



## Specific details of the Wolverine Terminals project engineering noted by MDEM experts

**You might have heard about Wolverine Terminals barges, built in Vietnam and engineered with participation of MDEM experts. Would you like to know more? These notes are about some specific details that make a difference and bring this project into the line of remarkable ones for MDEM.**

Let's start with the fact that MDEM was responsible for detail engineering, working in cooperation with a Polish team (basic engineering) and with Damen Shipyards in Vietnam. Viktoria Vzheshnevska (Lead Engineer, Mechanical Department), Maksym Vzheshnevskiy (Engineer, Mechanical Department) and Andriy Marchuk (Lead Engineer, Electrical & Automation Group) shared with us with the project details.

As Victoria Vzheshnevska noted, at the first stage, the project was led by the employees of the MDEM Kherson branch, but the military invasion forced to look for new executors in the territories with possibilities to work, despite the fruitful work of Kherson colleagues and compliance with the deadlines. Therefore, the company's management faced a difficult task to form a team as soon as possible that has access to equipment and the ability to continue responsible work despite shelling, power outages, and a stressful situation in order to fulfill obligations to the customer. A strong team of experienced MDEM employees was formed, operating remotely in various locations.

The difficulty laid in the urgent need to accept the work from a team which there had been no contact for some time, because Kherson was occupied. The transfer of servers to safe areas

caused a long period of works slow down, where strict norms of time consumption were established. However, this should not have hindered the fulfillment of the company's obligations to the customer in meeting the deadlines for the delivery of documentation to the yard. And the team made tremendous efforts to fulfill the prescribed obligations despite any circumstances.

The key feature of the project was in the appointment of vessel and, accordingly, works on ensuring the implementation of all the inherent characteristics. The vessel is supposed to carry about 80,000 barrels of fuel and 24 wagons are to be placed on its deck. In order to minimize unloading/loading time, two systems were used: a low-pressure steam system running on diesel fuel, which is used for heating the rail car from the supply temperature to 50 °C, and a thermal oil system, which ensures that the fuel temperature in the tanks is maintained at a constant level of 50 °C. The placement of these systems on the vessel and in the port became the subject of discussions in order to offer the best implementation option. Also, the size of the barge led to a significant number of blocks and sections, each block containing up from 1000 to 2000 ISO/Spools, which made it difficult to prepare report packages. Although it is worth

mentioning that projects of this scale are far from the first for MDEM.

As concluded Andriy Marchuk, the feature of this project design was the need to find optimal solutions and to comply with all norms and rules regarding the installation of electrical equipment and cable routes on vessels of this class. Moreover, the project was initially handled by other engineers, who put their own meanings and solutions into the work. However, it is worth noting the excellent communication with colleagues from other countries who, been aware of the complexity of the work and the military situation, were as open as possible to cooperation and achieving the set goals.

The team of MDEM specialists, which worked on this project under extremely difficult war conditions, did the almost impossible, met all deadlines and fulfilling all obligations to the customer. As colleagues noted, we were aware of the responsibility that rests on our shoulders - to preserve the company's reputation under any circumstances, because MDEM team needs job and everyone on their place make their own contribution to support the economy of Ukraine.

We are proud of our team, their dedication and professionalism.

Stay tuned for more information about MDEM projects. <<

