Cygnus Mk5 Gauge Environmental Test Details.

The Cygnus Mk5 Range of Ultrasonic Thickness Gauges were tested to the environmental standards listed in the table below. To pass each test the gauge was shown to be operational and fully functioning at the end of the test.

Testing was carried out by PARC Product Assessment and Reliability Centre Ltd in the UK. Their test report (no. 5744 April 2015) states all tests were passed and is available on request.

Test and Standard used	Test Details	Outcome
High Temperature Test Mil Std 810G Method 501.6 Procedures I & II.	24 hour non-operating soak at +71°C followed by 2 hours at +55°C with unit operational.	Pass
Low Temperature Test Mil Std 810G Method 502.6 Procedures I & II.	24 hour non-operating soak at minus 46°C followed by 2 hours at minus 20°C with unit operational.	Pass
Humidity Test Mil Std 810G Method 507.6 Procedure II.	Procedure II – Aggravated 10 x 24 hour cycles between +30°C and +60°C. Humidity constant at 98%.	Pass
Vibration Test Mil Std 810G Method 514.7.	20-1000Hz @ 0.04g^2/Hz. 1000-2000Hz @ -6dB/Octave. Overall Level: 7.7g rms. Duration: 1 hour in each of 3 axes.	Pass
Shock Test Mil Std 810G Method 516.7	20g, 11ms half sine shock pulse. 3 shocks in each direction of each of 3 axes. Shocks increased in 5g steps up to 40g 11ms in each axis.	Pass
Transit Drop Test Mil Std 810G Method 516.7 Procedure IV	1.22 m drop onto concrete. Total of 26 drops (1 drop on each face, corner and edge).	Pass
Immersion Test Mil Std 810G Method 512.6. Using BS EN 60529:1992 + A2:2013. (IPX7 Test)	Water Depth: 1 m. Duration: 30 minutes. Units preconditioned to be +27°C above the water temperature for 2 hours.	Pass
Dust Ingress Test BS EN 60529:1992 + A2:2013. (IPX6 Test)	20 millibar depression applied to each sample. Sample subjected to 2 hours and 35 minutes exposure to dust.	Pass