



SUCCESS STORY REPUBLIC CEMENT (A CRH-ABOITIZ COMPANY)

Teresa plant • Teresa, Philippines



Challenge: Republic Cement (a CRH-ABOITIZ Company) needed a new cement grinding plant in 2015—a period of strong market growth in the Philippines. Because of the region's high humidity, Republic Cement required a grinding solution that would produce new cement types with higher additive content, such as wet pozzolan, fly ash and limestone, to replace some clinker. In effect, the new plant would need to produce cement with the highest cement-to-clinker ratio possible to balance existing grinding systems' lack of drying capabilities.

Response: Factoring in the high moisture content of the pozzolan found in the plant's vicinity, Fives designed and supplied an FCB Horomill® 3800 grinding plant that would meet Republic Cement's specific requirements. With effective drying an essential factor, the team incorporated an FCB Aerodecantor and a 17 MW Fives Pillard vertical hot gas generator in the aeraulic circuit to target a clinker factor as low as 0.5.

Result: The new FCB plant handled the low-clinker cement production with ease, increasing capacity by 0.85Mta. The plant achieved the desired clinker factor using substitute additives that were readily available near the facility. The customer would demonstrate its satisfaction by making a repeat order for its Norzagaray plant.

Added value: Thanks to the use of carbon-neutral additives, CO₂ emissions at the site were reduced by 94,000 tpy. This helped Republic Cement advance on its commitment to sustainable and environmentally friendly operations.



“Our rainy season means that pozzolan (SCM) can reach moisture levels of up to 25%, so we needed a system that would be able to dry materials in extreme conditions. Fives worked with us from the earliest project stages to make sure we had the right equipment in place to handle our unique environment.”

Lloyd Vicente,
VP - Manufacturing, Republic Cement