



**Initial Inspection System Qualification Approval**

Supplier Name: Level 3 Inspection  
 Measurement System evaluated: Comet 5-4Ma

Supplier DUNS: 025613044  
 Honeywell Engineering Approval:

Date of Audit: July 21<sup>st</sup>, 2017  
 Honeywell FQE Approval:

Item No.	SPOC Req.	Description of requirement	Critical Y/N/O	Status C/N/N/A	Document Required	Objective Evidence:
8	SPOC 1.18	Were master parts required and have they been established for the dimensions of the features that will be reported by the inspection system?	O	C	<b>Dimensional Measurement Plan</b> per Quality plan / ref ASME B89.7.2	N/A
9	SPOC 1.18	Has a Primary (gold at Honeywell)/ Secondary (silver at supplier Quality)/ Work (supplier shop floor) Master part management system been established?	O	C	<b>Measurement Report for Master Parts</b> per Quality plan / ref ASME B89.7.2	N/A
10	SPOC 1.18	Is the supplier analyzing trends in measurements of calibration reference Standards/master parts?	O	C	<b>SPC control chart</b> with specified range representing not more than 10% of the strictest part tolerance range, average is set to be the initial calibrated value of the particular master / ref ASTM E2587 or other standards, as applicable	See ISO17025 accreditation and scope. See form 60-4 and 60-9.
11	SPOC 1.18	Is the measurement system in control?	O	C	<b>Charts interpreted per Western Electric rules and results of investigations.</b> Target values based on risk analysis / ref ASTM 2587, section 5; ASTM E2782	See ISO17025 accreditation and scope. See form 60-9 PT-ILC Worksheet.
12	SPOC 1.18	Has a training plan been created for inspectors?	Y	C	<b>Training plan and employee training records</b>	See forms 66-4, 66-5 and 66-6.
13	SPOC 1.18	What is the measurement system capability for the reported features?	Y	C	<b>Relevant gage R&amp;R study, Round Robin results with reference measurement system.</b> Target values based on risk analysis / ref ASTM 2587, section 5; ASTM E2782, ASME B89.7.2	See 3060612_W_04_GR-R_AG-5750_8098_00.xlsx

**TABLE 1: Sample of Information required to be on a Calibration Report based on structured light system acceptance**



## Initial Inspection System Qualification Approval

Supplier Name: Level 3 Inspection  
 Measurement System evaluated: Comet 5-4Ma

Supplier DUNS: 025613044  
 Honeywell Engineering Approval:

Date of Audit: July 21<sup>st</sup>, 2017  
 Honeywell FQE Appro:

Item No.	SPOC Req.	Description of requirement	Critical I Y/N/O	Status C/N/N/A	Document Required	Objective Evidence:
1	SPOC 1.18	Description of the measurement system: manufacturer, model number, software name, software version or release date, etc.	Y	C	N/A	Steinbichler-Comet 5, 4Ma (3) CometPlus v9.1.2 (4) Geomagic Control 2014 (8)
2	SPOC 1.18	Has the inspection system been calibrated originally?	Y	C	<b>Original Calibration Certificate</b> / ref. ISO10360 (CMM & others), VDI 2634 Part III (structured light) , VDI2630 (CT scanning) or equivalent, ISO17025	See ISO17025 accreditation and scope.
3	SPOC 1.18	Does the supplier have a plan to manage the impact of software changes or major maintenance events?	Y	C	<b>Software change-control plan, maintenance records, etc.</b> / ref. ISO10360 (CMM & others), VDI 2634 Part III (structured light), VDI2630 (CT scanning) or equivalent, ISO17025	See ISO17025 accreditation and scope.
4	SPOC 1.18	Has a calibration reference Standard been defined?	Y	C	<b>Drawing of reference Standard, visual review of reference Standard, pictures, etc.</b> / ref. ISO10360 (CMM & others), VDI 2634 Part III (structured light) , VDI2630 (CT scanning) or equivalent, ISO17025	See ISO17025 accreditation and scope. See sample calibration panel certification.
5	SPOC 1.18	Has the calibration reference Standard been calibrated?	Y	C	<b>Calibration Report for reference Standard</b> / ref. ISO10360 (CMM & others), VDI 2634 Part III (structured light) , VDI2630 (CT scanning) or equivalent, ISO17025	See ISO17025 accreditation and scope. See sample calibration panel certification.
6	SPOC 1.18	Has the measurement system been calibrated within the last 12 months with the reference Standard?	Y	C	<b>Yearly Calibration Report</b> / ref to Table 1 below and ISO10360 (CMM & others), VDI 2634 Part III (structured light) , VDI2630 (CT scanning) or equivalent, inspection system manufacturer certification procedure, ISO17025	See ISO17025 accreditation and scope. See sample calibration panel certification.
7	SPOC 1.18	Have other calibration reference Standards been used to validate the set-up and operation of the machine? (example: Glastonbury or other non part specific standard)	O	C	<b>Drawing of reference Standard, visual review of reference Standard, pictures, Calibration Report, etc.</b> / ref. ISO10360 (CMM & others), VDI 2634 Part III (structured light) , VDI2630 (CT scanning) or equivalent, inspection system manufacturer certification procedure, ISO17025	See ISO17025 accreditation and scope. See sample calibration panel certification. See form 60-9 PT-ILC Worksheet.



**Initial Inspection System Qualification Approval**

Supplier Name: Level 3 Inspection  
Measurement System  
evaluated: Comet 5-4Ma

Supplier DUNS: 025613044  
Honeywell Engineering  
Approval:

Date of Audit: July 21<sup>st</sup>, 2017  
Honeywell FQE  
Approv:

Reference Standard calibration certificate number	Reference Standard name	Reference Standard description	Measurement system metrology number	Measurement system maintenance number	System description	Lens set	Recommended Spheres	Reference distance between centers (in)	Report Name	Probing form error sigma (in)	Probing form error sigma limit (in)	Sphere spacing error (in)	Sphere spacing error limit (in)
---	-------------------------	--------------------------------	-------------------------------------	---------------------------------------	--------------------	----------	---------------------	---	-------------	-------------------------------	-------------------------------------	---------------------------	---------------------------------