THE PLANTS OF TOMORROW

CEMQ – REAL-TIME CEMENT QUALITY PREDICTION

◯ **APAC**　◯ **EUROPE**　◯ **MEA**　◯ **LATIN AMERICA**

It is currently impossible to estimate cement strength with any certainty until its 2-day, 7-day and 28-day strengths are measured through physical tests. Plants tend to compensate for this by using a higher amount of costly, high-quality clinker and additives to ensure a high-performing product. Alternatively, they may grind the product more extensively, as the fineness of the cement is another factor in determining its final strength. These approaches offer no way of accounting for the multitude of other production process variables that can affect cement quality.

Enter CemQ: using historic production data and machine learning, we forecast the future strength of cement and its quality accurately and in real-time at any point during the production process, while minimizing clinker factor, or mill electrical energy consumption.

Using historic production data and machine learning, we forecast the future strength of cement during the production process. This means that we can adjust parameters to prevent over-processing. During plant business case development, we select Clinker Factor or Mill electrical energy consumption, depending on plant product portfolio opportunity.

CemQ has saved 8% CO_2 (13,000 T annually) in Volos plant, Greece.

FACTS AND FIGURES:

- Adjusts production parameters in real-time based on predictions
- Stabilizes product quality and minimizes fluctuations
- Minimizes clinker factor and reduces CO_2 footprint
- Minimizes Mill electrical energy consumption
- To date, CEMQ has saved 8 % CO_2 (13,000 T annually) in Volos, Greece

GLOBAL IMPLEMENTATION STATUS:

- In use globally in APAC, EUROPE, MEA and Latin America
- Currently deployed in 25 plants
- Targeting 60 Holcim plants deployment by mid- 2023

Interested in more information on this initiative?　　Then follow **HOLCIM MAQER** for more insights!