



Duplomatic MS & Remazel Engineering





"The Yoke Handling & Yoke Pull Back System project for the offshore market is a real milestone in Remazel's history both in terms of complexity and project execution."

Project Manager, Remazel Engineering

Remazel Engineering Spa

Remazel Engineering Spa – HQ in Chiuduno, Bergamo, Italyis a leading company in the design and construction of Equipment and Components for the Offshore, Marine and Power Generation Industries. Thanks to the deep engineering know-how and the solid experience gained over the years, Remazel is able to turn every extreme engineering challenges into concrete projects.www.remazel.com

Remazel' Needs: to guarantee the highest technical performance for an extremely innovative solution

This project, called "Yoke Handling & Yoke Pull Back System" was supplied by Remazel Engineering to one of the major players in the global offshore market and it is a real milestone in the history of Remazel both in terms of complexity and project execution.

The plant is composed of a system of synthetic rope winches, hydraulic cylinders and high-pressure nitrogen accumulation groups and has been designed in compliance with stringent technical requirements for motion control and drive speed, in order to guarantee rapid and safe disconnection of the ship from the tower to which it is moored. The FPSO ship on which the system will be installed, will operate, in fact, in an area characterized by hurricanes: for this reason, it is necessary to immediately secure the ship and the operators on board.

Duplomatic' Solutions: quick release time of the ship from the platform

The solution created by Duplomatic includes the study, design, construction and testing of all the hydraulic blocks necessary for the connection / disconnection of the FPSO vessel from its mooring tower.

The choice and sizing of the installed components is the result of Duplomatic's expertise and the heart of the system is represented by the main manifold of the Yoke Handling System, which has a length of 2.8 meters and a weight of over 10 tons. This manifold is the key element for the rapid release movement of the ship from the pumping station. The considerable dimensions of the manifold were necessary to allow the management of a fluid flow rate of over 16,000 l/min, useful for moving a cylinder with a stroke of 5.5 meters and an internal volume on the bottom side of 1,500 liters.

Concrete Results

The technical collaboration between the Remazel Engineering and Duplomatic teams was important not only to create a highly innovative solution, but also to achieve the goal of on-time delivery, in a particularly difficult historical moment linked to the pandemic emergency that has hit the global system and the Italian territory in a critical way.