

INPUTS	WHO	METRICS	OUTPUTS
<ul style="list-style-type: none"> Manufactured Product 	Owner: Don Super SME: Chris Beatty Responsible Person: Local Quality Authority	<ul style="list-style-type: none"> Internal Audit compliance reports 	<ul style="list-style-type: none"> Inspection Reports Capability Studies

OBJECTIVE

The purpose of this work instruction is to document the scope of the Inspection and Test Laboratories in each manufacturing environment that performs work for Part Certification.

SCOPE

This work instruction applies to all NA based internally qualified labs.

WORK STEPS

A. Purpose

Each lab is dedicated to the inspection and testing of manufactured parts for part certification. Additional services, specific to the individual satellite labs, are documented in the local laboratory manual.

B. Laboratory Standards and Equipment

The list of equipment and standards is kept at the laboratory in the local lab manual or work instruction manual.

C. Laboratory Methods and Standard

[EANW 5-3 CS 11-01 EN](#) General Information for the Control and Documentation of Test and Measurement Equipment

D. Training

1. Training and records are maintained and available for personnel performing calibration.
2. In addition to experienced Quality Engineering personnel it is acceptable to use the services of Certified Quality Professionals to review practices and procedures.

E. Laboratory Procedure for Handling Inspecting and Test samples

1. Receipt - The lab and each satellite will handle the receipt and return of work it receives. If this requires more than a log sheet then the practice is documented in the local lab manual or work instruction. Lab personnel may be sent out of the

Lab building to perform any required activities. In these cases, due care will be taken to assure the accuracy.

2. Handling and Protection - All materials will be stored in an area or environment that meets or exceeds the requirements of storage or use. For most materials these conditions are -40 C to 85 C.
3. Retention - The lab retains the samples only until completion of the requested task. The Local Quality Authority provides a schedule to its customers and cooperates with pick up and delivery.
4. Care is taken to safeguard all equipment and product from inappropriate conditions that would invalidate test or inspection results.

F. Laboratory Policy

Each Lab's policy begins with Aptiv's Quality Policy "Exceed Customer Expectations". It is the aim of the Inspection and Test Laboratory to provide accurate and timely measurements. This will be done by performing the calibrations in accordance with recognized standards, utilizing appropriate equipment in an appropriate environment, using only properly trained personnel, and the use of work instruction and methods that accurately describe procedures. Maintenance of the work practices, gages and standards and the proper execution of the work instructions assure the validity of the work.

The Laboratory is overseen by the Quality Authority in each Lab and is managed by the Quality Control Department. On the local level, Quality Engineering is responsible for setting Policies and procedures and communication of corporate and local policy. The Quality Engineer or supervisor is responsible for setting personnel job assignments, prioritizing job assignments, providing for training needs, and overseeing Laboratory operation. The Lab Technician (ex. Gage Crib Attendant, QC Technician, Tradesman etc.) is responsible for all calibration, cleanliness, measurement record keeping and adherence to work instructions.

G. Validity of Work

All work is performed to industry standards or customer specific instruction when defined by the customer. Training records are maintained and conditions of calibrations are maintained. All master calibration standards are traceable to the NIST. Further verification of the validity of the work performed is supported by gage studies (bias, linearity and stability).

H. Environmental Conditions

The Appropriate environmental conditions for use and calibrations are outlined in satellite lab manuals, manufacturer literature or local work instruction. These

conditions, for the most part, are the same as the condition of use for the measurement device.

I. The minimum contents of the Lab Manual is as follows:

1. A controlled copy of this work instruction or a pointer to a readily accessible controlled copy. (See note 1)
2. Any Addendum to the Lab scope (i.e. Measurement devices, Work instructions, Environmental issues, etc.) (See note 2)

NOTE: A pointer from the manual to a readily accessible controlled hard copy or electronic copy is acceptable for any of the above.

NOTES

1. Any changes to the Scope (including additions or deletions of work instructions) should be communicated to the General Supervisor of Metrology.
2. The main Lab and each satellite are only required to have access to controlled copies of the work instructions that pertain to that particular lab's activities

DEFINITIONS

See Delphi [EOS-Glossary](#)

Laboratory - A test facility that may include chemical, metallurgical, dimensional, physical, electrical, reliability testing or test validation. For the purposes of this work instruction the term lab and laboratory are interchangeable and may be used to describe the building, area, equipment or personnel associated with the laboratory. The AIAG requires all measurement and tests for Part Certification submission to be done in a Lab.

Quality Authority - For the purpose of this work instruction the term Quality Authority will be the General Supervisor in charge of the Lab or Satellite Lab.

REFERENCES:

[EANW_5-3_CS_11-20_EN](#) Calibration Scope

ROLES AND RESPONSIBILITIES (optional)

Role	Responsibility
	The responsibility lies with all personnel assigned to the laboratory or its branches (satellites).

**CHANGE HISTORY**

Date	Change Description
20.Jan.2009	Renumbered for EOS, revised links. It Was Naw 4.12-01.05
Feb 17, 2011	In work step A. the location of DCS Central Lab has changed. Plant 47 QC Lab was removed. Document owner was changed from Jack Taylor to Mary Pat Meade DCR 09-588
8/16/2017	Update references to only Ohio and other obsolete work instructions DCR 17-148
24.Oct.2018	Updated to Aptiv references/ segments. Revised EOS Glossary link. No DCR

FINAL APPROVAL MATRIX (See DCR for further approvals)

Functional Area		Required
Divisional PBU	ECG	X
	EDS	X
Sales CBU		
Finance		
Program Management		
Product Engineering		
Manufacturing Engineering		
GSM		
GSM(L)		
Production Control		
Manufacturing		
Customer Satisfaction		X
Human Resources		
Information Technology		
Excellence and Lean		

Flow	Required
Monitoring & Continually Improving (MCI)	
Flow 1	
Flow 2	
Flow 3	
Flow 4	
Flow 5	X