECS/ProcessExpert® optimization solution	An advanced process control solution that ensures your plant performs to its full potential; maximum alternative fuel substitution, optimum blending of finished product, lowest energy consumption, high production and product quality. Thus, resulting in lowest OPEX and minimal carbon footprint.
Online Condition Monitoring (OCM)*	Continuous monitoring and analysis of equipment data to predict maintenance needs, identify performance gaps and optimise productivity.
Plant Line Agreement	Maintenance of your critical digital tools for optimum performance and security.
SiteConnect™ app*	See your plant data anytime, anywhere, for on-the-go performance analysis.
ECS/UpTimeGo™, Downtime analysis*	Identify the root cause of any problems in your process to prevent recurrence.



## Onsite services

Post commissioning technical service	On-site support for a period of time after commissioning to train your plant team in operation and maintenance routines.
Production / maintenance service	Regular on-site support from our service specialists. Proactive troubleshooting to provide advice on operation and maintenance to reduce risks of equipment failure and to maintain production efficiency.
Training	Get the benefit of our experience with training programmes designed for knowledge transfer.
Services to maximize clinker substitution – and thus achieve CO2 reduction targets	A bespoke combination of laboratory services, onsite support, and expert advice - according to your requirements. We will help you optimize the reactivity of calcined clay as well as the cement grinding process to achieve the desired clinker factor and cement characteristics.

## Spare and wear parts

First time / 2 years spares and wear package*	A set of recommended spare parts carefully selected and tailored to meet the specific requirements of the machine and the customer's needs.
Spares and wear parts stocking plan, and inventory management	Never wait on the parts you need – let us take care of inventory management for critical spare and wear parts.
Extended warranty for critical parts*	Includes critical components.

## Simulation, laboratory services

Process and scenarios simulation	A comprehensive process assessment using modelling scenarios combined with FLSmidth experience and knowledge. We first establish a high-level steady-state overall process model of the plant's current operation. Then we model the impact from future process modifications.
Laboratory testing and analysis services	Take advantage of our fully equipped laboratory and pilot plant to control product quality of the calcined clay as well as the final blended cement through bi-annual testing in our laboratory. We'll also produce a monthly review and analysis of quality trends from your own test results.

Recommended duration of service package is 2-5 years.

\* Digital enablers and sensors hardware included in the calcined clay plant scope.