

## SOUTHWEST RESEARCH INSTITUTE®

6220 Culebra Road, P.O. Drawer 28510 Institute Quality Systems Institute Calibration Laboratory Phone: 210-522-5215 Fax 210-522-4834



Calibration Laboratory Certificate #0972-01

## **Certificate of Calibration**

Submitted By: DIV20 Address: B51

Contact: DON BANNON
Manufacturer / Model: STARRETT / 721

Description: CALIPER, 9 INCH

**Serial No:** 03031512 **Asset No:** 010085

Procedure: CALIPERS - 13 MAR 06

Work Order: 303079291

Date Issued: Feb 21, 2008 Calibration Date: Feb 21, 2008 \*Calibration Due: Feb 21, 2009

Calibration Location: Bldg. 64

Environment: Temp. 68.0°F Hum. 40 %RH

\*\*Data Type: FOUND-LEFT

DivID/Location: N/A

This certificate documents traceability to the National Institute of Standards and Technology (NIST) and the International System of Units (SI). The Laboratory quality system conforms to ISO/IEC 17025, 2005, ANSI/NCSL Z540-1-1994 and relevant requirements of the ISO 9000-2000 standard. This certificate shall not be reproduced, except in full, without the written approval of the Southwest Research Institute Calibration Laboratory. This certificate shall not be used to claim product endorsement by Southwest Research Institute, American Association for Laboratory Accreditation (A2LA) or any agency of the U. S. Government. Results of this calibration relate only to the instrument described above at the time of calibration and does not imply any long term stability of the instrument.

\*Determined by the customer, does not imply the instrument will remain within tolerance as any number of factors may cause an out-of-tolerance condition before this date. \*\*Found/Left = adjustment and/or repair was not required, As Left = adjusted and/or repaired was required. The client has sole responsibility for determination of in-/out-of-tolerance or compliance/noncompliance. See Remarks or attached Measurement Report with the same Work Order number for data.

Reported uncertainty calculated in accordance with the ISO "Guide to the Expression of Uncertainty in Measurement" (GUM) and represents an expanded uncertainty with a coverage factor of k=2 to approximate a 95% confidence level.

Remarks: None

## Standards Used

Asset No	. Serial No.	Manufacturer	Model	Description	Cal Due
007705	120399.3	STARRETT	SS8A1X	GAGE BLOCK WORKING SET	Jan 25, 09
006465	60498.3	STARRETT	SS81A1	GAGE BLOCK WORKING SET	Sep 17, 10

Reviewed by: (/) srk ( ) mar ( ) wgh

m:\a2la1.rpt Rev date August 15, 2005

Measurements by Joe Greagrey

Metrology Technician

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## Southwest Research Institute Calibration Laboratory Measurement Report

Work Order: 303079291 Mfr: Starrett Technician: JRG Asset No: 010085 Model: 721 03031512 Caliper 0-9 / .0005 21-Feb-08 Serial No: Type: Cal Date: Remarks:

RANGE	Test Point	Indicated	Difference	+/-Limit	+/-Uncertainty	Found/Left
9.000	Inch	Inch	Inch	Inch	Inch	Result
OUTSIDE SCALE	2.2500	2.2500	0.0000	0.0020	0.00066	Pass
	4.5000	4.5000	0.0000	0.0020	0.00066	Pass
	6.7500	6.7500	0.0000	0.0020	0.00066	Pass
	9.0000	9.0000	0.0000	0.0020	0.00066	Pass
INSIDE SCALE	0.5000	0.4995	-0.0005	0.0020	0.00066	Pass
STEP FUNCTION	3.0000	2.9995	-0.0005	0.0020	0.00066	Pass
DEPTH SCALE	1.0000	1.0000 END O	0.0000 F REPORT	0.0020	0.00066	Pass