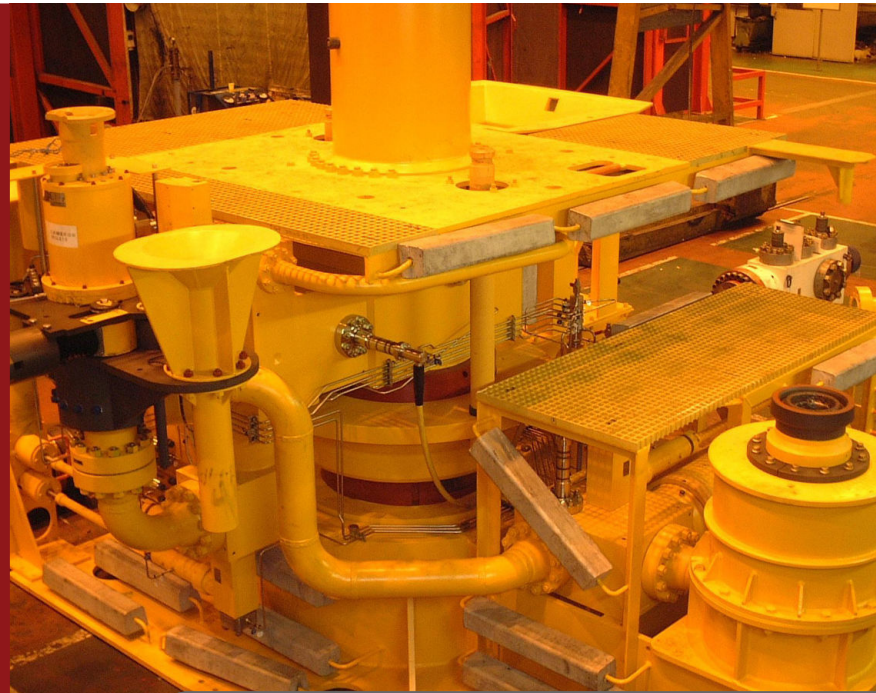


Drop Protection for Subsea Applications

Gulf of Mexico & International Waters

A major supplier of manifolds and blowout preventers approached EPI/D.E.F.I. Structural Fiberglass in Houston, Texas, to develop a unique drop protection solution. The supplier needed a corrosion-resistant, lightweight solution to prevent foreign materials from damaging important components that rest on the ocean floor – such as blowout preventers (BOP), stacks and manifolds.

Note: Covers are fabricated and shipped to customers assembled for easy installation on their equipment, which cuts labor time in the field.



Products Used: Bedford PROForms® Structural Shapes and PROGrid® Molded Grating



Challenge

EPI/D.E.F.I. Structural Fiberglass was asked to design a protection system ranging from 5 kj to 20 kj (kilojoules) of impact. The materials needed to be extremely strong (with the durability to withstand the pressures of being in 10,000 ft.-plus depths); corrosion-resistant to withstand constant exposure to salt water; and extremely lightweight.

EPI/D.E.F.I. Structural Fiberglass Solution

As a Bedford distribution partner, EPI/D.E.F.I. Structural Fiberglass recommended Bedford PROForms® and PROGrid® fiberglass-reinforced polymer (FRP) products. FRP was ideal for this project because, unlike steel, FRP is non-corrosive. The material is also lightweight enough for an ROV (remotely operated underwater vehicle) to remove the covers occasionally to access valves deep within the manifolds. The project was completed after a year of testing, and the results have been outstanding with no issues.

- A.** PROGrid® grating provides a corrosion-resistant work platform surface.
- B.** Specially designed handles allow an ROV to pick up and remove the FRP covers for access to manifold valves.
- C & D.** Covers made of FRP shield critical components from potential damage that could be caused by falling tools and foreign objects.

EPI/D.E.F.I. Structural Fiberglass

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