



## Monitoring of pipelines in deeper waters

### Mimir Motion Clamp

Pipelines and cables are subjected to forces during their installation and operation in a subsea environment. Forces from such things as surrounding sea conditions, temperature changes, production fluid flow variances can create motions and vibrations in the pipelines and cables that potentially result in possible damage and premature fatigue if not understood and managed effectively. Understanding what is happening to a pipeline over a longer period of time than a standard Remotely Operated Vehicle (ROV) snapshot inspection, supports accurate long-term decision making.

The Mimir Motion Clamp is designed to provide continuous monitoring and recording of pipeline motion data on battery power alone, through a state-of-the-art multi-sensor array. The Mimir Motion Clamp has been engineered to be a simple, independent, self-contained solution, for deployment along the pipeline. Capable of operating at depths of up to 3,000 msw, the Mimir Motion Clamp provides an effective solution for continual monitoring of pipelines in deeper waters, as opposed to sporadic inspection in environments where regular ROV deployment is more complex.

The Mimir Motion Clamp contains a uniquely hot-swappable pod, designed to house and protect specially engineered motion sensing electronic equipment during operation. The unique pods provide the ability for continuous logging of data, with the ability to simultaneously replace one pod with another, ensuring the clamp is capable of multiple installations and deployments.

Data recovery from the pod is quick and easy, with the data easily accessible to download on the vessel and store in the cloud for future access and processing. Pipeline data collected by the Mimir Motion Clamp gives operators the ability to understand what is happening to a specific pipeline, on a continuous basis, to support digital performance modelling, planning and scenario prediction.

Based on CRP Subsea's long standing track record for buoyancy clamping solutions, the Mimir Motion Clamp design follows the same trusted rigor and design processes.

## Benefits

- Reduce OPEX associated with monitoring of existing facilities. Mimir Motion Clamp enables optimisation of ROV inspection frequency, reducing unnecessary ROV deployment.
- Reduces overdesign of new pipeline facilities, through performance modelling data to support scenario prediction planning.
- Supports service life extension of pipeline and reduces associated CAPEX.
- Deployable in up to 3,000 msw, supporting various subsea pipeline configurations, with the option to attach to new and retrofit to existing pipelines.
- Risk reducing custom designed ROV handles. Designed for safe, easy ROV deployment and retrieval, allowing the ROV to simply clasp the clamp and snap it onto the pipe.
- Low power consumption solution. Integrated battery life of greater than 5 years.
- Hot-swappable pod for easy data recovery and continuous monitoring.
- Made from high performance, corrosion resistant alloys. Mimir Motion Clamp has a strong, lightweight, titanium exoskeleton structure, engineered to impart the clamping load into the clamp body and allow for smooth transfer of the clamping load into the pipe.
- Near neutral clamp weight in water, supports and aids safe handling and installation.

## Applications

- Subsea pipelines up to 3,000msw
- Subsea cables
- New installations
- Retrofit to existing pipelines
- Pipelines in areas where regular ROV deployment is more complex

### POWERED BY MIMIR DIGITAL INTELLIGENCE

The Mimir Motion Clamp is supported by access to e-learning, product documentation and installation guides, through CRP Subsea's Mimir Digital Technician app. The app provides an easy way to configure and set-up the motion clamp on the back of the vessel, rather than relying on costly additional onsite specialist technicians and support.



CRP Subsea delivers innovative and reliable offshore solutions that maximise 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.