



Structural design - Freyssibar (+) prestressing bars - Carbon Fiber

RETROFITTING OF BULACAN PREHEATER TOWER

Philippines



General contractor

frevssinet

Customer/Owner

Republic Cement (CRH)

Engineer

Design by FREYSSINET / Owner's representative: AECOM

Freyssinet subsidiary

Freyssinet International & Cie (Rueil-Malmaison)

Others subsidiaries

FIMI (PHILIPPINES),

Works period

Start date: May 2018 End date: September 2018



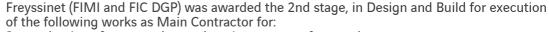
PROJECT DESCRIPTION

The Owner, Republic Cement (CRH) is undergoing a significant improvement

Pre Heater tower was built in Luzon Island (Philippines). Retro-fitting of preheater was required after structural inspection in order to increase production by installation of additional equipment such as cyclones.



Freyssinet (FIMI and FIC DT) performed a first stage of investigation, assessment, modelling and Preliminary design of the structural strengthening.



Strengthening of concrete beams by microconcrete form and pour

Strengthening of concrete beams by Carbon Fiber Fabric (TFC ®).

Application of coating protection

Strengthening of connection type 1 by steel structures connected to lateral blisters anchored by Freyssibars and load transfer by permanent flat jacks.

Strengthening of connection type 2 by steel structures supported by elastomeric Bearing



