



CERTIFICATE OF CALIBRATION

Certificate #: LAB171421

Calibration Performed By:

MG&T LAB/DANVILLE

112 MAPLEWOOD STREET
DANVILLE, VA 24540

For:

LINEAR MEASUREMENT INSTRUMENTS, CORP
25843 HUNTSVILLE BROWNSFERRY ROAD

MADISON, AL 35756

Equipment Information

Serial Number: VGA-11-004

Description: VGA-11 BLOCK

Gage Type: CUSTOM

Size: REPORT OF VALUE

Unit of Measure: DEC DEG/INCH

PO Number: 70017276

Cal. Interval:

Cal Date: 26-May-2022

As Found Condition: Report of Value

Gage I.D. VGA-11-004

Calibration Location: MGT LAB DANVILLE

Performed By: S.COBB

Drawing Number: VGA-12 CERTIFICATION

Temp./RH: 68.1 F / 54 %

Cal. Due Date:

As Left Condition: Report of Value

Uncertainty

+/- 98+ 6.2L MICRORINCH (LENGTH)
+/- .06° DEGREES (ANGLES)

Calibration Notes

VISUAL CONDITION: GOOD
METHOD AND SPECIFICATIONS PER CUSTOMER.

Test Points

Seq.	Description	Standard	Tolerance +	Tolerance -	As Found	As Found Dev.	As Left	As Left Dev.	Unit of Meas.
1	DIMENSION A	0.00000	0.00000	0.00000	0.24975	0.24975	R 0.24975	0.24975	INCH
2	DIMENSION B	0.00000	0.00000	0.00000	0.18663	0.18663	R 0.18663	0.18663	INCH
3	DIMENSION C	0.00000	0.00000	0.00000	0.12524	0.12524	R 0.12524	0.12524	INCH
4	DIMENSION D	0.00000	0.00000	0.00000	0.12455	0.12455	R 0.12455	0.12455	INCH
5	DIMENSION E	0.00000	0.00000	0.00000	0.09318	0.09318	R 0.09318	0.09318	INCH
6	DIMENSION F	0.00000	0.00000	0.00000	0.06212	0.06212	R 0.06212	0.06212	INCH
7	DIMENSION G	0.00000	0.00000	0.00000	89.85221	89.85221	R 89.85221	89.85221	DEC DEG
8	DIMENSION H	0.00000	0.00000	0.00000	89.91479	89.91479	R 89.91479	89.91479	DEC DEG
9	DIMENSION I	0.00000	0.00000	0.00000	89.54566	89.54566	R 89.54566	89.54566	DEC DEG

Standards Used To Calibrate Equipment

Company	I.D.	Last Cal.	Cal. Due Date
MG&T LAB	MGT-588	1/5/2022	1/5/2023

Procedures Used In This Event:

Procedure Company	Procedure Name	Revision Level
Master Gage and Tool Company	WI# IT1042	J

KEY:

F = OBSERVED VALUES DO NOT MEET SPECIFICATIONS
L = OBSERVED VALUES DO NOT MEET SPECIFICATIONS/LIMITS GAGE USE
R = REPORT OF VALUE
A = ADJUSTED

UNCERTAINTY EXPRESSED AT $K = 2$ WHICH APPROXIMATES A 95% CONFIDENCE LEVEL, AND IS EXPRESSED IN MICROINCH UNLESS OTHERWISE NOTED. UNCERTAINTY FORMULA: $L = \text{LENGTH}$, $R = \text{RESOLUTION}$, $D = \text{DIAMETER}$.

DECISION RULE:

A "WITHIN SPECIFICATION" OR "OUTSIDE SPECIFICATION" RESULT INDICATES THE MEASURED VALUE FALLS WITHIN OR OUTSIDE UNMODIFIED LIMITS. THE STATEMENTS OF CONFORMANCE DO NOT TAKE THE REPORTED UNCERTAINTY INTO ACCOUNT UNLESS OTHERWISE SPECIFIED. THIS IS A SHARED RISK DECISION RULE WHICH THE CUSTOMER ALSO HAS RESPONSIBILITY FOR DETERMINING ACCEPTANCE OF THE RESULTS.

CALIBRATION RESULTS STATED HEREIN RELATE ONLY TO THE UNIT UNDER TEST. THIS GAGE HAS BEEN CALIBRATED OR VERIFIED WITH STANDARDS THAT ARE CERTIFIED ACCURATE AND TRACEABLE TO NIST. THESE MEASUREMENTS CONFORM TO SPECIFICATIONS EITHER PROVIDED BY THE CUSTOMER, MFG. OR OUTLINED IN ISO, ANSI, ASME, OR OTHER RELATIVE STANDARDS. ALL SERVICES ARE IN COMPLIANCE WITH ISO/IEC 17025:2017, ANSI/NC SL Z540-1-1994, MIL-STD-45662A. HARDNESS TESTERS ARE A "INDIRECT VERIFICATION" PER ASTM E18, E384, E110, AND E10. A CMM IS A "VERIFICATION ONLY" AS NO ADJUSTMENTS CAN BE MADE EXCEPT BY THE OEM.

CALIBRATION INTERVAL SHOWN IS PER CUSTOMER'S SPECIFICATIONS.

WHEN THE CALIBRATION IS PERFORMED AT CUSTOMER'S SITE, ENVIRONMENTAL CONDITIONS ARE CONTROLLED BY THE CUSTOMER AND NOTED ON THE CERTIFICATE, OR CALIBRATED AT OUR FACILITY AT 68 DEG. WITH A RELATIVE HUMIDITY REFERENCE NAVAIR 17-35FR-06 3.2.1.

ANY NUMBER OF FACTORS MAY CAUSE CALIBRATION ITEM TO DRIFT OUT OF CALIBRATION BEFORE THE RECOMMENDED INTERVAL HAS EXPIRED. THESE GAGES ARE DIRECT CONTACT INSTRUMENTS AND SOME WEAR WILL OCCUR AFTER USAGE. THE PURCHASER OR USER SHOULD PERIODICALLY RE-CALIBRATE THESE GAGES OR RETURN TO MASTER GAGE & TOOL CO (MGT). FOR CALIBRATION, MGT CANNOT AND DOES NOT WARRANT OR GUARANTEE THAT THESE GAGES WILL MAINTAIN THIS LEVEL OF TOLERANCE AFTER SHIPMENT OR USAGE. ANY MISUSE OR ABUSE, OR ALTERATION TO THESE GAGES, VOIDS ALL CERTIFICATION AND WARRANTIES. MGT IS HELD HARMLESS BY PURCHASER, USER, OR CUSTOMER AND ACCEPTS NO RESPONSIBILITY FOR THE USE OF THIS GAGE. THIS CERTIFICATE OR REPORT SHALL NOT BE REPRODUCED EXCEPT IN FULL, WITHOUT THE WRITTEN APPROVAL OF THE CORPORATE METROLOGY SERVICE MANAGER: SEAN COBB

