



ARCELORMITTAL WAREHOUSE PORT OF AVILÉS, SPAIN

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ArcelorMittal Dofasco Steel Design, 2009)

DESIGN AND CONSTRUCTION TEAM

ARCHITECT:
Baragaño architects

CLIENT:
ArcelorMittal & Actividades
Generales Portuarias

ENGINEERING FIRM:
Estudios y Proyectos

CONTRACTOR:
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Construcción

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Cold Formed Steel Offers Many Benefits and Savings



The ArcelorMittal warehouse in the Port of Avilés, Spain, a bolted steel structure, is one hundred percent disassemblable and recyclable. The architect drew inspiration for its design from the recyclability of the materials in order to create a work that is both ephemeral and dynamic in its shape, location and use. The ArcelorMittal industrial sheds are situated in an exceptional location - on the Ria of Avilés, at the San Agustín dock, facing the city.

It is an industrial landscape, among cranes and one of ArcelorMittal factories as a backdrop. With the rapid development this Asturian city is undergoing, the new plan for the Ria Isla de la Innovación - Island of Innovation - and the presence of a building by Pritzker prize winner Oscar Niemeyer, enticed us to put forward an alternative for an existing project, a conventional industrial building with a gabled roof and a 120m (393.7') facade facing the city.

We immediately brought up the concept of Industrial Sheds, those simple, old port buildings used for the warehousing of materials. Thus, the idea of containers arose, an image of portside life engraved on the retinas of the people. The facades and roof are made up to appear as containers, dividing up the large buildings into colour pixels intended to blend the large-scale work into its surrounding, providing the area with movement, colour and cleverly used nighttime illumination.

The selection of the range of colours did not only stem from the immediate association with the corporate image of both companies, but was also intended to relate to the industrial areas. And there was a deliberate attempt to choose colours which, historically, have been used in the construction of industrial buildings, just employing and combining them in a different way.

On a dark metal base, built to resemble the hull of a ship, rises the tower. A subtle beacon emerging from the landscape, addressing the cranes and stacks and serving to break up, once again, the continuity of the facade. This element will house the company logos that the building will bear while also serving as a boundary for the roof, which becomes the building's fifth facade and serves as an aerial reference point for planes landing or

taking off from the nearby Asturias airport.

The sheds are built entirely of steel, including the frame, the exterior building skins, facades and roof. Thus, it meets the requirements of the plan, the history of the place itself as well as the users of the building. ArcelorMittal, the world's leading producer of steel and AGP (Actividades Generales Portuarias) a company dedicated to transport management in the Port of Avilés.

Logical and rational use of materials and manner of construction were addressed in the construction of the industrial warehouses. All of its components are produced at the nearby ArcelorMittal factories and, because it is a bolted-steel structure, they are one hundred percent disassemblable and recyclable. It is also composed of more than seventy percent of recycled material, produced using an electric furnace system.

200 tonnes of structural beams:

Main structure: 50 ton HEA 240, HEA 280, IPE 200 and IPE 240 on S275 JR,

Substructure: 150 ton cold-formed profiles;

- 8000m² (86,111 sq. ft.) sheet PL 40/250 and 0.80mm (.032") thick galvanized steel and polyurethane polyamide Granite® coating;
- 650m² (7,000 sq. ft.) of 1150mm (45.3") panel, 35mm (.013") thick.

It is established as a transitory work that, according to the development of the city, can be disassembled and moved to another location or even its purpose can be changed over time - from warehousing to venues such as concerts, cultural activities, exhibitions, recreation, etc.

An evolutionary building, adapting itself to the needs of the area and the city. A dynamic building that speaks to its surroundings, to the ships, to the sea.

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Logical and rational use of materials and manner of construction were addressed in the construction of the Industrial Sheds. The warehouses are built entirely of steel, including the frame, the exterior building skins, facades, and roof.

