

## HYDRAULIC BOLT TENSIONING FOR ONSHORE AND OFFSHORE WIND TURBINE APPLICATIONS

### BENEFITS OF BOLTIGHT TECHNOLOGIES

- Reduce maintenance man-hours
- Simplify working in tight spaces
- Increase equipment reliability
- Increase production uptime
- Maintain high clamping force on critical joints
- Prevent bolts from loosening against high vibration
- Reduce frequency of inspections

A

B

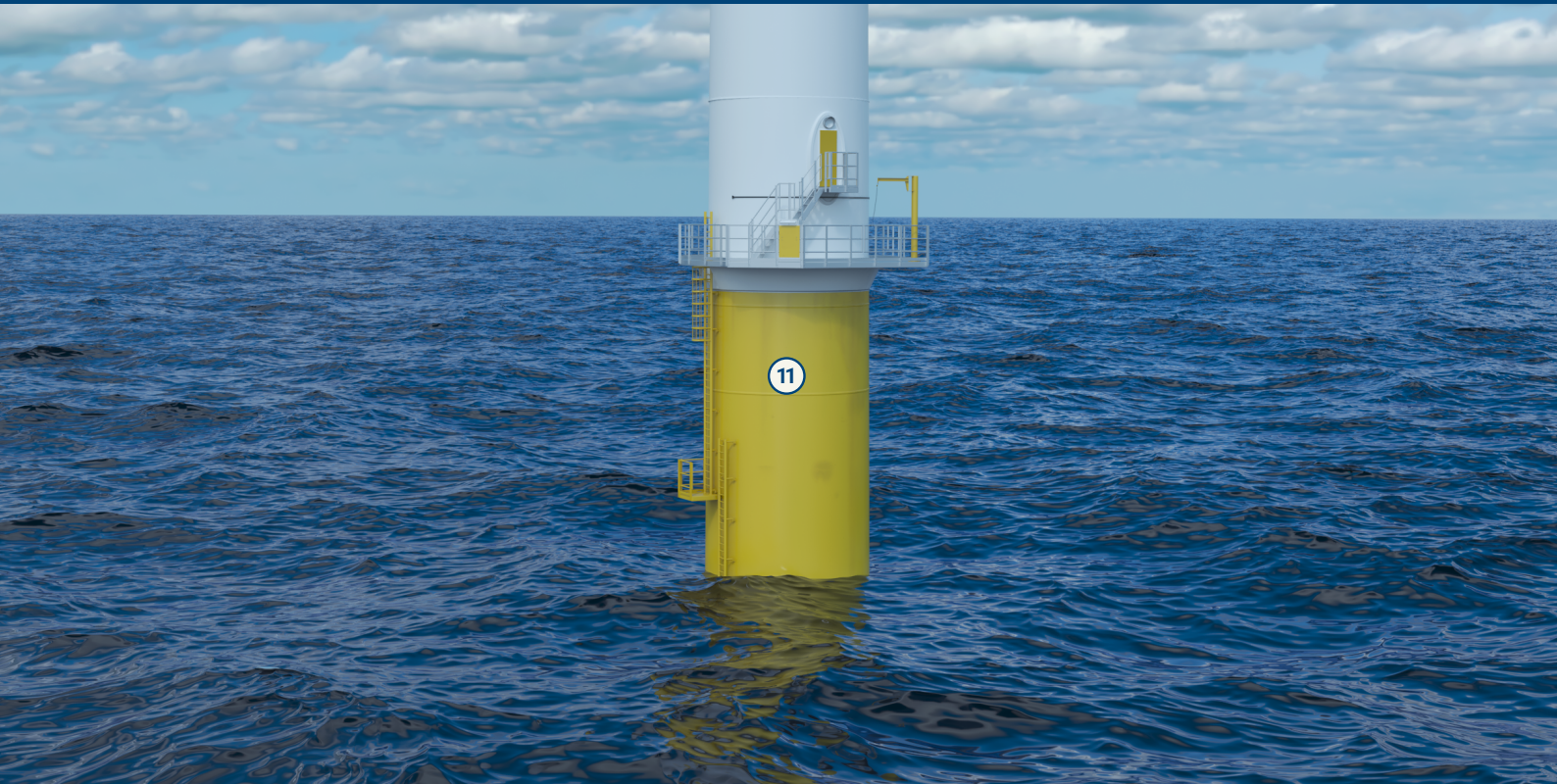
A

B

- 1 Rear Main Bearing
- 2 Gearbox to Generator Coupling
- 3 Rotor Blade to Gearbox Coupling
- 4 Main Shaft to Hub
- 5 Blade Bearing
- 6 Front Main Bearing
- 7 Nacelle Yaw Bearing
- 8 Nacelle Frame
- 9 Tower Bolting
- 10 Foundation Bolting
- 11 MT/TP Bolted Connection



# HYDRAULIC BOLT TENSIONING FOR ONSHORE AND OFFSHORE WIND TURBINE APPLICATIONS



Customised tool for MP/TP bolted connections



Foundation Tools



Typhoon single and multi stage hydraulic tensioners for multiple bolted connections



The tools generate EN ISO 898-1:1999 and ASTM A490M proof load standards for 10.9 bolts, in accordance with the requirements for wind turbine, structural and other high load, high integrity bolting applications.

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