
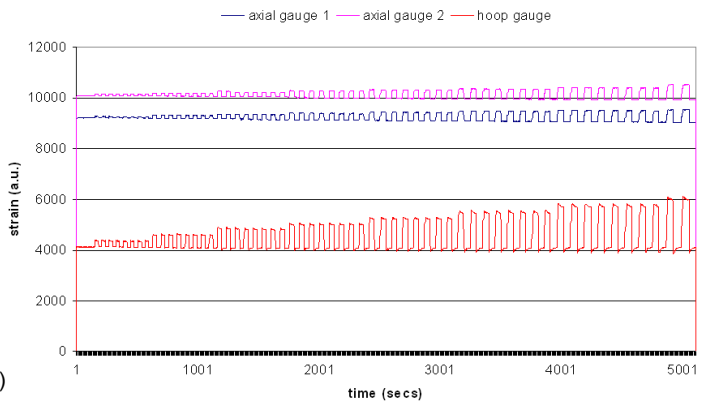


Composite Pipe Pressure Testing

Project	Monitoring of strains in filament wound CRFP pipeline under cyclic pressure tests
Client	KEMA
Date	2001
Location	Arnhem, The Netherlands
Sensors	Bare FBG Sensors
Attachment	Composite Embedment
Interrogator	OFSSSI
Images	 <p>OFS Instrumented test specimen undergoing pressure cycling</p>
Results	<p>Smart Fibre sensors were applied to pipe samples in the axial and directions during the winding process, trapping the fibres within the web. Electrical strain gauges were also surface applied for reference. The samples were tested using the standard method of pressure cycling at increasing increments of 10 bar.</p> <p>The optical fibre sensors detected the onset of cracking and eventual elastic behaviour in the samples. The data were supported by similar measurements from the ESG sensors.</p> <p>Typical data recorded under pressure cycling (full data withheld)</p> 
Further information	Withheld