TAB®Raft on grade

ArcelorMittal Fibres

Reinforced concrete solutions

CASE STUDY: CLAD RACK FOUNDATION RAFT FOR COCA-COLA EUROPEAN PARTNERS

Clad rack foundation raft for Coca-Cola European Partners

Project overview ›

The Spanish Coca-Cola bottler, Casbega, now incorporated within Coca Cola European Partners, opened its soft drinks storage and distribution plant at Leganés, Madrid in 2012.

Coca-Cola European Partners makes, sells and distributes products for The Coca-Cola Company in Europe and it is the world's largest independent Coca-Cola bottler.

Coca-Cola European Partners combines more than 50 bottling plants, 25,000 employees and 300 million customers across 13 markets.

ArcelorMittal Fibres solution ›

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Location: Leganés, Madrid, Spain
Owner: Coca-Cola European Partners
General contractor: BYCO (Inbisa Group)
Flooring contractor: Solei Building S.L. (TPB Group)
Engineering Consultants: LKS Ingeniería y Arquitectura
Fibres used: HE+ 1/60

Dosing: 50kg/m^3
Concrete class: C30/37
Slab thickness: 450mm
Area: 8800m^2
Maximum point loads from racks: around 500 kN

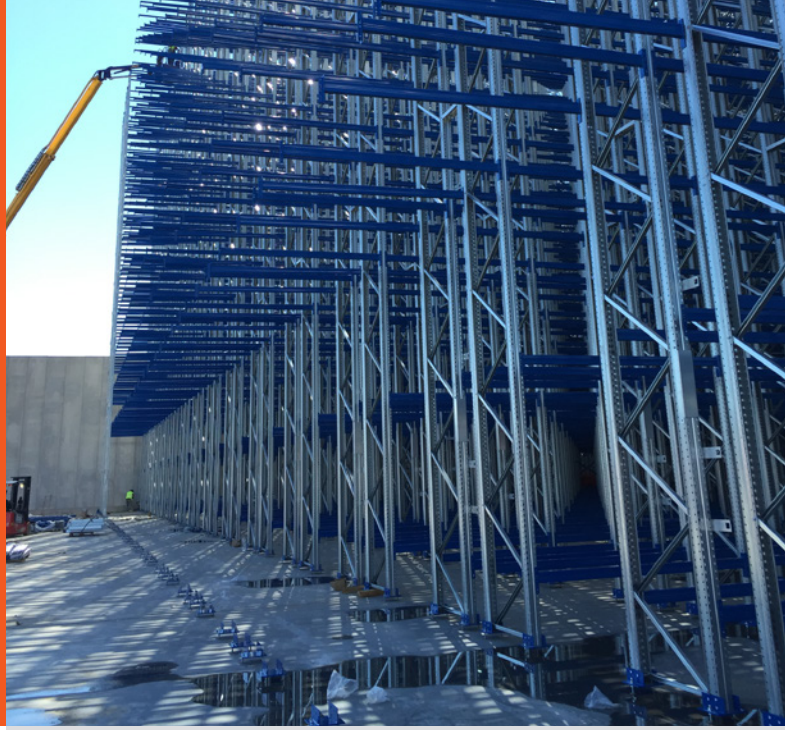
> "The industrial foundation slab that we designed and installed for Coca-Cola European Partners is a prime example of an economical but very robust solution that is built to last under extremely demanding static and dynamic load bearing conditions."

Javier Alamo Gonzalez
ArcelorMittal Fibres

The challenge ›

Static and dynamic loads, including high racking single loads of 500 kN, as well as lateral and vertical forces caused by wind and snow, meant that the new industrial foundation and floor slab for Coca-Cola European Partners would require a robust solution.

In collaboration with LKS Ingenieria, ArcelorMittal Fibres engineering department designed and developed the specification for this optimised steel fibre reinforced concrete raft foundation.

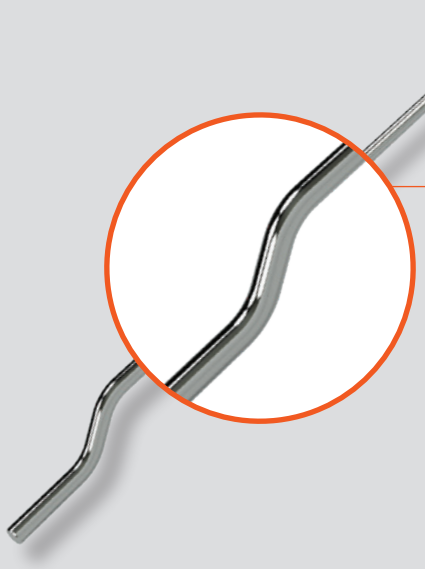


The solution ›

ArcelorMittal Fibres Engineering department supported the construction partners throughout the project and specified a foundation slab that would:

- Accelerate the slab construction process time.
- Provide scope to use a laser screed to ensure an extremely flat and level surface finish.
- Deliver lower labour, equipment and material costs through the elimination of rebar reinforcement and the use of direct pouring of concrete without the use of pumping.

ArcelorMittal Fibres specified the use of HE+ 1/60 steel fibres, dosed at 50kg/m^3 in a C30/37 concrete to ensure full ductility of the slab.



SPECIFICATION

Fibre type:
HE+ 1/60

Dosage:
50kg/m^3

Slab thickness:
450mm

Concrete class:
C30/37

Surface area:
8800m^2

The result ›

Since its construction, the 8800m^2 facility at Leganés, Madrid, continues to operate successfully.

The floor remains maintenance free and has not encountered any adverse effects from Coca-Cola European Partners' 24/7 intensive operations.

The world is building on our expertise.

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