

FMC Subsea Mobile Shelter

Customer: FMC, Inc.

FMC Technologies' Subsea Systems business encompasses a wide range of equipment and technologies that are required to explore, drill and develop offshore oil and gas fields. At their Houston location, they have one facility that is large enough to perform maintenance on mechanical assemblies used in offshore oil field operations. The assemblies are 24' square, weigh 40 tons, and arrive on special trailers. They are then unloaded by crane inside a building that is tall enough to accommodate both the assembly and the crane. FMC's business now requires it to be able to work on more than one assembly at a time. A permanent building that is large enough for both the assembly and the crane was prohibitively expensive. FMC turned to Shelter Structures to see if there was an alternative design that would accomplish their goals while saving them money.

Shelter Structures worked with FMC to design a two-section mobile shelter that opens at the middle. Moving the two shelter sections apart allows the crane to deposit the assembly at one of the work stations within the building. The two shelter sections are then closed over the assembly, eliminating the need for the additional height required for the crane, as the crane is never inside the building. We accomplished this with a self-propelled, track mounted system which can be moved at a speed of 8 mph in winds up to 35 mph, using Hilman rollers. The tracks are flush mounted, allowing people and equipment to move freely over them, eliminating the trip hazard associated with light rail mounted at grade that is typically used for most mobile shelters. Once our design was presented to FMC, another division of FMC immediately ordered two additional buildings.

Shelter Structures unique solution – moving the shelter for the crane, rather than building a shelter tall enough for the crane to enter – saved FMC thousands of dollars, and offered a solution they can replicate throughout their system.