Float over is a proven technology of installing a heavy topside of an offshore oil & gas platform to a substructure out at sea. The process involves the heavy barge ferrying the topside to the installation site and the mating process begins; the barge maneuvers into position between the jacket legs and aligns the topside with the substructure before it ballasts, slowly connecting the topside onto the jacket substructure.

As the weather and sea conditions can be harsh in an offshore environment, our float over solutions help to ensure the transportation and installation goes flawlessly, including keeping the topside and substructure safe during the mating process.

During the barge ballasting operation, vertical and horizontal compression will occur on our Odin LMUs (Leg Mating Unit) till the topside leg cans are in contact with the jacket leg. To stabilize the mating process, sway fenders will be in action as well. Finally, decompression will occur on our Odin DSUs (Deck Support Unit), and effectively transferring the topside’s weight from the barge to the substructure. For this, our Odin float over hardware plays a key role in the mating process for the float over operation.

Our Odin LMUs consist of a steel structure incorporating engineered elastomeric pads, it can be installed either in the topside or the substructure. They can absorb immense loads and minimizes the risk of damage created as the topside’s load is transferred to the jacket. The elastomeric pads in our Odin LMUs are designed to absorb the static and dynamic forces of the topside structure and relieves the horizontal forces generated by the sea surface movements during the float over mating operation. After the installation is completed, the topside leg cans are welded to the substructure.

Our Odin LMUs are tailored to each individual project, with the highest engineering levels and subjected to rigorous testing for performance guarantees. Designed and built to the highest standards, we have applied to many projects around the world, and have been proven in safety, reliability and quality.
Applications:

• Oil & Gas Topside
• Mining and LNG Terminal Construction
• Offshore Wind High Voltage Direct Current (HVDC)
• Decommissioning Topside

Benefits:

• Assist in the transfer of static & dynamic load from the barge ferrying the topside to the substructure during float over operation
• Capability to absorb immense topside loads during mating process
• Cost-effective and time efficient comparing to conventional platform installation methods
• Tailor-made engineering solutions to suit the environment and application’s needs
• Reliable even in adverse weather conditions
• Full-scale compression test up to 18,300MT

Contact Us

Trelleborg Offshore delivers innovative and reliable offshore solutions that maximize business performance to meet your needs. Our dedicated and highly skilled staff are always on hand to provide seamless process support from initial idea, through to delivery and beyond.

Brazil: +55 22 2106 4040
China: +86 137 9287 9241
France: +33 3 44 23 03 50
Norway: +47 32 23 20 00
Singapore: +65 6265 0955
United Kingdom: +44 1695 712 000
United States: +1 832 456 8300

Email: Offshore@trelleborg.com