

Instrumentation on Offshore Wind Turbine

Preserving structural integrity and optimizing installation with non intrusive fastening

CHALLENGE faced with traditionnal solutions :

Our customer was looking for a fastening solution for the installation of a large sensor to be located <20m above the water on the tower of an offshore floating wind turbine. Traditionnal solutions for such installation are usually drilling or welding. Yet these intrusive solutions are also known to come with some recurring drawbacks :

- Associated services and costs (e.g support vessel, bulky installation equipment) especially with rope access
- Time-consuming application difficult to fit with weather window
- **Impact on the tower structural integrity (fatigue life)**



Cold Pad offered an innovative solution based on the C-CLAW® technology: a heavy duty and non intrusive mechanical fastener. It offers a reliable and durable solution for structural maintenance and modifications in offshore conditions. The structure itself was therefore adhesively bonded onto the tower by a rope access crew.

STRUCTURAL INTEGRITY : being non intrusive, C-CLAW® significantly reduces the impact on the structural integrity (fatigue life), involving no needs for recertification.

COST EFFECTIVENESS : Implies lower associated cost with a smaller support vessel and much less bulky installation equipment.

OPERATIONNAL FLEXIBILITY : due to the self supporting tool, C-CLAW® can be easily installed by rope access even in a moving environment.

RELIABILITY & DURABILITY : Technology certified by DNV and ABS for marine environments with target design life >20 years.

