



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005

First Gear Engineering and Technology

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CALIBRATION

Valid to: **May 31, 2019**

Certificate Number: **L2454**

Length – Dimensional metrology

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Measurement Over Wires	(0 to 13) in	$(37 + 1.1D) \mu\text{in}$	Lab Master
Measurement Between Wires	(0.2 to 14) in	$(38 + 1.1D) \mu\text{in}$	
Major Diameter	(0 to 13) in	$(10 + 2D) \mu\text{in}$	
	(0.2 to 14) in	$(13 + 1.9D) \mu\text{in}$	
Minor Diameter	(0 to 13) in	$(10 + 2D) \mu\text{in}$	
	(0.2 to 14) in	$(13 + 1.9D) \mu\text{in}$	
Index	(0.15 to 11) in	$(118 + 0.4D) \mu\text{in}$	Peco Gear Analyzer
	(0.2 to 11) in	$(130 + 0.3D) \mu\text{in}$	
Lead	(0.15 to 11) in	$(66 + 0.6D) \mu\text{in}$	
	(0.2 to 11) in	$(86 + 0.5D) \mu\text{in}$	
Profile	(0.15 to 11) in	$(58 + 0.6D) \mu\text{in}$	
	(0.2 to 11) in	$(66 + 0.6D) \mu\text{in}$	
Runout	(0.15 to 11) in	$(139 + 0.3D) \mu\text{in}$	
	(0.2 to 11) in	$(151 + 0.3D) \mu\text{in}$	


Length – Dimensional metrology

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Tooth Thickness	(0.15 to 11) in	$(80 + 0.5D) \mu\text{in}$	Peco Gear Analyzer
	(0.2 to 11) in	$(117 + 0.3D) \mu\text{in}$	
Length/Diameter External	(0 to 13) in	$(10 + 2D) \mu\text{in}$	Lab Master
Length/Diameter Internal	(0.2 to 14) in	$(13 + 1.9D) \mu\text{in}$	
Perpendicularity	-	$(10 + 0.7D) \mu\text{in}$	

Calibration and Measurement Capability (CMC) is expressed in terms of the measurement parameter, measurement range, expanded uncertainty of measurement and reference standard, method, and/or equipment. The expanded uncertainty of measurement is expressed as the standard uncertainty of the measurement multiplied by a coverage factor of 2 ($k=2$), corresponding to a confidence level of approximately 95%.

Notes:

1. D = diameter or length in inches
2. This scope is formatted as part of a single document including Certificate of Accreditation No. L2454.



Vice President

