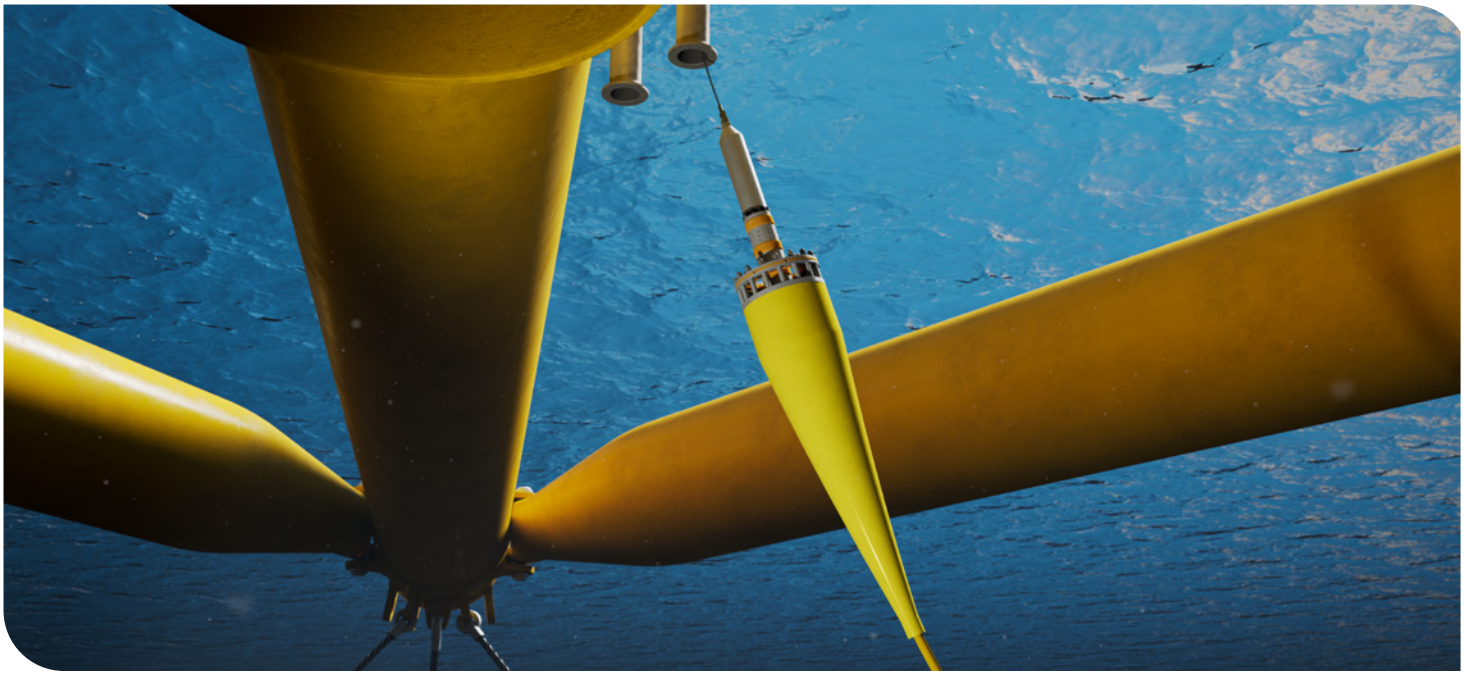


Bend Stiffener Latching Mechanism

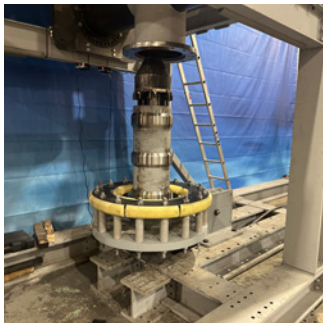
Polytech deliver fully qualified diverless bend stiffener latching mechanism (BSLM), tested to API 17L1 and CIGRE TB 862

The Polytech BSLM is a new bend stiffener latching mechanism developed to simplify the connection of bend stiffeners to floating structures.

Subsea umbilicals, risers and cables move constantly under wave action. Bend stiffeners protect these assets at the platform interface by controlling bend radius and reducing fatigue. To do this, the bend stiffener must be securely fixed to the I-tube, J-tube or bellmouth. In many applications, this connection must be installed and, if required, released without diver or ROV intervention. That is where the BSLM plays a critical role.

Challenge and solution

Conventional systems can solve the problem, but often at a cost. Many require a specialized female receptacle to be bolted to the structure in drydock. Installation and release frequently depend on divers or ROVs, adding offshore complexity, vessel time and HSE exposure. Many existing designs also include moving parts, reset requirements and additional release items, all of which can increase maintenance risk, cost and relatch time.



The Polytech BSLM has been designed to remove these limitations. It attaches to standard I-tubes, J-tubes and bellmouths, so no dedicated female receptacle is required. It is designed for diverless installation, has no

THE BENEFITS

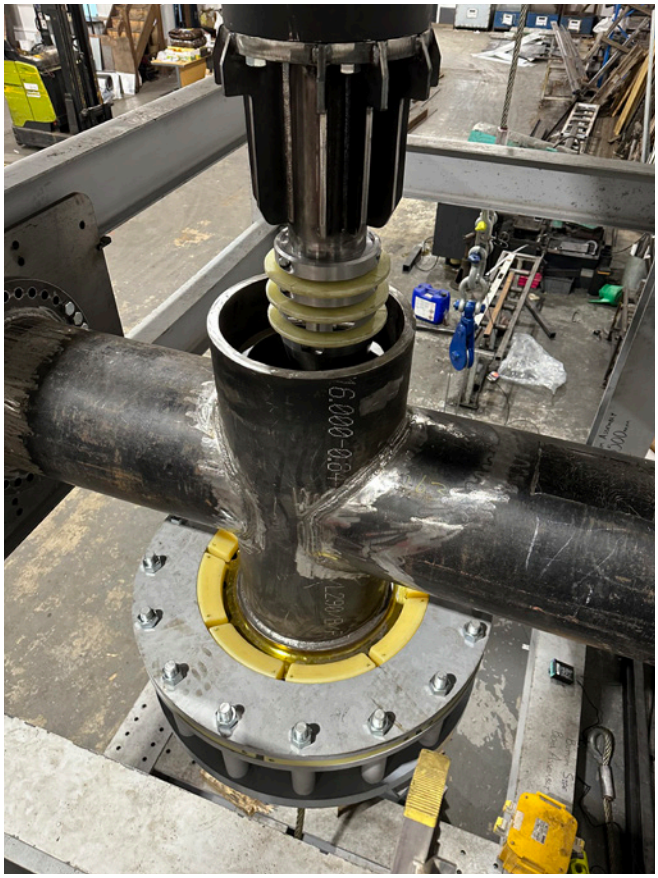
- Qualified to API 17L1 and CIGRE TB 862 with Lloyd's Register-witnessed testing
- No receptacle required
- Significantly reduced project costs
- Significantly reduced lead times
- Pull-in testing up to 30 degrees
- More than 1.5 million cycles of fatigue testing
- 30+ years design life
- Diverless installation for safer, faster, lower-risk operations
- Modular and scalable for a wide range of cable sizes and project requirements
- Extensively validated through more than 140 full-scale pull in trials
- No moving parts: inherently reliable and maintenance-free

Polytech
Wind for life™

moving parts and is fully reversible without component resetting. This reduces complexity during installation and throughout the asset life. The system can be installed and, if necessary, released in under two minutes, helping reduce offshore intervention time and operating cost.

Qualification

The solution has been supported by an extensive qualification programme. Polytech has carried out more than 200 material screening tests and more than 150 PUR component tests covering flexural behaviour, FEA characteristics, temperature effects, long-term properties and geometry optimisation.



Full-scale assembly testing includes pull-in and release trials at J-tube hang-off angles from 0° to 30°, temperature variation, finger quantity variation, aged finger testing and simulated marine growth conditions.

Qualification is aligned with recognized industry standards, including API 17L1 and CIGRE TB 862, with Lloyd's Register IVA involvement. The programme includes:

- Pull-in testing up to 30°
- 32 full latch–de-latch cycles across operating conditions
- More than 1.5 million fatigue cycles
- Pre- and post-fatigue NDT of welds
- Post-fatigue pull-in trials with marine growth simulation

For floating wind developers, installers and operators, the Polytech BSLM offers a practical way to reduce offshore exposure, installation risk and lifetime OPEX, while improving design flexibility and procurement simplicity.

Collaboration with world-leading partner

Polytech is proud to announce a sales channel collaboration with CRP Subsea that simplifies procurement and ensures that the integrated package will enter the market with a level of technical assurance that sets a new benchmark in the sector.

Steven Bray
Business Development Manager for Subsea, Polytech A/S

"Our BSLM technology and engineering/materials know-how, combined with CRP's bend stiffener expertise, creates a truly integrated and qualified package for subsea applications.

By qualifying the system to API 17L1 and CIGRE TB 862, and validating it through one of the most comprehensive test programmes in the industry, we are delivering a solution that operators can trust for decades."