

# Combined Tension and Bend Test Machine

Full-scale combined tension and bend testing system for critical products

Oceanengineering is equipped with the expertise and machinery to complete combined tension and bend testing at our in-house laboratories located in Niteroi, Brazil and Rosyth, Scotland.

The testing rig is suitable for completing combined bending and tension tests on a wide range of products.



## FEATURES

**Maximum length between connections: 40 ft / 8.9 m**

**Maximum tensile load: 2,500 kN**

**Bending radius: 110 in/280 cm**

# Combined Tension and Bend Test Machine

Full-scale combined tension and bend testing system for critical products

**Our machinery is capable of performing combined tension and bending testing on products including:**

- » Umbilicals
- » Flexible and composite pipes
- » Power cables
- » Ropes

**Advantages of completing testing include:**

- » Advancement of overall knowledge and understanding of products
- » Verification of compliance with industry standards

## Technical Data

	Niteroi, Brazil	Rosyth, Scotland
Applied loads	Bending with tension, internal pressure (independently controlled)	
Maximum tensile load	2,500 kN	5,000 kN
Axial displacement range	13.8 in / 350 mm	300 mm
Maximum sample length between connections	29.2 ft / 8.9 m	Typ. 5m to 6m between terminations. (Sheave radius dependent)
Bending radius	110 in / 280 cm	Typ. 2m to 8m
Machine / Test sample interface	Bolted flange	Bolted flange/Split collets
Control system	Computerized system for machine control and datalogging of sample instrumentation	
Sensors	Integrated displacement and load monitoring. Datalogging facilities available for monitoring of additional sensors such as thermocouples and strain gauges, if required.	
Calibration	Accredited calibration (Brazil)	Accredited calibration (UK)
Results	Electronic test report	Electronic test report