Certificate of Calibration

Pine Instrument Company
Grove City, PA 16127

Instrument: 150mm Mold Assembly
Manufacturer: Pine Instrument Company
Model No.: AFG1M15

Calibration Date: 10/06/09
Due Date: 10/06/10
Temperature: 70 F
Rel. Hum.: 46%

Mold Serial No: 0926063 #4
Base Plate Serial Number: 093813

Characteristic	Test Value mm	Limits mm	Actual Reading mm	Actual Reading Inch	Status (Pass/Fail)
Mold Bore (Cylinder)	150.00	150.0 149.9	149.92	5.9024	Pass
Mold Bore: Roughness	1.6µm	<1.6µm	0.53	21	Pass
Base Plate: Diameter	149.50	+0.25 -0.00	149.74	5.8951	Pass
Base Plate: Thickness	15.875	+0.051 -0.051	15.896	0.6258	Pass
Base Plate: Flatness	0.05	<=0.05	0.01	0.0003	Pass
Base Plate Roughness	1.60µm	<=1.6µm	0.28	11	Pass
Comments:					

The equipment used to perform this calibration/confirmation/verification is traceable to the National Institute of Standards and Technology (NIST) calibrated in accordance with ASME B89.4.1a-1998

Calibration Standard: DEA Mistral Coordinate Measuring Machine
Model Number: 07.07.05 **Serial Number:** 152
Calibration Date: 8/19/2008
Recalibration Date: 8/19/2009
Uncertainty of Calibration Standard: +/- 0.0015 mm

Approved by: Matthew J. Cyphert

Certificate of Calibration

Pine Instrument Company
Grove City, PA 16127

Instrument: 150mm Mold Assembly
Manufacturer: Pine Instrument Company
Model No.: AFG1M15

Calibration Date: 10/06/09
Due Date: 10/06/10
Temperature: 70 F
Rel. Hum.: 46%

Mold Serial No: 0926062
Base Plate Serial Number: 093812

#5

Characteristic	Test Value mm	Limits mm	Actual Reading mm	Actual Reading Inch	Status (Pass/Fail)
Mold Bore (Cylinder)	150.00	150.0 149.9	149.91	5.9019	Pass
Mold Bore: Roughness	1.6µm	<1.6µm	0.48	19	Pass
Base Plate: Diameter	149.50	+0.25 -0.00	149.73	5.8949	Pass
Base Plate: Thickness	15.875	+0.051 -0.051	15.894	0.6258	Pass
Base Plate: Flatness	0.05	<=0.05	0.01	0.0004	Pass
Base Plate Roughness	1.60µm	<=1.6µm	0.33	13	Pass
Comments:					

The equipment used to perform this calibration/confirmation/verification is traceable to the National Institute of Standards and Technology (NIST) calibrated in accordance with ASME B89.4.1a-1998

Calibration Standard: DEA Mistral Coordinate Measuring Machine
Model Number: 07.07.05 **Serial Number:** 152
Calibration Date: 8/19/2008
Recalibration Date: 8/19/2009
Uncertainty of Calibration Standard: +/- 0.0015 mm

Approved by: Martin J. Cyphert