

Scope of Accreditation For Sterling Manufacturing & Engineering Inc.

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In recognition of a successful assessment to ISO/IEC 17025:2005, accreditation is granted to **Sterling Manufacturing & Engineering Inc.** to perform **Dimensional Inspection** in the following parameters:

Accreditation granted through: **August 7, 2009**

Dimensional Inspection

Inspection Parameter/Equipment	Range	Best Measurement Capability (+/-) ²	Remarks
Dimensional Measurement 1D	0.24 in to 12 in	(35 + 2L) μin	Comparator and Gage Blocks are utilized as Reference Standard for Dimensional Inspection
	0.25 in to 18 in	(65 + 3L) μin	Bore Gage and Gage Blocks are utilized as Reference Standard for Dimensional Inspection
Dimensional Measurement 1D	0.1 in to 20 in	(50 + 3L) μin	Mikrokator and Gage Blocks utilized as Reference Standard for Dimensional Inspection
		(50 + 3L) μin	Electronic Amplifier Gage Blocks utilized as Reference Standard for Dimensional Inspection
		(70 + 4L) μin	0.0001 in Indicator Gage Blocks utilized as Reference Standard for Dimensional Inspection
Dimensional Measurement 1D	0.1 in to 12 in	(650 + 30L) μin	Calipers utilized as Reference Standard for Dimensional Inspection

Inspection Parameter/Equipment	Range	Best Measurement Capability (+/-) ²	Remarks
Dimensional Measurement 1D	0.001 in to 24 in	(55 + 3L) μin	Mikroktor and Gage Blocks utilized as Reference Standard for Dimensional Inspection
		(55 + 3L) μin	Electronic Amplifier and Gage Blocks utilized as Reference Standard for Dimensional Inspection
		(70 + 4L) μin	0.0001 in Indicator and Gage Blocks utilized as Reference Standard for Dimensional Inspection
	24 in to 40 in	(85 + 5L) μin	Electronic Amplifier & Blocks utilized as Reference Standard for Dimensional Inspection
		(95 + 5L) μin	0.0001 in Indicator and Gage Blocks utilized as Reference Standard for Dimensional Inspection
Dimensional Measurement 1D	0 in to 6 in	(130 + 7L) μin	Depth Micrometer utilized as Reference Standard for Dimensional Inspection
Dimensional Measurement 1D	0 in to 6 in	(100 + 5L) μin	OD Micrometer utilized as Reference Standard for Dimensional Inspection
Dimensional Measurement 1D	Up to 24 in x 24 in	(75 + 4L) μin	Flatness - 0.0001 in Indicator Gage or Electronic Amplifier utilized as Reference Standard for Dimensional Inspection
Dimensional Measurement 2D	0.125 in to 8 in	(70 + 4L) μin	Angles – Over Rolls Roll Check Fixture and Gage Blocks utilized as Reference Standard for Dimensional Inspection
Dimensional Measurement 2D	0.125 in to 8 in	(75 + 4L) μin	Angles – Under Gage Balls Electronic Amplifier and/or 0.0001 in Indicator and Gage Blocks utilized as Reference Standard for Dimensional Inspection
Dimensional Measurement 2D	0° to 50°	20 arc seconds	Angle - Sine Plate, Surface Plate, Electronic Amplifier and Blocks utilized as Reference Standard for Dimensional Inspection



Inspection Parameter/Equipment	Range	Best Measurement Capability (+/-) ²	Remarks
Dimensional Measurement 2D	0.1 in to 18 in	(60 + 3L) μin	Jig Grinder - X Axis utilized as Reference Standard for Dimensional Inspection
	0.1 in to 10 in	(60 + 3L) μin	Jig Grinder – Y Axis utilized as Reference Standard for Dimensional Inspection
Dimensional Measurement 3D	X = 0.1 in to 37.5 in	(80 + 4L) μin	SIP – X Axis utilized as Reference Standard for Dimensional Inspection
	Y = 0.1 in to 28.5 in	(80 + 4L) μin	SIP – Y Axis utilized as Reference Standard for Dimensional Inspection
	Z = 0.1 in to 24 in	(80 + 4L) μin	SIP – Z Axis 0.0001 in Indicator and Length Standards utilized as Reference Standard for Dimensional Inspection

Notes:

- 1) Laboratory offers calibration services at the laboratory's own facilities.
- 2) Best measurement capabilities represent expanded uncertainties at approximately the 95% confidence level using a coverage factor of k=2.
- 3) Deviation of Indication Media from gage block / standard
- 4) *L* is the Length of the Unit Under Test in inches.

Approved by: _____

R. Douglas Leonard
Chief Technical Officer

Date: October 6, 2006