

Amazon uses the TAB®Floor jointless solution for its new warehouse in Spain

Project overview >

Following its expansion policy, the US retail and distribution giant, Amazon, has built a new logistics distribution warehouse that occupies an area the size of 12 football pitches. The new warehouse is located in the Plataforma Central Iberum Industrial Park, approximately 40 kilometres south of Madrid, and has a total warehousing and logistics surface area of 98,000m².

Project title: Amazon Logistics Warehouse

General Contractor: Itercon S.A and Cobra S.A.U

Flooring Contractor: Solei Building S.L.
– Grupo TPB

Landlord: P3 Logistic Parks, Iberia S.L.U

Engineering: LKS Ingeniería

Flooring Consultants: Face Consultants Ltd

Location: Illescas, Spain

Area: 98,000m²

System: TAB®Floor (jointless solution)

Fibre type: HE+ 1/60

Fibre dosage: 35kg/m³

“Thanks to the excellent technical support and advice provided by the ArcelorMittal Fibres team, we were able to implement a solution that was not only very cost effective but considerably better quality.”

Fernando Prieto,
Director Técnico Comercial,
Solei Building S.L.

The challenge >

Providing a jointless floor solution with full control of concrete shrinkage and a design to ensure the floor bearing capacity over time, given the type of loads and ground conditions.

The new logistics centre uses Amazon Robotics – autonomous robots that slide under the towers of the shelves and move them through the logistics centre. In order to validate the switch from a traditional concrete reinforcement solution to steel fibre reinforcement, engineers from ArcelorMittal, collaborating with the Czech Technical University in Prague, had to prove that the steel fibre reinforced concrete floor surface was conductive or static dissipative ($10^4 \leq \rho \leq 10^{11} \Omega \cdot \text{cm}$) in order to prevent static electricity on the surface of the slab and eliminate interferences with the automatic robots that operate in the area.

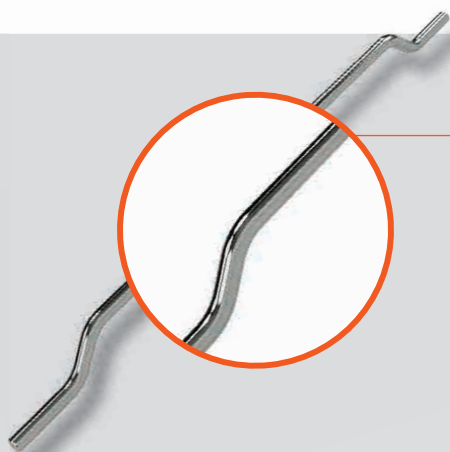


The solution >

ArcelorMittal Fibres and its project partners specified a 98,000m² high performance slab. The jointless floor slab is 21cm thick with class C30/37 concrete, reinforced with HE+ 1/60 fibres dosed at 35kg/m³.

The result >

Prior to commencement of the project, ArcelorMittal Fibres engineers provided expertise on the project specification and full design support to the contractors involved in the project. Our long-standing experience, combined with our ongoing commitment to the development of the best performing solutions and our partnership with the concrete floors specialist Solei Building – Grupo TPB, resulted in delivering a project outcome that met Amazon's requirement for a highly durable, low maintenance slab that is equipped to perform within a high tech warehousing environment.



SPECIFICATION

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TAB®Floor
(jointless solution)
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HE+ 1/60
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35kg/m³
Slab thickness:
21cm
Concrete class:
C30/37
Surface area:
98,000m²

The world is building on our expertise.

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