

US Military Standard 810G Test Results for MK5 Cygnus Ultrasonic Thickness Gauges

These MK5 gauges consists of 5 models that are all housed in an injection moulded ultra rugged enclosure. The electronics are sealed to prevent any leakages from the AA batteries damaging them. They have passed stringent US Military Standard testing:

	Type of Test	Procedure	Description of Test	Result
Process 1	High Temperature	Mil Std 810G Method 501.6 Procedures I & II	<ul style="list-style-type: none"> 24 hour non-operating soak at +71°C followed by 2 hours at +55°C with unit operational 	PASS
Process 2	Low Temperature	Mil Std 810G Method 502.6 Procedures I & II	<ul style="list-style-type: none"> 24 hour non-operating soak at -46°C followed by 2 hours at -20°C with unit operational 	PASS
Process 3	Humidity	Mil Std 810G Method 507.6 Procedure II	<ul style="list-style-type: none"> Procedure II - Aggravated 10 off 24 hour cycles between +30°C 	PASS
Process 4	Vibration	Mil Std 810G Method 514.7	<ul style="list-style-type: none"> 20-1000Hz @ 0.04g²/Hz 1000-2000Hz @ -6dB/Octave Overall level: 7.7grms Duration: 1 hours in each of 3 axes 	PASS
Process 5	Shock	Mil Std 810G Method 516.7	<ul style="list-style-type: none"> 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
Process 6	Transit Drop	Mil Std 810G Method 516.7	<ul style="list-style-type: none"> 1.22m drop onto concrete Total of 26 drops (1 drop on each face, corner and edge) 	PASS
Process 7	Immersion	Mil Std 810G Method 512.6 using BS EN 60529:1992+A2:2013	<ul style="list-style-type: none"> Depth: 1m Duration: 30 minutes Units preconditioned to be +27°C above the water temperature for 2 hours 	PASS
Process 8	Dust Ingress	BS EN 60529:1992+A2:2013	<ul style="list-style-type: none"> IPX6 Test 20 millibar depression applied to each sample Duration of test depending on airflow through sample Cygnus 2 and Cygnus 6PLUS subjected to 2 hours and 35 minutes exposure to dust 	PASS