

Flex Fatigue Test Machine

Full-scale fatigue testing system for critical products

Oceanengineering is equipped with the expertise and equipment to complete full-scale fatigue testing at our in house laboratories located in Rosyth, Scotland and Niteroi, Brazil.

The flex fatigue rig is suitable for completing tensile or combined tension and bending fatigue tests on a wide range of products and their associated connection hardware.



FEATURES

Maximum sample length 40 ft / 12 m

Tensile load maximum 2,500 kN

Angular variation up to ± 20 degrees

Flex Fatigue Testing Machine

Full-scale fatigue testing system for critical products

Our machinery is capable of performing tensile or combined tension and bending fatigue testing on products including:

- » Umbilicals
- » Bend stiffeners
- » Latching mechanisms
- » Flexible and composite pipes
- » Power cables
- » Ropes

Advantages of completing flex fatigue testing:

- » Ability to validate service life prediction
- » Advancement of overall knowledge and understanding of products
- » Verification of compliance with industry standards



	Rosyth, Scotland	Niteroi, Brazil
Applied Loads	Tension, bending, internal pressure (independently controlled)	
Maximum tensile load	1,000 kN	2,500 kN
Axial displacement range	20 in / 500 mm	20 in / 500 mm
Angular displacement range	± 20° in 180° phase	± 15° in 180° phase
Maximum sample length	40 ft / 12 m	37,37 ft / 11,39 m
Maximum sample diameter	24 in / 600 mm	20 in / 500 mm
Machine / Test Sample Interface	Bolted flange	
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	UKAS Accredited Calibration to BS EN ISO 7500-1:2004	Accredited calibration (Brazil)
Results	Electronic test report	

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