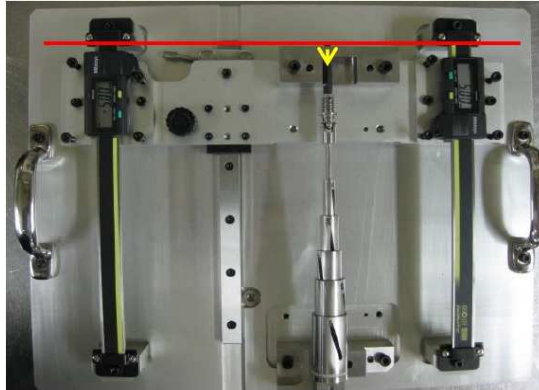


SPIRAL Track Evaluation Progress (Static)

Calibration Fixture



Calibration Result

Spiral Track Calibration Values

Model No. Spirpal-105mm
Serial No. 20191108A

Excitation:2V

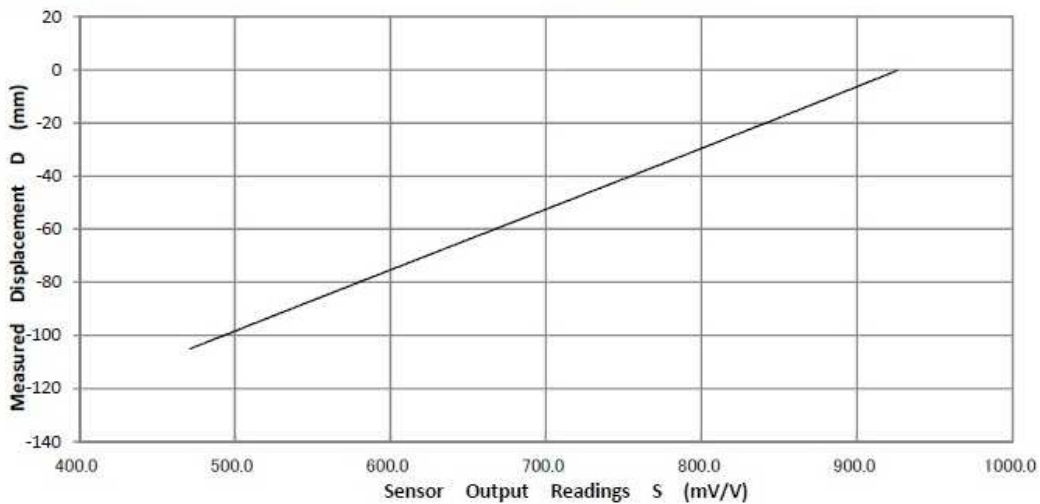
105mm

Calibration Points (Xc)	Measured Displacement D (mm)	Sensor Output Readings S(mV/V)	Actual Displacement (mm)	Error (mm)	Linearity (%F. S.)
0	0.00	925.680	-0.30	0.300	0.285
5	-5.00	906.830	-4.74	-0.258	0.246
10	-10.00	885.165	-9.82	-0.178	0.170
15	-15.00	862.810	-15.04	0.038	0.036
20	-20.00	841.130	-20.07	0.075	0.071
25	-25.00	819.910	-24.99	-0.014	0.014
30	-30.00	798.150	-30.00	0.005	0.005
35	-35.00	776.700	-34.94	-0.062	0.059
40	-40.00	754.800	-39.96	-0.038	0.036
45	-45.00	732.920	-44.97	-0.029	0.027
50	-50.00	710.310	-50.14	0.140	0.134
55	-55.00	688.550	-55.11	0.110	0.105
60	-60.00	666.675	-60.10	0.104	0.099
65	-65.00	645.225	-65.00	0.000	0.000
70	-70.00	623.550	-69.95	-0.049	0.047
75	-75.00	601.700	-74.95	-0.053	0.051
80	-80.00	579.975	-79.92	-0.079	0.075
85	-85.00	558.130	-84.93	-0.067	0.064
90	-90.00	536.265	-89.96	-0.037	0.036
95	-95.00	514.225	-95.05	0.047	0.045
100	-100.00	492.900	-99.98	-0.016	0.015
105	-105.00	471.050	-105.06	0.062	0.059
Output		-454.630	Max Non-Linearity		0.285

$$y = 0.000000039881497 x^3 - 0.000079919131370 x^2 + 0.281646894496809 x - 224.167237060500000$$

$$R^2 = 0.999987892584396$$

Calibration Curve



SPIRAL Track Evaluation Progress (Dynamic)

Calibration Fixture



Calibration Result

