The core components of the berthing system play an important role in ensuring the safety of berthing vessels. The damper unit of a berthing system contains two steel pipes with a rubber layer between them. The shock absorbing unit needs to be used in combination with an Eccentric Bumper Ring (EBR) and a barge enclosure. When a platform supply vessel is docked at an offshore oil and gas platform, the axial deflection and rotation of the damping unit absorbs the impact load of the vessel. The kinetic energy generated by the impact is absorbed and dissipated as heat. When subjected to shear and compression, the reaction force of the rubber component of the damper unit is reduced. This load becomes smaller and the vessel can be safely berthed without damaging the platform structure.

Steel and rubber are chemically bonded together during the manufacturing process to ensure that max applied kinetic energy is safely absorbed. Rubber physical and chemical properties are important for producing a high quality Shock Cell to withstand axial, shear and rotation effects.

Our Odin SC (Shock Cell) consists of 2 steel tubes and a rubber layer that chemically bonded both tubes. Both tubes.

**Applications:**
- Offshore Platform Jacket structure
- Wind Farm Monopile

**Benefits:**
- Low maintenance
- Effectively and safely absorb a berthing vessel's kinetic energy by axial deflection
- Chemically bonded the metal and rubber components
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.

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