## **OLYMPUS**°

## Solutions for the Cement and Aggregate Industry

Fast, On-Site Material Quality Control

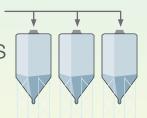
Vanta<sup>™</sup> handheld XRF analyzers provide immediate material chemistry throughout the cement manufacturing process to help save you time and reduce cost.



Quarry



Raw Materials Storage



Corrective **Materials** 



- Check calcium levels on the spot
- Know the quality of all the material you pull out of the ground

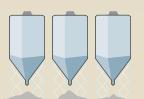
- Know the elemental composition of every pile in your storage yard
- Ensure you're removing the right material from storage before it gets to the kiln

• Make sure you're adding the right corrective materials

Gypsum



Clinker Storage



- Test mixed material coming from the kiln to make your changeover faster
- Know the material chemistry of your mixed piles for reblending

Kiln Relining



• Do incoming QC on your kiln bricks to ensure they're made of the correct materials to help avoid early failures

- Analyze feed stream materials
- Inspect incoming gypsum for the correct sulfate (SO<sub>4</sub>) content