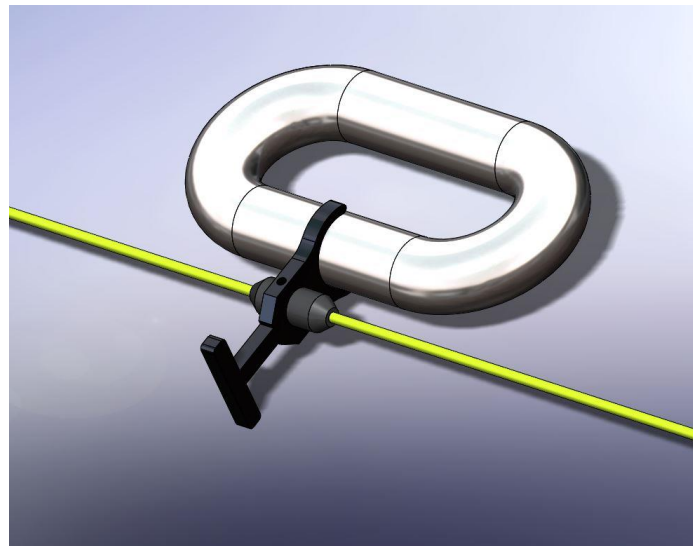


OceanTools

C-Moor

Catenary Monitoring System

C-Moor is an innovative *catenary measurement system* designed to generate cross-sectional profiles of multiple mooring systems.



Sensor node clamped to anchor chain

Overview

C-Moor is suitable for systems comprising chain and/or cables from 100m to 1000m in length. Eight angular readings are taken per mooring line and may be used on up to 16 mooring lines per system. A cross-sectional profile of each mooring is built up from sensor array data. Control unit functionality is subject to change and open to client requests.

Sensor Array

- Sensor arrays consist of 8 sensors spaced along an interconnecting cable.
- Each sensor measures the local angle of elevation of a mooring.
- Standard sensor array lengths are 100m, 250m, 500m or 1000m.
- Each sensor is clamped to the anchor chain or mooring line.
- Clamps support anchor chain, cable or combination moorings.
- Up to 16 sensor arrays (one for each mooring) are connected to the sensor hub.

Sensor Hub

- Sensor hub provides power and communications to all sensor arrays.
- Either externally powered or by battery pack with optional solar charger.
- Sensor hub is linked to control unit via wired communications or RF link.
- Zone 1 rated components are available as an option.
- External power and wired communications allow real-time (e.g. every minute) monitoring.
- Battery power and RF link supports power saving and periodic (e.g. hourly) monitoring.

Control Unit

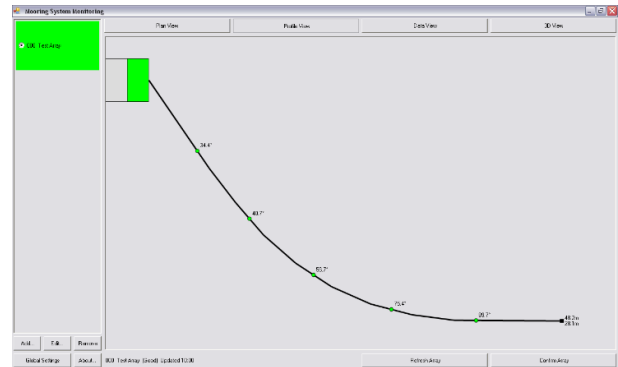
- Control unit hosts graphical display software in control room or bridge.

Control and display software offers:

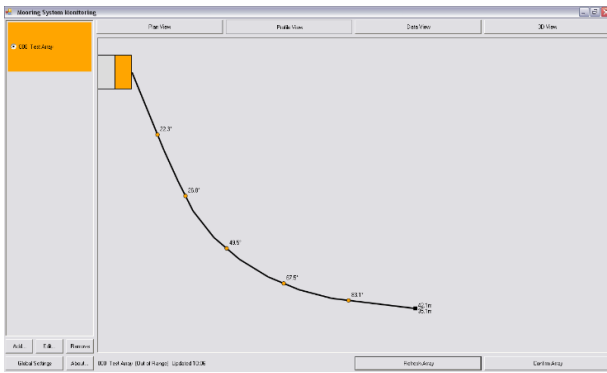
- Cross-sectional profile of one mooring
- Plan view monitoring all moorings
- Detailed diagnostic information

Status and warnings indicate:

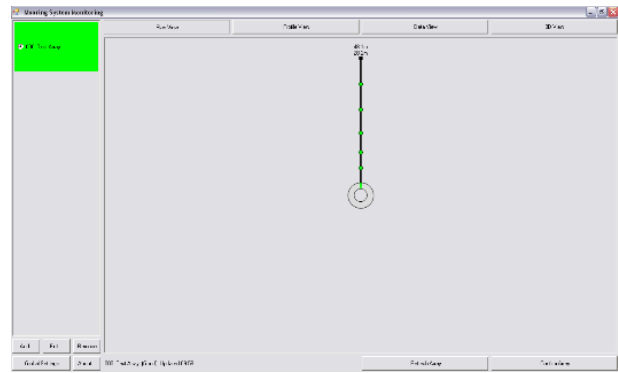
- Correctly tensioned mooring
- Under-tensioned mooring
- Over-tensioned mooring
- Sensor failure or broken array



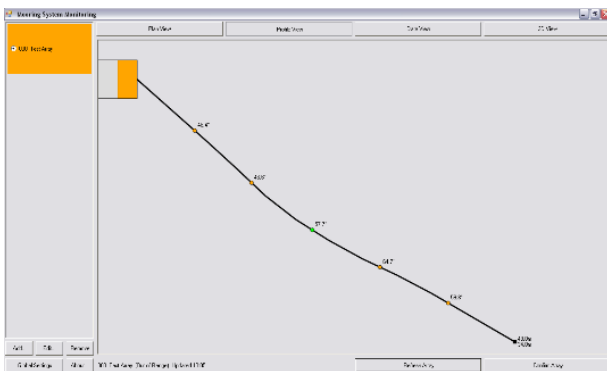
Cross section of correctly tensioned mooring



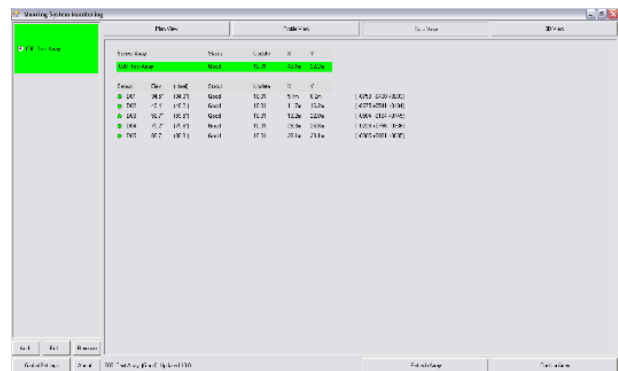
Potentially dragged or slack mooring



Plan view of correctly tensioned mooring



Potentially over-tensioned mooring



Nodal diagnostic information

Key Features

- Full length cross-sectional mooring systems profile
- Real-time or time-lapse measurements
- Works with chain, cable or combination
- Works with multiple mooring lines
- Deployed via ROV or diver

Product datasheets, GA drawings, case studies and other supporting documents are available to download from data.oceantools.co.uk
 All specifications are subject to change without notice. E&OE.

Version 12 (16.07.2019)

