



McDermott Altamira Oil Platform Facility

Altamira, Mexico



McDermott's Altamira, Mexico, facility is strategically and competitively positioned for conventional and floating facility oil rig projects for customers in the Gulf of Mexico and Atlantic. While that location certainly aides in customer service and logistics, it also places challenges on the coating of structures due to the location directly on the gulf. This harsh, tropical marine environment is extremely tough on buildings and support structures.

In addition to the climate of Altamira, the facility is located in a port area that supports a number of large manufacturers, fabricators and electrical generators. This industrial environment adds to the need for a robust coating system. Hot-dip galvanizing overcomes those environmental challenges and provides decades of maintenance-free corrosion protection. With its executive offices in Houston, Texas, McDermott is a leading engineering, procurement, construction and installation ("EPCI") company focused on executing complex offshore oil and gas projects worldwide.

Having such a wealth of experience and knowledge, McDermott understands the value of longevity, toughness and integrity. The oil rigs and flotation platforms the Altamira facility produces is a testament to that culture. As result, when it came to specifying a coating for the new fabrication facility, hot-dip galvanizing (HDG) was the hands-down winner. McDermott knew that unprotected steel in the tropical marine environment develops rust very quickly and causes downtime for maintenance and replacement. Past experiences with paint systems

failed due to the harsh environments. HDG coats inside and out and provides the longevity needed in a corrosion protection system.

Besides long term corrosion protection, McDermott values HDG coated products due to their toughness and ease of handling without fear of a breach in the coating. Paint systems are subject to scratching and eventual failure to protect the steel substrate. The specifier was also focused on the environment. All of the components on this project are recyclable.

The Altamira project included large, heavy frames and columns. The design of the frames and columns required detailed dialogue between the galvanizer and the fabricator/designer to eliminate vent and drain concerns. Delivering overweight, overwidth products internationally also required dialogue and answers to questions not seen in domestic projects – choice of wood for dunnage, stacking and loading techniques and requirements, customs documentation, etc. The project was on a tight timeline with construction and assembly deadlines that needed to be met, while accommodating the added time for transportation and time to clear customs. →

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Even though the products were fabricated in the midst of a harsh Kansas winter, the ability to hot-dip galvanize regardless of the atmospheric conditions and deliver on time is a testament to the fast and flexible HDG process. Typical cure and handling concerns during transportation of painted products was eliminated by the robust, tough coating. During erection the galvanizer and fabricator visited the site to discuss long term corrosion protection expectations for this and future buildings on the site. The galvanizer also validated McDermott's reasons for specifying HDG with education on why galvanized steel was the correct choice for this environment and facility design. The site visit with hands on discussion has led to HDG being specified for all future buildings on the Altamira campus, as well as at other worldwide McDermott locations.

The McDermott Altamira facility is a perfect example of how hot-dip galvanized steel answers the corrosion questions presented by large, industrial facilities that are located in harsh, tropical marine environments. HDG steel can be fabricated in the dead of winter, galvanized and shipped to the erection site regardless of the weather. The pre-build meetings, in process dialogue and site visit demonstrate how a difficult project can be executed ahead of schedule and on budget when the specifier, fabricator and galvanizer work as a team. 🚧



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