

Project:
 Egyptian Refinery Company

Location:
 Qalubeya _ Mostord

Project completed:
 Jan 2018

Owner/s:
 Egyptian and Arab private investors

Applicator/ Main Contractor:
 Consortium of GS Engineering &
 Construction of South Korea and
 Mitsui & Co. of Japan for the
 construction
 A-Build

Civil Sub-Contractors:
 Orascom , HAC , Petrojet & SIAC

Market sector:
 Institutional buildings

Egyptian Refinery Company



Products used:

Repair and grout :

MasterEmaco S 488
 MasterEmaco N 303
 MasterFlow 980
 MasterFlow 928
 MasterFlow 524
 MasterFlow 648
 MasterBrace ADH 1418

Curing and bonding agent:

MasterKure 101
 MasterCast 141
 MasterFinish 341 M

Waterproofing and sealant :

MasterSeal 622
 MasterSeal 599
 MasterSeal 910
 MasterSeal NP 472

Tiling adhesive and grout :

MasterTile 30 White
 MasterTile 530 White

Protection products :

MasterEmaco 8100

Flooring :

MasterTop 1200
 MasterTop 1205

The background

ERC Refinery is a 4th generation technology refinery operating at a 4.2M.Tons/Year capacity

ERC planned to construct on its grassroots refining upgrade project to be built within the existing Mostorod Petroleum Complex (MPC), 20 km northeast of Cairo in Qalyoubia Governate, Egypt

ERC will produce European-grade diesel and IATA worldwide specification jet fuel for use solely in Egypt's domestic market

Construction on the \$3.7 billion project, which is designed to address Egypt's demand for petroleum products and reduce the country's dependence on imports, is scheduled to begin on Apr. 15 with piling work and some site preparation work related to underground obstacles like foundations,

The challenge

- 4 main Civil Contractorer with different background (Governmental / prive sector)
- Application challenge special for expoy grout due to the varaince of temp is Winter / Summer
- Very tough compition (we won the project while we are not the chepast supplier)
- Filling the gap under all base plates of all steel structures, Pipe Racks, small / big generators, cooling fans, cook Tower specially the Critical part Area with High vibration and dynamic load



Egyptian Refinery Company ERC



Our solution

Master Builders Solutions recommended its Cementitious Grout **MasterFlow 524** which is a high strength Non-Shrinkage construction grout under all steel pipe racks & big static cooling Fan for its proven & predictable performance with high bond strength to steel and Concrete with early strength development.

Master Builders Solutions Recommend its epoxy Grout **MasterFlow 648** which is a high strength foundation, epoxy grouting for support & precision of heavy equipment to ensure the proper transmission of static and dynamic loads to the equipment foundation.

The customer's benefit

- Client was satisfied with the performance of Master Builders Solutions products, usual Master Builders Solutions Technical Support mainly with all contractors work in the project.
- The Client & Consultant asked for a technical training for all contractors work in the project , Master Builders Solutions trained more than 2 crews for every contractor for casting Cementitious & Epoxy grout .
- Master Builders Solutions supported in casting MasterFlow 524 under one of the largest cooling fan at the project with Orascom for Construction (Contractor) & finally obtained excellent results

Projects facts at a glance

- Project duration: 30 months
- The largest refinery project in Egypt / Africa
- Filling with cementitious grout under static cooling fans / big generators with dimension 8.5m*4m*0.07m.
- Filling with Epoxy Grout under high dynamic / vibrated machine like: cook tower located on a height reached 80m

Master Builders Solutions by MBCC Group

The Master Builders Solutions brand expresses MBCC's expertise in providing customized chemical solutions for new construction, maintenance, repair and restoration of structures.

Master Builders Solutions is built on the experience gained from more than a century in the construction industry. At the core of the Master Builders Solutions brand is the combined know-how and experience of a global community of MBCC construction experts, who connect with you to solve all of your construction challenges.

Further information is available at:
<https://www.master-builders-solutions.com/eg/en>

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