

Project:
ETAP EL ATABAL

Location:
MÁLAGA

Project completed:
2015

Owner/s:
EMASA

Applicator/Contractor:
AZUL DE REVESTIMENTOS

Market sector:
Water Management Industry

Products used:
MasterInject 1360
MasterEmaco S 5450 PG
MasterEmaco S 5300
MasterBrace P 3500
MasterBrace SAT 4500
MasterBrace ADH 4000
MasterBrace LAM
MasterBrace FIB
MasterProtect 8000 CI
MasterTop P 621
MasterSeal M 808
MasterSeal M 391

ETAP EL ATABAL – Primary sedimentation tank Repair, reinforcement, protection and waterproofing



Aerial view of the primary sedimentation tank at the water treatment works ETAP El Atabal, (Málaga – Spain)

The background

Comprehensive refurbishment of one of the primary sedimentation tanks at the El Atabal water treatment plant in the province of Málaga (Spain) was required as a result of severe damage to the reinforced concrete structures.

The damage was the result of corrosion caused by acid attack as well as chlorides and sulphates in the environment.

The challenge

Full treatment was necessary. This simplified the system originally required in the project:

- Structural injection of concrete.
- Structural repair.
- Reinforcement using carbon fibers.
- Application of corrosion inhibitor.
- Application of protective waterproofing membranes.

Contact:

BASF Construction Chemicals España, S.L.
Carretera del Mig nº 219
08907 L'Hospitalet de Llobregat (Barcelona)
Tel: +34 93 261 61 00
Fax: +34 93 261 61 09
E-mail: basf-cc@basf-cc.es

ETAP EL ATABAL – Primary sedimentation tank

Repair, reinforcement, protection and waterproofing



Full refurbishment including concrete repair, reinforcement, and protective waterproofing in accordance with EN 1504

Our solution

Following a detailed evaluation of the structure of the condition and service requirements, a complete refurbishment proposal presented in accordance with the requirements of EN 1504. This included

- Structural injection of concrete using low-viscosity epoxy resin MasterInject 1360.
- Structural concrete repair using MasterEmaco S 5450 PG flowable repair mortar and MasterEmaco S 5300 thixotropic repair mortar MasterEmaco S 5300.
- Reinforcement using carbon fiber system to replace lost rebar section.
- Application of MasterProtect 8000 CI corrosion inhibitor.
- Application of MasterSeal M 808 chemical-resistant waterproofing membranes with high crack bridging properties and MasterSeal M 391.

Benefits to the customer

Thanks to Master Builders Solutions, the engineer responsible for planning the project was able to simplify the treatment originally proposed.

During the refurbishment work, our technicians also provided continual advice to solve unexpected problems not considered in the original plan.

Projects facts at a glance

- Full refurbishment was needed: injection, repair, reinforcement, and protection using corrosion inhibitor and waterproofing membranes with high chemical resistance.
- Complete solution using Master Builders Solutions' products.
- Collaboration with planners to simplify solutions originally proposed for the project.

Master Builders Solutions from BASF

The Master Builders Solutions brand expresses BASF'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 BASF construction experts, who connect with you to solve all of your construction challenges.

Further information is available at:

www.master-builders-solutions.basf.es/es-es