



Wind Sculpture Strain Sensing

Project	Strain sensing of "Windwand", a 50m thin needle mast manufactured from Glass Reinforced Plastic located at Canary Wharf in the heart of London's Docklands	
Client	Ron Arad	
Date	2000	
Location	London, England	
Sensors	Bare FBG Sensors	
Attachment	Composite Embedment	
Interrogator	OFSSSI	
Images	 <p>This artistic sculpture flexes in the wind with deflections of up to 20m at the tip. The sculpture contains an array of LEDs at the masthead to illuminate its movements</p>	 <p>Sensor Arrays being installed in one half of the 50m composite prior to mould closing</p>
Results	<p>Sensors were embedded via three optical fibres within the mast laminate, each containing several strain sensors, spaced at 120° around the circumference of the mast. These sensors provided real time feedback of the strains experienced by the mast, allowing designers and architects to observe the performance during service</p>	
Further information	Not available	

