



CERTIFICATE OF CALIBRATION

Certificate #: LAB104496

Calibration Performed By:

MG&T LAB/DANVILLE

112 MAPLEWOOD STREET
DANVILLE, VA 24540

For:

ORIGIN TECHNOLOGIES CORP
9238 MADISON BLVD
BLGD 1, SUITE 845
MADISON, AL 35758

Equipment Information

Serial Number: VGA-12-024
Description: VGA-12 BLOCK
Gage Type: CUSTOM
Size:
Unit of Measure: DEC DEG/INCH
PO Number: 16258
Cal. Interval: 5 YEARS
Cal Date: 06-Jan-2020
As Found Condition: Report of Value

Gage I.D. VGA-12-024

Calibration Location: MGT LAB
Performed By: W.BACON
Drawing Number: VGA-12 CERTIFICATION
Temp./RH: 68 F / 60 %
Cal. Due Date: 06-Jan-2025
As Left Condition: Report of Value

Uncertainty

+/- 98+6.2L MICROINCH

Calibration Notes

VISUAL CONDITION: SHOWS WEAR, DINGED.

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	0.49976	0.49976	R 0.49976	0.49976	INCH
2	DIMENSION B	0.00000	0.00000	0.00000	0.37491	0.37491	R 0.37491	0.37491	INCH
3	DIMENSION C	0.00000	0.00000	0.00000	0.24902	0.24902	R 0.24902	0.24902	INCH
4	DIMENSION D	0.00000	0.00000	0.00000	0.24996	0.24996	R 0.24996	0.24996	INCH
5	DIMENSION E	0.00000	0.00000	0.00000	0.18782	0.18782	R 0.18782	0.18782	INCH
6	DIMENSION F	0.00000	0.00000	0.00000	0.12512	0.12512	R 0.12512	0.12512	INCH
7	DIMENSION G	0.00000	0.00000	0.00000	90.01918	90.01918	R 90.01918	90.01918	DEC DEG
8	DIMENSION H	0.00000	0.00000	0.00000	90.11077	90.11077	R 90.11077	90.11077	DEC DEG
9	DIMENSION I	0.00000	0.00000	0.00000	90.27801	90.27801	R 90.27801	90.27801	DEC DEG

Standards Used To Calibrate Equipment

Company	I.D.	Last Cal.	Cal. Due Date
MG&T LAB	MGT-683	2/21/2019	2/21/2020

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 = LENGTH, R = RESOLUTION, D = 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 17025:2005, ANSI/NCSL 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 BY 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

