

CERTIFICATE OF REGISTRATION

This is to certify that the management system of:

Metal Flow Corporation

11694 James Street, Holland, MI, 49424, USA

has been registered by Intertek as conforming to the requirements of:

IATF 16949:2016

The management system is applicable to:

Manufacture of Deep Drawn Metal Components and Assemblies

Permissible exclusions include: Product Design

IATF Certificate Number

0314269

Certificate Number:

2005-0129

Certificate Issue Date:

05 July 2018 (Revised: 16 July 2019)

Certificate Expiry Date:

04 July 2021



Calin Moldovean

President, Business Assurance

Intertek – 4700 Broadmoor, Suite200
Kentwood MI 49512, USA



APPENDIX TO CERTIFICATE OF REGISTRATION

This is to certify that the quality management system of:

Metal Flow Corporation

11694 James Street, Holland, MI, 49424, USA

has been registered by Intertek as conforming to the requirements of:

IATF 16949:2016

Including the Following Support Functions:

Metal Flow -
2262 112th Street, Holland,
Michigan, 49424, USA

Packaging, Logistics, Warehousing

IATF Certificate Number
0314269

Certificate Number:
2005-0129

Certificate Issue Date:
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President, Business Assurance

Intertek – 4700 Broadmoor, Suite200
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1. Scope

The purpose of this scope is to identify the capabilities to perform the required inspection, tests or calibrations of product and processes of the Quality Lab at Metal Flow Corporation. If any gage is greater than our capability to measure, Metal Flow will send them out to be calibrated.

2. Personnel

- A. Quality Technicians, with management approved training and/or experience, make the professional judgment relating to calibration approvals.
- B. Reference Quality Lab Competency Matrix
- C. Quality Technicians, Auditors, Manufacturing Quality Supervisors or Leaders and Operators participate in management approved and supervised training, education, and/or experience, in regard to testing.

3. Specific Tests

- A. Metal Flow Laboratory has capacity to perform the following:
 - 1) Hardness testing
 - 2) Cleanliness testing
 - 3) Tension, compression shear and flexure testing
 - 4) Roughness testing
 - 5) Hydroburst Testing
- B. Personnel use test methods, including those for sampling, which meet the needs of the customer and are appropriate for the tests they undertake. When it is necessary to employ methods not covered by standard specifications, it will be subject to agreement with the customer.
- C. The tests are performed within the guidelines or training for the test equipment.

4. Evaluations

- A. The Metal Flow Lab has the equipment and software capable of:
 - 1) Evaluating SPC data
 - 2) Evaluating Gage R&R's
 - 3) Calibration data storage and recall
- B. Appropriate statistical techniques are applied to verify activities whose deliverables are data and directly related to the customer's product.

5. Calibrations

- A. The Quality Lab performs calibrations on equipment the staff has the ability and competency to perform. Using equipment traceable to NIST standards, the staff calibrates the following (Note: If any gage is greater than our capability to measure, Metal Flow will send them out to be calibrated.)
 - 1) The Master Gage block set is used to test and calibrate:
 - a) Calipers
 - b) Micrometers
 - c) Linear indicators
 - 2) The Vision CMM is used to test and calibrate:
 - a) Radius gages
 - b) Functional job specific dedicated gages
 - 3) Micrometers are used to test and calibrate:
 - a) Functional job specific dedicated gages
 - b) Gage Pins
 - 4) CMM is used to test and calibrate:
 - a) Functional job specific dedicated gages
 - b) Ring gages
 - 5) Linear Indicators are used to test and calibrate:
 - a) Functional job specific dedicated gages

- B. The Metal Flow Laboratory and/or an Accredited Calibration Laboratory uses calibration methods, including those for sampling, which meets the needs of the customer and are appropriate for the calibrations it undertakes. When it is necessary to employ methods not covered by standard specifications, it will be subject to agreement with the customer.
- C. The Quality Lab uses the methods and standards in Plex Gage Control within the limitations of the Quality Lab scope.
- D. If validity of measurement equipment is found unfit, featured measured with unfit equipment method shall be quarantined until validity can be provided.

6. Use of Laboratory Equipment

- A. Use as intended:
 - 1) All calibrated equipment is utilized within the limits of the manufacture's written instructions, the skills of the lab technicians/layout technicians and/or trained operators/die setters and in conjunction with the customer's blue print specifications.

7. Accredited Lab Calibrations

- A. The Metal Flow Quality Lab utilizes accredited calibration laboratories/services to perform the testing and certification on the following equipment:
 - 1) Surface finish testing plates
 - 2) CMM x 2
 - 3) Optical Comparator
 - 4) Rockwell Testers
 - 5) TC Indicator Tips for Rockwell Testers
 - 6) Hardness test blocks for Rockwell Testers
 - 7) Surface plates
 - 8) Tinius Olsen testing machine
 - 9) Gage blocks
 - 10) Scales
 - 11) Vision CMM
 - 12) Contour Tracer
 - 13) Cleanliness equipment
 - 14) Gage pin sets
 - 15) Master Bore Rings
 - 16) Step Gage for Depth Micrometers
- B. The Metal Flow Quality Lab utilizes accredited calibration laboratories/services to perform the testing for material verification.

8. Customer Specific

- A. Metal Flow Corporation utilizes the services of customer specific calibration services when so directed.