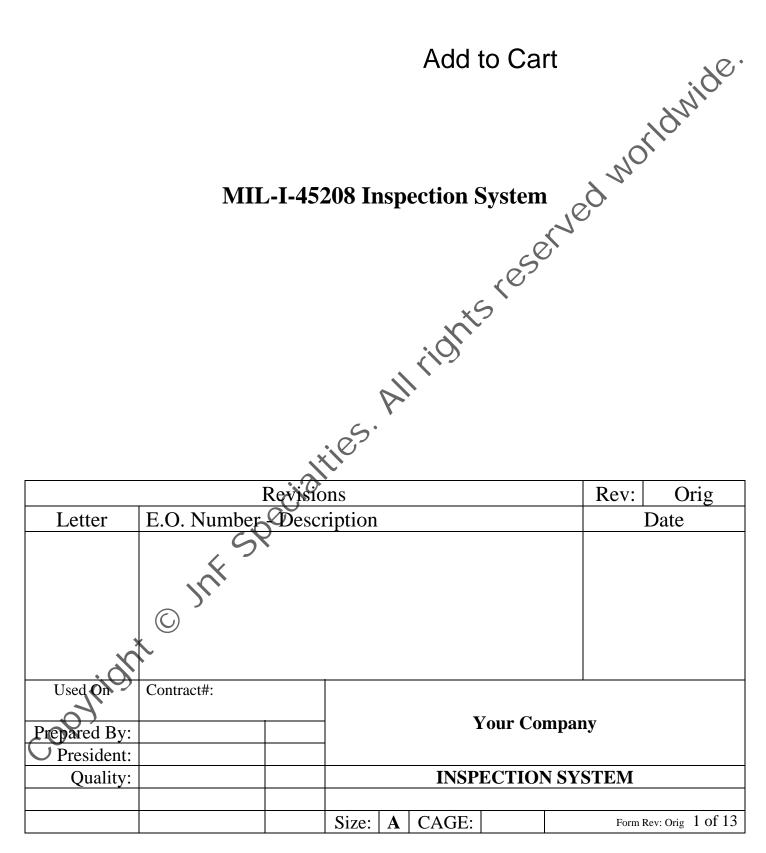
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Your Logo

TABLE OF CONTENTS

0 0	RGANIZATION	
2.1	Quality Responsibility and Authority ^{3.2.3}	3
2.2	Initial Quality Planning ^{3.11.1, 3.11.2}	
2.3	Inspection and Testing Documentation ^{3.2.1}	
2.4	Records ^{3.2.2}	
2.5	Corrective Action ^{3.2.3}	
5.0 FA	ACILITIES AND STANDARDS	<u>٢</u> 6
3.1	Drawings, Documentation and Changes ^{3.2.4} Change Control ^{3.2.4} Measuring and Test Equipment ^{2.1, 3.3} Use of Contractor's Inspection Equipment ^{3.3}	6
3.2	Change Control ^{3.2.4}	6
3.3	Measuring and Test Equipment ^{2.1, 3.3}	6
3.4	Use of Contractor's Inspection Equipment ^{3,3}	7
3.5	Control of Purchases ^{3.11, 3.11.1, 3.11.2, 3.11.3} Materials and Material Control ^{3.9, 3.12} Production Processing and Fabrication ^{3.2.1}	7
3.6	Materials and Material Control ^{3.9, 3.12}	7
3.7	Production Processing and Fabrication ^{3.2.1}	9
3.8	Completed Item Inspection and Testing ^{3.2.1, 3.5}	
3.9	Handling, Storage and Delivery	11
3.10	Nonconforming Material ^{3.7}	12
3.11	Indication of Inspection Status ^{3.5}	
3.12	Government Inspection at Subcontractor or Vendor Facilities ^{3.8, 3.11, 3.11.1, 3.11.2}	12
3.13	Government Property ^{3.6}	

APPLICATION NOTES (delete prior to release):

This inspection system is based upon MIL-I-45208 and is subject to Customer evaluation and verification.^{3.13}

The paragraph numbers in this quality manual do not correspond to the paragraph numbers in the MIL-I standard. This quality manual displays superscript numbers to establish the relationship between the standard and content in this quality manual. Superscript numbers correspond to paragraph numbers from MIL-I-45208A.

Paragraph numbers 1 and 2 and 4 through 6 in MIL-I-45208A only provide guidance (except 2.1) and do not require reference in the quality manual.

Vour Compony Nomo	REV	CAGE	DOC#:	2 of 13
Your Company Name	Orig		MIL-I-4520	8 Quality Manual

1.0 SCOPE^{3.1}

It is a policy of the Company to perform all activities in a manner that reflects a total commitment to quality. This means maintaining the highest standards of quality in all products and services and a dedication to the principle of maintaining the highest levels of quality and integrity in communicating with people inside and outside of the Company. It is also a policy of the Company to prevent production and distribution of products that would pose unreasonable risks to health, safety, or the environment. It is a goal of the Company to encourage all employees to strive for individual excellence in their work and in their association with other people inside and outside of the workplace. The Company strives to motivate employees to achieve this excellence by providing leadership, training, proper materials, facilities and a cooperative environment.

Managers are responsible for developing organizations and systems that accommodate the goal of achieving Customer satisfaction. Managers must recognize and support employees charged with the responsibility of interacting with Customers. Employees who are authorized to work with Customers are responsible for carefully listening and fully understanding their requirements and expectations. These employees should be as responsive as possible to those needs within the province and spirit of good business practices. Managers must monitor Customer satisfaction on a continuing basis, making appropriate adjustments and corrections if problems occur. This Quality Manual is produced to provide guidance to achieve the policies and goals of the Company. This manual of policies and procedures are subject to review by the Customer. The Company's Mission is to continually improve products and services.

2.0 ORGANIZATION

2.1 Quality Responsibility and Authority^{3.2.3}

The quality manager has the responsibility and authority to resolve matters relative to quality in products, processes, and services from internal and external sources. Quality may suspend internal and external processes and services that do not meet requirements until appropriate corrective and preventive action is implemented on an expedited, high priority basis. In addition, Quality may withhold internal and external shipments of products that do not meet requirements until appropriate corrective and preventive action is implemented on an expedited, high priority basis. In addition, Quality may withhold internal and external shipments of products that do not meet requirements until appropriate corrective and preventive action is implemented on an expedited, high priority basis. The quality manager reports directly to the President. Quality supervisors, inspectors, and auditors report directly to the quality manager.

2.1.1 Problem Resolution

Quality problems resulting from a variance to a program requirement are resolved by the organizational Group assigned the specific responsibility. Decisions affecting Quality, Cost, or Schedule are recorded using documented correspondence. Company correspondence is distributed and retained. Each organizational Group has the authority, responsibility, and freedom to initiate, recommend or provide solutions for programmatic problems; however, each Group is expected to fulfill this inspection system at all levels and protect the quality effort of other Groups upon which they have an influence.

2.2 Initial Quality Planning^{3.11.1, 3.11.2}

The Quality Group is responsible for review of new and pending work based on the receipt of a Request for Proposal (RFP), the receipt of a new contract or potential contract or the activation

Your Company Name	REV	CAGE	DOC#:	3 of 13
Your Company Name	Orig		MIL-I-4520	08 Quality Manual

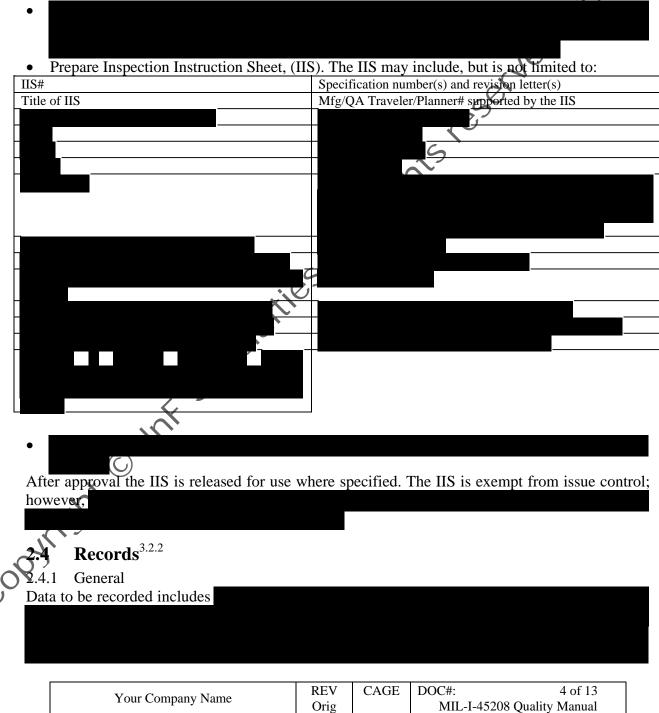
of a Company-funded program to integrate special or unusual contract requirements into quality plans and procedures.

2.3 Inspection and Testing Documentation^{3.2.1}

2.3.1 Preparation

All work affecting quality is described by clear and complete documented instructions of a type appropriate to the circumstance. Preparation, maintenance, reviews and compliance with instructions is accomplished in 'real-time' or as a result of the initial quality planning function. 2.3.2 Inspection Instructions^{3.9}

The Quality Group prepares an inspection instruction sheet for all inspection work by performing tasks that may include, but are not limited to:



2.4.2 Record Verification Records are examined for

A Document Control Center can be used to maintain records as directed by the contract or for seven (7) years if not specified by the contract. To the extent prostically

2.4.4 Active Records

Records for active contracts are maintained in the quality area handling the inspection system. Records are removed

2.4.4.1 Objective Evidence

Records are collected or produced to the extent necessary to

Corrective Action^{3.2.3} 2.5

2.5.1 Internal Corrective Action Requests

A Corrective Action Request (CAR) or a Request for Corrective Action (RFCA) is initiated as promptly as practicable to

2.5.2 Corrective Action Implementation by the MRB The MRB forwards the CAR of RFCA to

2.5.2.1 Corrective Action Monitoring

An initial review of the adequacy of improvements and corrections and the monitoring of the effectiveness of actions taken are

2.5.3 Supplier Corrective Action

A Supplier corrective action is initiated by the MRB, Purchasing Group or a Customer. Corrective Action Request (CAR or RFCA) form is completed as specified by the Customer, The MRB or by the Quality Group. The CAR/RFCA form is

V. C. Martin	REV	CAGE	DOC#:	5 of 13
Your Company Name	Orig		MIL-I-45208	Quality Manual

Acceptable Supplier responses are forwarded to

2.5.4 Customer Request for Corrective Action

A Customer request for corrective action may be communicated verbally or by letter or by formal corrective action request. These requests may

5

2.5.4.1 Corrective Action Implementation

The Corrective Action Board (CAB), working with other Company organizations as needed,

2.5.4.2 Corrective Action Progress

Progress of the corrective action is monitored by the Quality Group to

3.0 FACILITIES AND STANDARDS

3.1 Drawings, Documentation and Changes^{3.2.4}

The Quality Group verifies that the latest revisions of documents that are specified by contract are

3.2 Change Control^{3.2.4}

Changes to contractual requirements are documented using an Engineering Order, Request for Waiver / Deviation or an Engineering Change Proposals according to

3.3 Measuring and Test Equipment^{2.1, 3.3}

All measuring and test equipment instruments and devices used to determine a deliverable item's conformance to specified requirements are

Vour Compony Nomo	REV	CAGE	DOC#:	6 of 13
Your Company Name	Orig		MIL-I-4520	8 Quality Manual

Tools that are used for inspection purposes are calibrated prior to use.

The environment where measuring and test equipment instruments and devices are both calibrated and used is controlled to the extent necessary to assure required accuracy, with consideration given to temperature, humidity, vibration, cleanliness and other controllable factors.

3.4 Use of Contractor's Inspection Equipment $x^{3.3}$

3.4.1 Availability

Company owned gauges, inspection devices and test equipment are made available for use by Customers when

3.5 Control of Purchases^{3.11, 3, 11, 3, 11, 2, 3, 11, 3}

3.5.1 Procurement Document Requirements Review The Quality Group reviews procurement documents to

The Supplier is directed to provide some or all of the following:

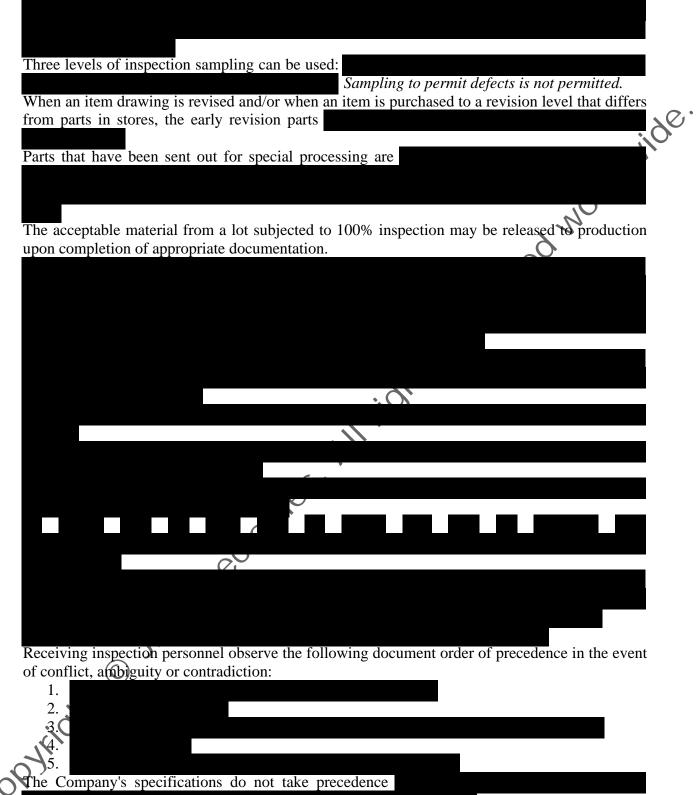


3.6 Materials and Material Control^{3.9, 3.12}

3.6.1 Receiving Inspection

All materials are evaluated by receiving inspection to the extent necessary to

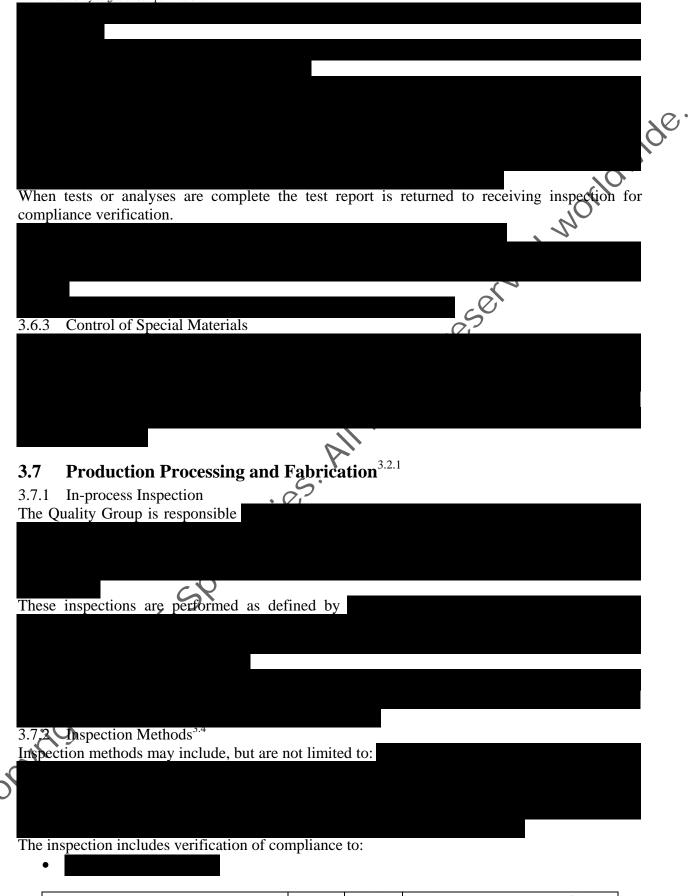
Vour Compony Nomo	REV	CAGE	DOC#:	7 of 13
Your Company Name	Orig		MIL-I-45208 Q	uality Manual



3.6.2 Raw Material Inspection

The Purchasing Group specifies physical and/or chemical characteristics and properties on purchase orders for raw materials. The purchase order requires the Supplier to provide

Vour Company Nama	REV	CAGE	DOC#:	8 of 13
Your Company Name	Orig		MIL-I-4520	8 Quality Manual



Vour Company Nama	REV	CAGE	DOC#:	9 of 13
Your Company Name	Orig		MIL-I-452	208 Quality Manual

When physical inspection of processed supplies is impossible or disadvantageous, indirect control of product quality is accomplished by

In the event materials, components or assemblies are needed prior to receipt of Certified Test Data, Certificate of Compliance or Analysis, approved Request for Deviation or Weither limited risk condition, cognizant MRR merel the articles on a Calculated Risk.

An open CRR prevents delivery of supplies unless waived by the Customer. 3.7.3 Identification^{3.5}

Parts or assemblies found to be in compliance with inspection requirements are identified as

3.7.4 Failure Reporting

A Material Report is initiated by process or inspection personnel for each failure detected, including those discovered during

3.7.5 Tooling Inspection^{3.3}

All production tools such as jigs, fixtures and templates used for producing deliverable supplies are

Completed Item Inspection and Testing^{3.2.1, 3.5} 3.8

Final Physical and Visual Inspection 3.8.1

All finished goods are inspected as specified on the applicable inspection instruction or Traveler or as specified by the Quality Group. Parts and assemblies are processed only after all operations specified on applicable process documentation are identified as complete and accepted. Inspections are made using

Vour Compony Nomo	REV	CAGE	DOC#:	10 of 13
Your Company Name	Orig		MIL-I-45208	Quality Manual

3.8.2 Final Acceptance Testing

Supplies are approved for acceptance testing after a determination has been made that the supply

is		
		De.
		\mathbf{O}

3.8.3 Final Acceptance Processing

After successful completion of final inspection and test, completed supplies are examined for the following:

Documentation attesting to the acceptance of the supply is annotated upon completion of the final inspection and test.

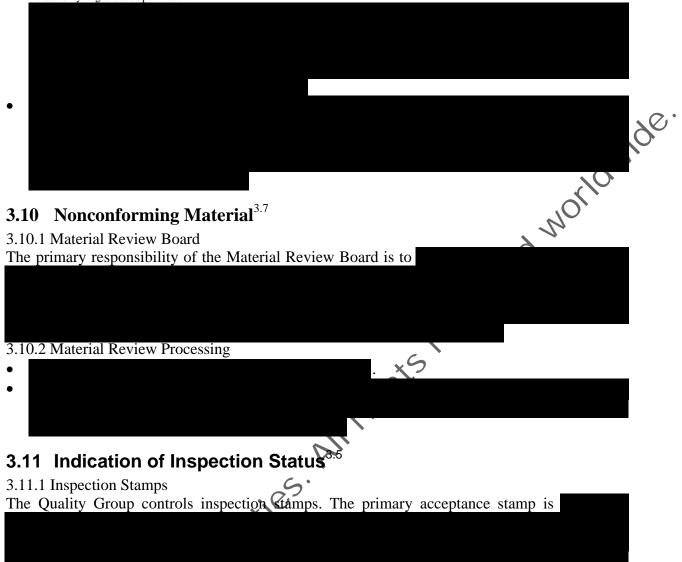
3.9 Handling, Storage and Delivery

3.9.1 Protecting Product Quality

The Quality Group specifies, where required and according to contractual directives, instructions for

The following routines apply:

) -						
-						
	New Company News	REV	CAGE	DOC#:	11 of 13	
	Your Company Name	Orig		MIL-I-45208 Qua	lity Manual	



3.11.2 Identification Media

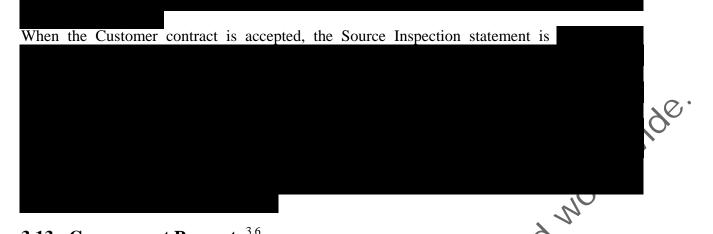
The inspection status of supplies is recorded on accompanying paperwork with a rubber stamp and in some instances with notations and signatures. Rubber stamps are of a design distinctly different from Government inspection stamps. The inspector completes a Good Material Tag, following its format, upon completion of final inspection when specified by the Inspection Instruction. When a condition exists that requires temporary suspension of inspection or processing activities, the inspector completes



2 Government Inspection at Subcontractor or Vendor Facilities^{3.8, 3.11, 3.11.1,}

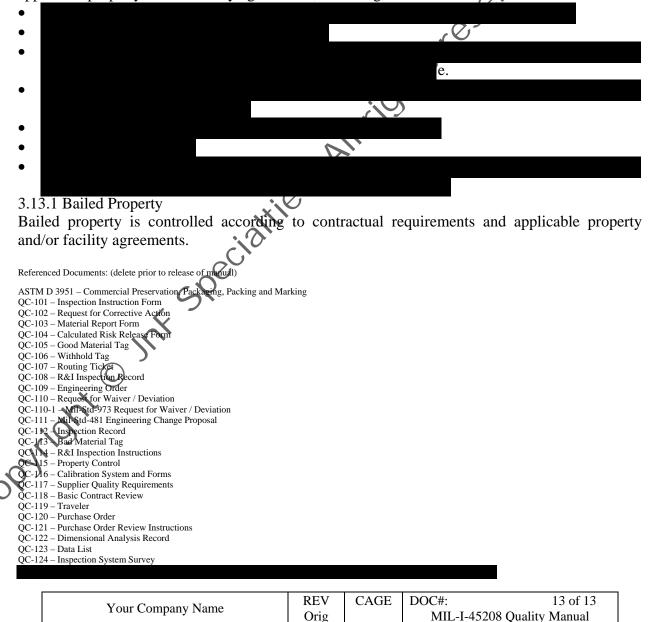
When the Customer wishes to conduct Source Inspections at Supplier facilities, the following statement is normally included in the Customer's purchase agreement:

Vour Compony Nomo	REV	CAGE	DOC#:	12 of 13
Your Company Name	Orig		MIL-I-452	08 Quality Manual



3.13 Government Property^{3.6}

Government and Customer property is controlled according to contractual requirements and applicable property and/or facility agreements, including, but not limited to:



MIL-I-45208A Inspection System

SUPPLIER INFORMATION:		CAGE CODE:				
Supplier Name:		Supplier Code: _				
Address:						
(Street)	(City)	(State)	(Zip)			
Quality Manager:	Phone:	Fax:	<u> </u>			
SURVEY BACKGROUND INFORMA	TION:		102			
Reason for Survey: New Supplier	Recertification	Corrective Action Follow-	up 🗋			
Survey Date:	A	pproval Date:	•			
Approval Method: Survey	History	and				
(If History, attach summary) History summ	•	Yes No				
Special Process Codes (if known)		6				
SUPPLIER BACKGROUND INFORM	IATION:	ntsre				
Housekeeping is adequate	Yes No	<i>S</i>				
Floor Space is adequate	Yes No					
Government Source Inspection is on Site	Yes No					
GSI is Itinerant	No No					
Number of shifts	1 2 3					
Number of Employees Nu	mber in Quality	Years in Busines	S			
Delegated active Material Review Board	Yes No	Delegated by				
% Government Business						
SURVEY RESULTS:	APPROVAL STA	TUS: (A, C, or D)				
A = Approved	C = Conditional	D = Disapproved				
Survey Expiration Date (if required by applicable	specification)					
Survey Follow-Up Required: Yes No			No			
This survey was performed by						
Surveyor's Office Phone Number:	·	Survey was requested by:				
Signature:		Date:				

Audit and HDBK 51 Question Number	MIL-I-45208 Paragraphs	Acceptable	In space under 'Acceptable' enter 'Y' for conformance, 'N' for Nonconformance, or 'X' for Not Applicable. Under comments enter statement describing nature of nonconformance for each 'N' entry. Comments are mandatory for all objective evidence observed.
	1.0 Scope		ble)
	1.1 Scope (Not applicable)1.2 Applicability (Not applicable)		,01
	1.2.2 Relation to other contract requirements (Not applicable)	oplica	ble)
	1.2.3 Options (Not applicable)	•	A l
	2.0 Applicable Documents (Self explanatory)		$\sqrt{2}$
	2.1 General (Self explanatory)2.2 Amendments and revisions (Self explanatory)		
	2.2 Amendments and revisions (Sen explanatory) 2.3 Ordering Government Documents (Self explanatory)	orv)	\sim
	3. Requirements	5-57	e contra de la con
	3.1 Contractor Responsibilities		<u> </u>
1. (1)	Does the inspection system cover all supplies and		xS
2. (2)	services offered to the Government for acceptance? Does the inspection system cover all supplies and		
2. (2)	services procured from subcontractors or vendors?	۰.C	
3. (3)	Does the inspection system assure that all supplies and	$\langle \cdot \rangle$	
	services submitted to the Government for acceptance	•	
4 (4)	conform to contract requirements?		
4. (4)	6.		
9. (1)	3.2 Documentation, Records and Corrective Action Are all inspection instructions clear, complete and up to		
9. (1)	date?		
10. (2)	Are all required instructions available and current?		
11. (3)			
c^{0}	3.2.2 Records		
13. (1)	Does the contractor maintain adequate records of all examinations and tests?		
14. (2)	Do the records indicate the nature and number of		
(=)	observations made?		
15. (3)			

Audit and HDBK 51 Question Number	MIL-I-45208 Paragraphs	Acceptable	In space under 'Acceptable' enter 'Y' for conformance, 'N' for Nonconformance, or 'X' for Not Applicable. Under comments enter statement describing nature of nonconformance for each 'N' entry. Comments are mandatory for all objective evidence observed.
17. (5)	3.2.3 Corrective Action		<u> </u>
18. (1)	Is action taken promptly to correct all conditions that	1	
	cause defects to be submitted for Government acceptance?		, NO
19. (2)			
			eserver
	3.2.4 Drawings and Changes		
21. (1)	Does the contractor's inspection system provide		N ¹⁵
	procedures that assure that only the latest applicable drawings, specifications and instructions, including all		
	approved changes, are used for fabrication, examination		
	and testing?	N	
22. (2)			
22 (1)	3.3 Measuring and Test Equipment	1	
23. (1)	Are the gauges, testing and measuring equipment that are necessary to assure that products meet technical requirements available and are procedures established for their use?		
24. (2)	Is the test and measuring equipment properly		
	maintained?		
25. (3)			
00			
32. (10)	Does the contractor make inspection equipment and		
	facilities available to the Government representative for verification of the contractor's results where required?		
33. (11)	vermeation of the contractor's results where required?		
55. (11)			

Audit and HDBK 51 Question Number	MIL-I-45208 Paragraphs	Acceptable	In space under 'Acceptable' enter 'Y' for conformance, 'N' for Nonconformance, or 'X' for Not Applicable. Under comments enter statement describing nature of nonconformance for each 'N' entry. Comments are mandatory for all objective evidence observed.
	3.4 Process Controls		
34. (1)	Are there contract or specification requirements for control of any specific manufacturing processes or operations?		NOTIC
35. (2)			λ^{\sim}
	3.5 Indication of Inspection Status		
36. (1)	Does the contractor have an effective system for		
50. (1)	identifying the inspection status of products?		
37. (2)	all inspection status of products.		20
	3.6 Government Furnished Material		
	3.6.1 Damaged Government Furnished Material (GF	M)	5
38. (1)	Does the contractor examine GFM upon receipt for	111)	
50. (1)	damage, quantity, completeness and type?	. Č	
39. (2)			9
_			
42. (5)	Does the contractor record and report to the Government		
	any damage, malfunction or detectoration of GRM prior		
12 (0)	to, during and after installation?		
43. (6)			
	3.7 Nonconforming Material	1	L
44. (1)	Does the contractor have an effective system for		
	controlling nonconforming material?		
45. (2)			
	0		
$\overline{\mathbf{C}}$			
	3.8 Qualified Products (Not applicable)		
	3.9 Sampling Inspection		

Audit and HDBK 51 Question Number	MIL-I-45208 Paragraphs	Acceptable	In space under 'Acceptable' enter 'Y' for conformance, 'N' for Nonconformance, or 'X' for Not Applicable. Under comments enter statement describing nature of nonconformance for each 'N' entry. Comments are mandatory for all objective evidence observed.
49. (1)	Do required sampling procedures conform to the applicable specification or other procurement documents?		orldn
50. (2)			, N
	3.10 Inspection Provisions		- 0
51. (1)	Has the contractor elected to use any inspection equipment or procedures other than those specified or referenced in the contract?		reserved
52. (2)			1050
			ALS .
		5	2 2
		•	
	3.11 Government Inspection at Subcontractor or Ver 3.11.1 Government Inspection Requirements 3.11.2 Purchasing Documents 3.11.3 Referenced Data	ndor l	Facilities
56. (1)	Do contractor purchasing documents require Government source inspection of supplies only when the Government so requested?		
57. (2)			
	• 3.12 Receiving Inspection		
59. (1)	Is all received material inspected as necessary to assure conformance with contractual requirements?		
60. C	Is the Government representative notified of all defects found in material subjected to Government procurement quality assurance actions at source?		
61. (3)			
	3.13 Government Evaluation	•	
62. (1)	Does the contractor permit the Government		
	representative to evaluate the inspection system and the		

Audit and HDBK 51 Question Number	MIL-I-45208 Paragraphs	Acceptable	In space under 'Acceptable' enter 'Y' for conformance, 'N' for Nonconformance, or 'X' for Not Applicable. Under comments enter statement describing nature of nonconformance for each 'N' entry. Comments are mandatory for all objective evidence observed.
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63. (2)			d world
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Survey	Date(s):		
Site:	City	:	State:
	one No.		
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Quality System Elements	MIL-I- 45208A	MIL-Q- 9858	ISO 9001:94	ISO 9001:2008	ISO 9001:2015
Management Responsibility:	3.1	1.3, 3.1	4.1	5.1, 5.3, 5.4.1, 5.5.1, 5.5.2, 5.6, 6.1, 6.2.1, 8.5.1	
Quality System, Initial Quality Planning:		1.3, 3.2	4.2	4.1, 4.2.1, 4.2.2, 5.4.2, 7.1	
Contract Review:	1.2	3.2, 1.4	4.3	5.2, 7.2.1, 7.2.2, 7.2.3	
Design Control:	N/A	4.1	4.4	7.2.1, 7.3	
Document and Data Control:	3.2	4.1	4.5	4.2.3	0
Purchasing:	N/A	5	4.6	7.4.1, 7.4.2, 7.4.3	
Control of Customer Supplied Product:	3.6	7.2	4.7	7.5.4	
Product Identification and Traceability:		6.1	4.8	7.5.3	
Process Control:	3.4	6.2	4.9	63, 6.4, 7.5.1, 7.5.2	
Inspection and Testing:	3.1, 3.2.1, 3.12	6.1, 6.2, 6.3	4.10	7.1, 7.4.3, 7.5.3, 8.1, 8.2.4	
Control of Inspection, Measuring and Test Equipment:		4,2-4.5	4 .11	7.6	
Inspection and Test Status:	3.5	06.7	4.12	7.5.3	
Control of Nonconforming Product:		6.5	4.13	8.3	
Corrective Action:	3.2.3	1.3, 3.5	4.14	8.5.2, 8.5.3	
Handling, Storage, Packaging, Preservation, and Delivery:		6.4	4.15	7.5.1, 7.5.5	
Control of Quality Records:	3.2.2	3.4	4.16	4.2.4	
Internal Quality Audits:	N/A	N/A	4.17	8.2.2, 8.2.3	
Training:	N/A	N/A	4.18	6.2.2	
Servicing:	N/A	1.3	4.19	7.5.1	
Statistical Techniques:	N/A	6.6	4.20	8.1, 8.2.3, 8.2.4, 8.4	

Quality Systems Cross Reference Matrix

	Inspection Instructions	QC-101 (m	o/yr) Page 1 of 1
	Special Instructions:		
Your Logo			

REQUEST FOR	CORRECTIVE	ACTION
--------------------	-------------------	--------

1	RFCA#:	Date:	MR#:
-			
2	Internal		External
3	To:	Return To: Your	C0.
		Attention:	
		Address:	
4	Classification of Defect	Nonconformance	Report#:
	Critical Major Minor	Purchase Order#:	-
	Required Response(Working Days)	Part#:	Spec#:
	Days 15Days 30Days		Reject Qty:
	Implement Next Purchase Order		
5		Supplier Type.	
11			

Your Logo

QC-102 (mo/yr)

	Nonconfor	manc	e Repo	ort	Dispos	ition I	Process Rev:
		Revisio	ons				Rev:
Letter	E.O. Number	Desci	ription				Date
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	NU.						
	<u> </u>						
	~						
95.							
Used On Prepared By:	Contract#:	Date			You	r Comp	any Name
Your Dept:		Date					
Your Dept:		Date			YO	UR PR	OGRAM
Your Dept:		Date					cedure #
Your Dept:		Date	Size:	A	CAGE:		Your Form # (mo/yr) 1 of 1

Your Company Logo

1.0	Reporting Agent	When a nonconformance, continuous improvement or calculated risk condition occurs in manufacturing, testing or inspection, record the condition on the top-half of a Material Report, QC-103-2, following its format. Do not
1.1	Reporting Agent	Forward completed MR to Document Control (DCC).
2.0	DCC	Enter MR into the routing database, copy the MR, stamp DCC on the form and forward original to the Quality Mgr.
3.0	Quality Mgr.	
4.1	1st MRB Reviewer	
	IF	THEN
	Engineering Order (EO) or Request for Waiver (RFW) is the normal course of action	
4.2	1st MRB Reviewer	
5.0	MRB Staff	
V	our Company Name	REV CAGE DOC#: 2 of

Your Company Name	REV	CAGE	DOC#:		2 of 2
1 5				Your Procedure #	

permission.		
	IF	THEN
	MRB Member	
	Disagrees with	
	recorded	
	disposition	
	anspectiven	
5.1	MRB Staff	Perform actions required to maintain the disposition status
		on the MR Form, e.g., re-sign MR Form A/R to keep it
		current through each disposition event; hand-carry for
		completion, caucus for consensus, etc.
6.0	Quality Mgr.	
0.0		
	IF	THEN
	Customer	Forward MR to Configuration and Discrepancy Mgr. for
	Required	retrieval of Customer concurrence of disposition or
		signature when required by contract (RFW or ECP A/R).
6.1	Quality Mgr.	Upon completion of the MRB, forward the completed MR
		to the Configuration and Discrepancy Mgr.
7.0	Configuration and	
	Discrepancy Mgr.	

Your Company Name	REV	CAGE	DOC#:	3 of 3
1 2			Y	our Procedure #

MATERIAL REPORT

Nonconformance Continuous Improvement Opportunity Calculated Risk Release

SUBCONTRACTOR:		DATE RECEIVED:		
MR#:			SHEET	OF
Traveler#:	Op#:	Quantity Received:	Job Number:	
Item Name:		Description: ID S/B Spec#, Para#, & IS Condition	n w/Quantity &Dimension Affected	# Discrepant
Dwg/Spec:				
Part#:				
Part# Rev:				
Lot or S/N: P.O.#:				
P.0.#.				
7				

CALCULATED RISK RELEASE

Date:		
Your Logo	QC-104 (mo/yr)	

Inspection Tags Green = Good, Yellow = Withhold, Red = Bad

Use standard, colored card stock – size approximately 3.5" tall by 5.75" wide or use stock size

GOOL	GOOD MATERIAL TAG			Your Logo				
P/N:		PO #:		Date:				
Dwg #:		Rev:		Lot #:				

QC-105 (mo/yr)

GOOD MATERIAL TAG		 Your Logo
P/N:	PO #:	Date:
Dwg #:	Rev:	Your Lot #:
QC-105-1 (mo/yr)		

WITHHOLD TAG	Your Logo
(mo/yr)	

 BAD MATERIAL TAG
 Your Logo

 Date:
 Item Name:

 PO #:
 Item P/N:

QC-113 (mo/yr)

GO	GOOD MATERIAL TAG		Your Logo		
P/N:			Rev:		Date:
PO#:				Lot#:	
MR#:			Qt	y Ok:	
Ready F	For:				
Initi	als:				

QC-105-2 (mo/yr)

GO	GOOD MATERIAL TAG		Your Logo		
P/N:			Rev:		Date:
PO#:			Lot#:		
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Ready I	For:				
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QC-105-2 (mo/yr)

GO	GOOD MATERIAL TAG		Your Logo		
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Initials:		$\overline{\mathbf{X}}$		
	1			QC-105-2 (mo/yr)

GOOD MATERIAL TAG	Your Logo		
P/N:	Rev:		Date:
PO#:		Lot#:	
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QC-105-2 (mo/yr)

GO	GOOD MATERIAL TAG		Your Logo		
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QC-105-2 (mo/yr)

GOOD MATERIAL TAG		Your Logo			
P/N:			Rev:		Date:
PO#:			Lot#:		
MR#:			Qty Ok:		
Ready F	or:				
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QC-105-2 (mo/yr)

GOOD MATERIAL TAG		Your Logo
P/N:	Rev:	Date:
PO#:	L	ot#:
MR#:	Qty	Ok:
Ready For:		
Initials:		

QC-105-2 (mo/yr)

WITHHOLD TAG		Your Logo			
Date:		Item Name:			
PO #:		Item Part Number:			
Lot #:		Material Report #:			
S/N:		Initials:			
Reason for Withholding:					
			QC-106-1 (mo/yr)		

Item Name: Item Part

> Number: Material

Report #:

Initials:

Your Logo

WITHHOLD TAG

Date:

PO #:

Lot #:

S/N:

WITH	HOLD TAG	Your Logo			
Date:		Item Name:			
PO #:		Item Part Number:			
Lot #:		Material Report #:			
S/N:		Initials:	20.		
Reason for Withholding:					
QC-106-1 (mo/yr)					
WITH	HOLD TAG	Yc Yc	our Logo		
Date:		Item Name:			
PO #:	Nis	Item Part Number:			
Lot #	0.	Material Report #:			
S/N:		Initials:			
• Reason for Withholding:					
			QC-106-1 (mo/yr)		
WITH	HOLD TAG	Yc	our Logo		
Date:		Item Name:			

Reason for Withholding: QC-106-1 (mo y) Your Logo WITHHOLD TAG Date: Item Name: Item Part PO #: Number: Material \mathbf{O} Lot #: Report #: S/N: Initials: Reason for Withholding: QC-106-1 (mo/yr)

WITHHOLD TAG		Your Logo			
Date:		Item Name:			
PO #:		Item Part Number:			
Lot #:		Material Report #:			
S/N:		Initials:			
Reason for Withholding:					

QC-106-1 (mo/yr)

Helpful Hint:

Purchase green "presentation" paper for the Good Material Tag and yellow "presentation" paper for the Withhold Tag, then print and cut whenever you need...

ACCE	ACCEPTED MATERIAL			Your Logo			
THIS	THIS MATERIAL HAS BEEN				AND ACCEPTED		
P/N:			Rev:		Date:		
PO#:			Ι	Lot#:			
MR#:			Qty Ok:				
Initia	als:						

QC-105-3 (mo/yr)

	ACCEPTED MATERIAL			Your Logo		
IIIIS	THIS MATERIAL HAS BEEN INSPECTED AND ACCEPTED					
P/N:		Rev:		Date:		
PO#:		I	Lot#:			
MR#:		Qty	Ok:			
Initia	als:					

QC-105-3 (mo/yr)

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PO#:			Ι	Lot#:			
MR#:			Qty	Ok:			
Initia	als:						

		QC-105-3 (mo/yt)
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PO#:		Lot#:
MR#:	4	Qty Ok:
Initia	ıls:	
		QC-105-3 (mo/yr)

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PO#:			Ι	Lot#:		
MR#:			Qty	Ok:		
Initia	Initials:					
	QC-105-3 (mo/yr)					



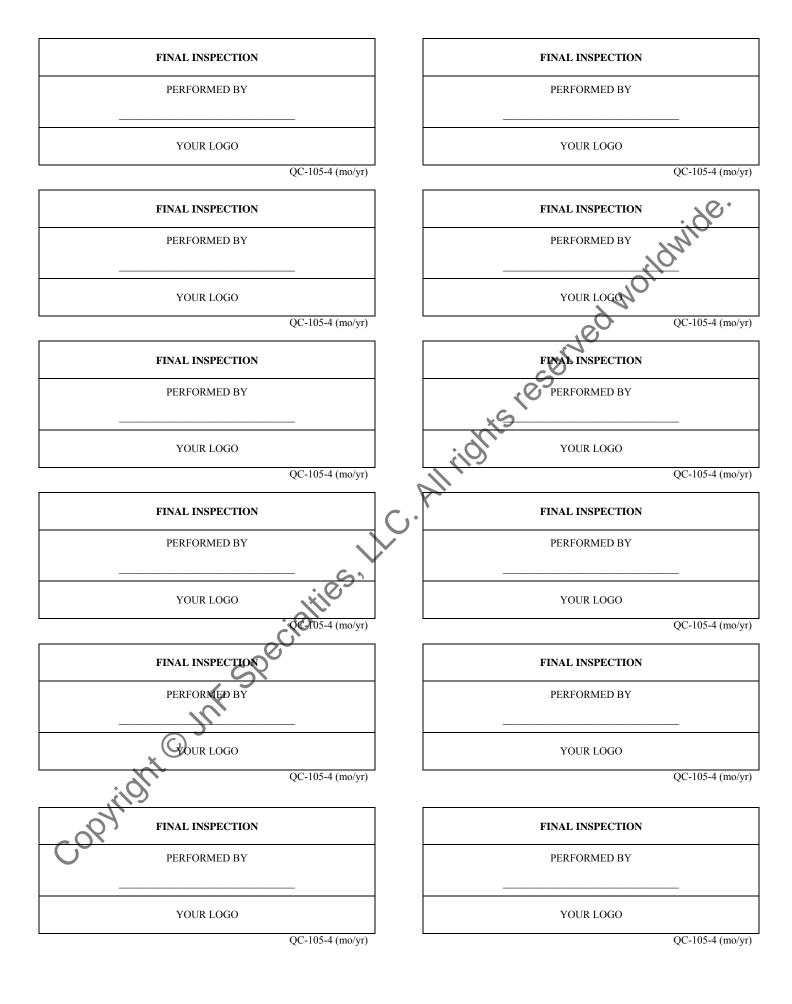
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					QC-105-3 (mo/yr)		

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P/N:		Rev:		Date:			
PO#:		Lot#:					
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Initials:							

QC-105-3 (mo/yr)

	Your Logo			
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QC-105-3 (mo/yr)



Helpful Hints:

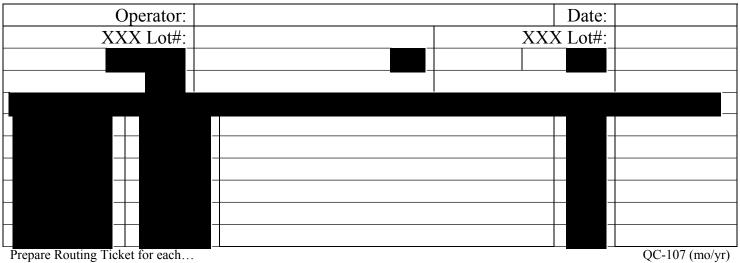
Purchase "presentation" paper in your choice of color and then print and cut labels whenever you need.

Purchase peel-and-stick labels of the correct size and then print whenever you need.



ROUTING TICKET

ACCOUNT#:



Drawing No:	RECEIVING INSPECTION REPORT				
Item Name: Sampling Plan	Your Co				
Sampling Plan					
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Your Logo

QC-108 (mo/yr)

EO NUMBER:	DATE:		MR#:	
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ORDER	CUSTOMER		USTOMER	EXISTING PARTS AFFECTED
Page of	APPROVAL		NCURRENCE	
HOLD PO'S PENDING APPROVAL YES NO	YES NO] YE	S NO	YES NO
				1
Your Logo				QC-109 (mo/yr)

Your Logo	Ι	REQUES DEVIATION	Γ FOR / WAIVER				
1. NAME AND ADDRESS	2. CAGE C	ODE	3. RDW NO).			
Your Co	4. PURCHA	ASE ORDER NO.	5. DATE				
. NAME AND ADDRESS /our Co	4a. PURCHA	ASE ORDER LINE NO.	6. DEVIATION WAIVER				
7.							
12.							

QC-110 (mo/yr)

	Drawing No: Item Name:											INS			N REC r Co)	CORD)							Q	C-112 (mo/yr) Front	
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QC-112 (mo/yr) Back

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			Receiving Inspection Instru	uctions		QC-114 (mo/yr) Page 1 of 1				
			Special Instructions:	Specification:						
	Your L	ogo	ANSI Z 1.4; Level I reduced, AQL 1.0 Die-controlled = 5/lot	Specification:						
			Commercial or items $>50Lbs = 1/Lot$	Approval:						
Oper	Qty	Descriptio	on of Inspection Operation			Gage	Comment			
R&I		Op 1	1 1							
		0								
		Op 2:								
		Op 4: Ver	rify the Supplier is listed in the approved	Supplier List						
		Op								
		Op 9:								
		Op 10: Ve	erify							
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		0.11 V								
		Op 11: Ve	erify							
		Op 12: Ve	erify							
			ffix a Good Material Tag to acceptable su	pplies. For supplies t	hat exhibit					
		a lot num	ber for							
			epare a Material Report for nonconformi							
			omplete inspection record QC-108 and re	cord the measuremen	t tool					
		number(s) Op 16:) in the Remarks field							
		Op 10.								

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Lotter									
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Used On Prepared By: Your Dept:	Contract#:	Date Date				r Comp			
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Your Dept:		Date	Size:	Α	CAGE:		You	ur Form # (mo/yr)	1 of 10

Your Company Logo

TABLE OF CONTENTS

1.0 2.0	PURPOSESCOPE	33
3.0	RECEIVING	
4.0	CUSTOMER PROPERTY RECORDS	
4.	1 Records of Misdirected Shipments	5
4.		
4.	3 Postings to Property Records	5
5.0	MATERIAL REQUISITION/ISSUE	6
6.0	UTILIZATION	
7.0	MAINTENANCE	6
8.0	PHYSICAL INVENTORIES	6
9.0	DISPOSITION	7
10.0	SUBCONTRACT CONTROL	7
11.0	REPORTS	8
12.0	PRECIOUS METALS, EXPLOSIVE COMPOUNDS	8
	REQUESTING AND/OR ACQUIRING CUSTOMER FURNISHED PROPERTY	
	HAZARDOUS WASTE MANAGEMENT	
	WORKMANSHIP 1	

Your Company Name	REV	CAGE	DOC#:	2 of 10
1 7				Your Procedure #

1.0 PURPOSE

To prescribe the minimum procedures for the control of Customer Property according to the regulations outlined in the Federal Acquisition Regulation, Part 45.

2.0 SCOPE

This procedure shall cover all property furnished to or acquired for use on contracts.

- a. Property Administrator means the individual duly designed by appropriate authority to administer the contract requirements and obligations relative to property. The person is an authorized representative of the Contracting Officer.
- b. Property means all property owned by or leased or acquired by the Customer under the terms of a contract. Property and contractor acquired property is defined as:
- 1. Property in the possession of or acquired directly by the Customer and subsequently delivered or otherwise made available to the contractor.
- 2. Contractor acquired property is property procured or otherwise provided by the contractor for the performance of a contract, title to which is vested in the Customer.
- c. Customer material is property that may be incorporated into or attached to an end item to be delivered under a contract or which may be consumed in the performance of a contract. It includes, but is not limited to, raw and processed material, parts, components, assemblies and small tools and supplies.
- d. Special Tooling means all dies, jigs, fixtures, molds, patterns, taps, gauges, other equipment and manufacturing aids and replacements thereof, acquired or manufactured by the contractor for use in the performance of a contract, which are of such specialized nature that, without substantial modification or alteration, their use is limited to the development or production of particular services (does not include consumable property, special test equipment or buildings, non-serviceable structures, general or special machine tools or similar capital items).
- Plant Equipment means personal property of a capital nature (equipment, vehicles, machine tools, test equipment, furniture and accessory and auxiliary items, excluding Special Tools and Special Test Equipment) used or capable of use in the manufacture of supplies or in the performance of services or for any administrative or general plant purpose.
- f. Scrap means property that has no reasonable prospect of being sold except for recovering value of its basic material content.
- g. Salvage means property recoverable for further use which because of its worn, damaged or deteriorated, incomplete condition or specialized nature, has no reasonable prospect of sale or use as serviceable property without major repairs or alterations, but which has some value in excess of scrap.
- h. Custodial Records means written memoranda or identifying method of any description or the type used to control items issued from Tool Cribs, Tool Rooms, Stockrooms, etc., such as requisitions, issue hand receipts, took checks, stock record cards or books and the like.

Your Company Name	REV	CAGE	DOC#:	3 of 10
1 5				Your Procedure #

- i. Individual Item Record means a separate card, form or document, used to account for one item of property.
- j. Stock Record means a perpetual inventory form for recording quantities and types of items received, in stock and issued to requesters against a specific contract. The form serves as a posting reference and records the balance of stock items on hand and their unit prices.
- biscrepancies Incident to Shipment means all deficiencies incident to the shipment of Customer property to or from a contractor or vendor's facility, Customer depot or like source wherein differences exist between the property said to have been shipped and the property actually received are identified as discrepancies incident to shipment. These deficiencies include, but are not limited to, loss, damage, destruction, improper status and condition coding, error in documentation, i.e., identity or classification and improper status and consignment or unit not furnished.
- 1. Work-in-Process is the definition used for the purpose of financial reporting and covers material which has been released to the production element.
- m. CPFF Material, Contractor procured CPFF material is property purchased by the contractor, acting as agent for the Customer, for use in connection with a specific cost-plus type contract. This material becomes Customer property upon receipt and acceptance by the contractor.
- n. Bonded Storage means a secure storage area with access limited to designated personnel.

3.0 RECEIVING

Receiving Inspection shall inspect all Customer furnished property upon receipt to verify

3.1 If overages, shortages or damaged conditions are noted upon receipt of property acquired for the Customer account (under a CPFF contract), the Company shall

3.2 Upon receipt of Customer furnished property or property acquired by the Company for the account of the Customer the receiving function shall

Your Company Name	REV	CAGE	DOC#:	4 of 10
1 2				Your Procedure #

3.3 Shipping containers that pack Customer property that are of a reusable nature shall

4.0 CUSTOMER PROPERTY RECORDS

Upon receipt of Customer owned property and/or material, the Company Property Administrator shall establish individual item records or stock record cards as necessary according to the provisions of FAR-**Constant**. In the case of material items, stock record cards shall be prepared and shall contain the following information:

a.	
b.)
c.	
d.	
e.	
e. f.	
g.	
g. h.	
i.	

4.1 Records of Misdirected Shipments

Misdirected shipments shall be reported to the Customer Property Administrator immediately. Records shall be maintained to provide the following information:

a.									
b.									
c.									
d.									
e.									
Th	e Compa	iny shall fo	orward th	nis inforr	nation in	writing to	o the C	ustome	r P

The Company shall forward this information in writing to the Customer Property Administrator within the customer and the cust

4.2 Documentation

Documentation supporting all entries to the Customer Property Records shall be maintained by the Company Property Administrator (i.e., receiving documents, issue documents, disposition documents, etc.)

4.3 Postings to Property Records

All property record postings shall

Your Company Name	REV	CAGE	DOC#:	5 of 10
			Y	our Procedure #

5.0 MATERIAL REQUISITION/ISSUE

After receipt of Customer furnished material and preparation by the Company Property Administrator of the required stock record cards the material shall be

5.1 Sensitive material issued according to 5.0 shall be maintained in a secure area with access limited to authorized personnel.

6.0 UTILIZATION

It is the responsibility of the Company Property Administrator to assure

7.0 MAINTENANCE

The Company Property Administrator shall insure

8.0 PHYSICAL INVENTORIES

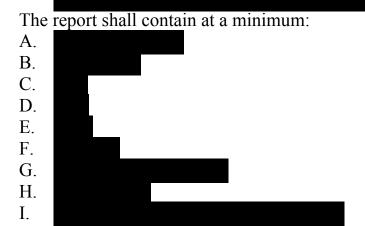
Inventory, as used in this procedure, consists of sighting, tagging or marking (when considered necessary), describing, recording and reporting the property concerned and reconciling the property recorded and reported with the property records.

The personnel who perform the physical inventory shall not be the same individuals who maintain the property records or have custody of the property.

Your Company Name REV CAGE DOC#: 6 of 10 Your Procedure #		/	2		2		
	Vour Com	nonu Nomo	REV	CAGE	DOC#·		6 of 1
Your Procedure #	r our Com	pany manne		CAUL	DOC#.		
						Your Procedu	ire #



8.1 The Company shall investigate and report to the Customer Property Administrator (CPA) all cases of loss, damage or destruction of Customer Property, either in raw material or completed/



9.0 **DISPOSITION**

At the completion of a contract under which Customer property was furnished, the Company shall perform an inventory to determine if any residual items of Customer property or scrap are remaining. If residual items or scrap remain, the Property Administrator shall list such items on

10.0 SUBCONTRACT CONTROL

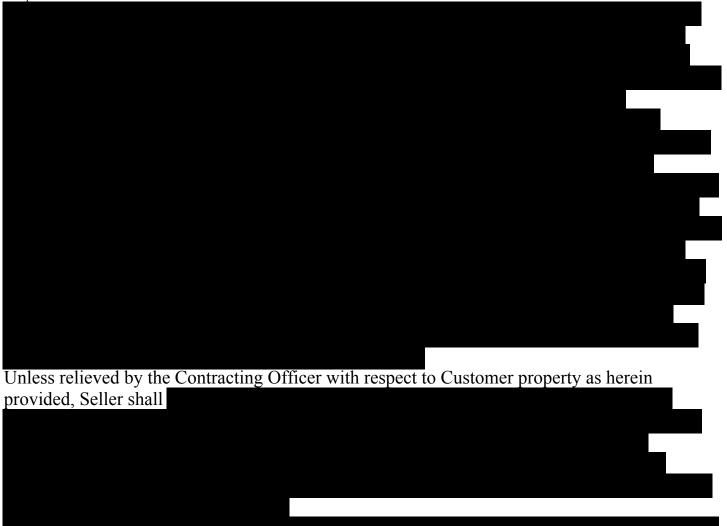
The Company purchasing function shall insure that the following statement is included in all subcontracts or vendor purchase orders where Customer furnished material or property is furnished to the subcontractor or vendor:

Responsibility for Property

Your C	Company	Name
--------	---------	------

DOC#:

7 of 10



10.1 The provisions of paragraph 8.1 apply to subcontractors possessing or controlling Customer property accountable under the contract.

11.0 REPORTS

Reports shall be prepared by the Property Administrator according to the terms of individual Customer contracts.

12.0 PRECIOUS METALS,

- **12.1** Immediately upon receipt Receiving Inspection (R&I) shall inspect material according to para. 3 3.2.
- 12.1.1 Sensitive material shall be stored in bonded storage immediately upon acceptance or rejection by R & I.
- **12.2** The Company's Property Administrator, upon taking possession of accepted sensitive material, shall

Your Company Name	REV	CAGE	DOC#:	8 of 10
1 2				Your Procedure #

- 12.2.1 The Company Property Administrator shall
- 12.2.2 Property records shall exhibit
- **12.3** The Property Administrator shall issue
- **12.4** All other conditions of this procedure shall be complied with as required.
- **12.5** The Property Administrator shall notify the Customer Property Administrator by

13.0 REQUESTING AND/OR ACQUIRING CUSTOMER FURNISHED PROPERTY



14.0 HAZARDOUS WASTE MANAGEMENT

Property received from or acquired for Customer that contains material of a hazardous nature shall be identified with its chemical formula and proper name according to paragraph 3.2.

1.1.1	
14.2	
14.2.1	The instructions shall contain
14.2.1.1	Storage and handling instructions may be in the form of

14.3 Scrap or Salvage materials shall be dispositioned by the Customer Property Administrator according to paragraph 9.

Your Company Name	REV	CAGE	DOC#:	9 of 10
				Your Procedure #

15.0 WORKMANSHIP

Adherence to applicable federal, state, local and environmental, health and safety requirements is mandatory.

Your Company Name	REV	CAGE	DOC#:	10 of 10
1 5				Your Procedure #

Metrology Recall Card

	ited of og filled and		
Description:		Calib Frequency:	
Type:	Model:	S/N:	
Property ID#:			
OC 116 1 (ma/ur)			

QC-116-1 (mo/yr)

Instrument and Case Identification Tag (shrink to fit)

	U (
Tool #:	Tech:
00.11(.2)	

QC-116-2 (mo/yr)

Instrument Deviation Tag (shrink to fit)

Tool#:	
Tool	Standard
Value	Value
Tech:	
	QC-116-3 (mo/yr)

Measuring and Test Equipment Calibration Report

In Tolerance as Received	Out-of-Tole	rance as Recv'd	PO# for M&TE:	
Department:		Date:		
Equipment:		Location:		
Size-Range:		Mfg-Model:		
Remarks:				

QC-116-4 (mo/yr) Front

IMPACT ANALYSIS REPORT

Number of parts that may be out-of-spec – List Model # and projected quantities for each type
that
\pm tolerance range for each dimension checked with the out-of-spec equipment – list by P/N
OC-116-4 (mo/yr) Back

Your Procedure # Rev: (mo/yr)			[Title] Calibration Instruction Sheet	QC-116-5 (mo/yr) Page 1 of
			Calibration Instruction Sheet	
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Your Dept:		Date					
Your Dept:		Date			YO	UR PR	OGRAM
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Your Company Logo

## TABLE OF CONTENTS

cope	3
	2
ennitions	
rocedures	3
Identification	3
Storage of Gages	3
Recall	4
Working Record	4
Calibration Frequency	4
LE I, Calibration Intervals	5
Interval Adjustment	5
Interval Extension / Adjustment	5
Calibration Overdue	5
Calibration Identification	5
Calibration Standards/Special Equipment	6
Recall	6
Standards Control	6
Customer Furnished Tooling	7
Out-of-Tolerance Equipment and Tooling	7
Provision for Use of Out-of-Tolerance Equipment	7
Suspected Product Nonconformance	7
Traceability	8
Production Tooling Used as Media of Inspection	8
Employee Owned Tools	8
Subcontractor Calibration	8
Storage and Handling of M&TE	8
Setting / Selecting a Reference Standard	8
)e 'r	efinitions ocedures Identification Storage of Gages Recall Working Record Calibration Frequency

Your Company Name	REV	CAGE	DOC#:	2 of 9
			Your P	rocedure #

## 1.0 Scope

These procedures comply with the requirements of are calibrated, at a temperature of and and

Measuring instruments relative humidity, in the

For cases where calibration must be conducted in the

production area, stabilization time is also allowed.

## 2.0 Definitions

- a) Gages are precision devices that compare the characteristics of an item to specified requirements.
- b) Recall All gages require recertification at established intervals. Recall dates are identified by a month/year designation. Certification is performed no later than the last day of the month/year designation except as otherwise provided. All gages may be used for acceptance/rejection of product during the month/year recall interval.
- c) M&TE Measurement and test equipment
- d) Standards Accepted values of natural physical constants or values traceable to National or International Standards.
- e) Procurement of Gages Gages are procured from a qualified source and are inspected by Gage Inspection before use. A newly acquired measuring or test device that has been certified as calibrated, and whose certification indicates an NIST reference number, may be issued to the user activity after a calibration interval and records have been established.
- f) Special Equipment (Your Co) standards, instruments, chemicals, and tools for which a measurement standard is not available on-site to perform calibrations.
- g) Significantly out-of-tolerance An instrument's accuracy that exceeds the manufacturer's published limits.
- h) Adequacy Adequacy, range, resolution and stability of M&TE and standards is determined by quality characteristic measurement requirements on an individual basis.
- I) Accuracy Ratio 10:1 for linear, weight, current, and voltage transfer standards.

# 3.0 Procedures

## 3.1 Identification

When a gage does not provide its own serial number then a number is issued. The numbers run consecutively for each gage size and may be further identified under a type-coding system. This number is etched or otherwise imprinted upon the gage.

# 3.2 Storage of Gages

All company owned gages are kept clean and are stored in cabinets and bins in the inspection department, tool crib or other storage areas when not in use.

Your Company Name	REV	CAGE	DOC#:	3 of 9
			Yo	our Procedure #

## 3.3 Recall

A rotating card file system is maintained on all instruments. The form used is QC-116-1. The rotating card file provides the means for implementation of recall for any gage that has expired its certification period.

Portable gages are physically removed from service and recertified during the recall interval as time permits. Permanent gages are

### 3.4 Working Record

In addition to the card file system, a working record sheet, QC-116-4, is kept on each companyowned gage/standard. The purpose of this record is to



## 3.5 Calibration Frequency

Calibration intervals are based on the following criteria:

#### Calibration intervals are established in terms of

and the schedule of Table I.

Tools that are identified as "Spares" in the calibration database are calibrated based upon usage rather than time and a usage tag is exhibited on the tool or its case. A "Spare" tool is calibrated after it

Your Company Name	REV	CAGE	DOC#:	4 of 9
				Your Procedure #

Calibration Cycle	Recalibration Cycles to Qualify for New Calibration Cycle	New Calibration Cycle					
Annual							
Bi-Annual							
3 - 4 Years							
5 Years	N/A						

### **TABLE I, Calibration Intervals**

### 3.6 Interval Adjustment

M&TE whose calibration error is recorded as being greater than the last recorded calibration error, but not significantly out of tolerance, reverts to

### 3.7 Interval Extension / Adjustment

M&TE calibration intervals may be extended or adjusted by

#### 3.8 Calibration Overdue

Overdue items are prevented from use as practicable. A calibration overdue notice in the form of an inter-office memo or other format may be used to facilitate recall of portable gages.

#### 3.9 Calibration Identification

A calibration tag, QC-116-2, showing
is attached to
each item of M&TE and/or manufacturing tool, gage, jig or fixture used for measurement
acceptance of quality characteristics. The tag serves as

Your Company Name	REV	CAGE	DOC#:	5 of 9
			Yo	our Procedure #

## 3.10 Calibration Standards/Special Equipment

It is the position of the National Conference of Standards Laboratories (NCSL) that: "Test report numbers issued by the NIST are intended to be used solely for administrative purposes. Although they are often used to uniquely identify documents which bear evidence of traceability, test report numbers should not be used nor be required as proof of adequacy or traceability of test or measurement."

Calibration of special equipment is conducted by

 .

 When calibrations are made for special equipment the purchase order specifies,

 and also require the lab to submit a report which contains:

 1.

 2.

 3.

 4.

 5.

 6.

 7.

# 3.11 Recall

A rotating card file system is maintained on all (Your Co) Transfer Standards indicating the

# 3.12 Standards Control

A current list of all calibration standards used by the calibration section is maintained and treated as

Your Company Name	REV	CAGE	DOC#:	6 of 9
			Your P	rocedure #

# 3.13 Customer Furnished Tooling

The Metrology department places all Customer furnished inspection gages on the calibration system. Records are kept showing

# 3.14 Out-of-Tolerance Equipment and Tooling

Equipment and tooling found to be significantly out of tolerance, damaged, inoperative, erratic or exhibiting some other form of anomalous condition should be

M&TE found significantly out of tolerance at recalibration for from use (except as otherwise provided) by

is prevented

All out of tolerance data is utilized in an evaluation to determine the adequacy of the M&TE for the intended use and to determine the effectiveness of the calibration procedure and measuring or test procedure. A notice is prepared and

## 3.15 Provision for Use of Out-of-Tolerance Equipment (apply sparingly)

An instrument whose calibration error is significantly out-of-tolerance (over a short portion of a specified range) is returned to service only when



## 3.16 Suspected Product Nonconformance

Any product certified with M&TE subsequently found to be out-of-tolerance is immediately reported to the Customer. "The impact on quality of products examined or tested by equipment found to be out-of-tolerance during calibration will

		-		
Your Company Name	REV	CAGE	DOC#:	7 of 9
				Your Procedure #

# 3.17 Traceability

Inspection instruction sheets and manufacturing travelers specify measurement and test equipment utilized for product conformance inspection. The M&TE number is recorded on

# 3.18 Production Tooling Used as Media of Inspection

Any production tooling which is used to accept attributes of a part, sub-assembly or assembly is verified for accuracy prior to its use and

# 3.19 Employee Owned Tools

Personal Tooling or gages owned as personal property by employees of (Your Co) are

## 3.20 Subcontractor Calibration

The quality requirements outlined in Supplier Quality Requirements QC-117 are imposed to the level required by the (Your Co) Quality Group. Criteria for the selection of the inspection level are based on

## 3.21 Storage and Handling of M&TE

M&TE is handled during movement using the manufacturers recommendations or handling practices that prevent exposure to

- except that which is normally encountered during movement -- and

M&TE requiring transportation to a calibration laboratory is packaged to

### 3.21.1 Calibration Prior to Archive / Long-Term Storage

An instrument does not require accuracy verification prior to archive / long-term storage if it was

## 3.22 Setting / Selecting a Reference Standard

Rule: The measurement range of a device being checked for accuracy must be less than the maximum measurement range of the reference standard – see the following examples.

			-		
Yo	ur Company Name	REV	CAGE	DOC#:	8 of 9
				You	ur Procedure #

### VOLTMETER:

A voltmeter that is required to be calibrated shall be verified for accuracy within an equivalent range on the reference standard, e.g.,

The voltmeter reference standard has scales that range from 2-20V, 20-200V, etc. – the voltmeter being checked for accuracy must be set to the same range as the reference standard – the reference standard must be set to a range that brackets the same range as the voltmeter being checked for accuracy, i.e., if the voltmeter being checked is set to 2-20V then the standard must be set to the same range – do not use the 20-200V range on the standard to check the 2-20V range on the voltmeter being checked for accuracy.

### CURRENT SHUNT:

The measurement range of a reference standard shunt must not be greater than the measurement range of the shunt being checked for accuracy, e.g., a 100A current shunt reference standard can be used to calibrate a but the same standard cannot be used to calibrate a

### OTHER MEASUREMENT DEVICES:

Any reference standard whose maximum measurement range is the same as the device being checked for accuracy must be at least more accurate than the device being checked, e.g., a device being checked has a 1% tolerance then the reference standard must

Your Company Name	REV	CAGE	DOC#:	9 of 9
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Letter	E.O. Number	Desci	ription					Date	
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Prepared By:		Date				-	-		
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Your Dept:		Date	Size: A	A	CAUE!			r our Form # (mo/yr)	1014

Your Company Logo

### **PURPOSE and SCOPE**

To establish the minimum requirements for supplier Quality Systems necessary to ensure that materials, parts, components, and services meet the requirements of the Contract. Procedures used to implement the provisions of this requirement shall be subject to (Your Co) approval upon request.

### 

These requirements shall apply to all supplies and services when referenced on the Purchase Order and amendments thereto.

When (Your Co)'s Purchase Order includes Seller's Inspection System QC-117 Level I, as a requirement, Seller's contractual commitment for an Inspection System shall be defined by all paragraphs of this specification. When (Your Co)'s Purchase Order indicates Level II as a requirement then the Seller's contractual commitment for an Inspection System shall be defined only by those paragraphs of this specification which are checked-off.

#### **DEFINITIONS and ABBREVIATIONS**

A. The term 'Buyer' or '(Your Co)' means (Your Co). B. The term 'Seller' means the legal entity that is the contracting party with the Buyer with respect to the Purchase Order.

- C. 'IAW' means in accordance with.
- D. 'MRB' means Material Review Board

#### SELLER'S QUALITY SYSTEM, GENERAL

The Seller shall maintain an effective Quality System planned and developed in conjunction with his other functions to comply with contractual requirements. In order that the Quality System will be effective, it shall provide



Records shall be kept available for

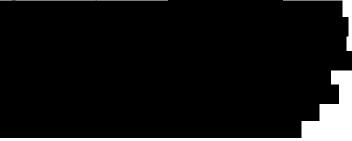
### NEGOTIATIONS

It is not the intent of this specification to restrict the Seller in his mode of operation; therefore, it is possible that certain items herein may be subject to negotiation. Until such time as the subject of the negotiation is resolved, the Seller is

### **PROPRIETARY INFORMATION**

The Seller must identify in writing the intended use in performance of the Purchase Order of an item, material, component or process with respect to which access by (Your Co) or (Your Co) Customer representatives for purpose of Quality Assurance by inspection, test or process surveillance is proposed to be restricted.

The absence of such written identification is a representation by Seller that



### PROCESS CONTROL

The Seller shall provide for complete review of contract requirements at the earliest practical phase of contract performance to



The Seller shall develop an Inspection/Test Plan specific in nature and related directly to the hardware produced. The Plan shall



Your Company Name	REV	CAGE	DOC#:		2 of 4
1 5				Your Procedure #	



#### DRAWING and CHANGE CONTROL

The Seller shall have a procedure and designate a responsible department for the distribution of all current specifications and drawings to the required Production and Inspection areas.

The procedure shall also provide

DOC#:

#### 

The Seller shall inspect incoming material to assure that purchased raw materials, parts, assemblies, components, tests, processes, hardware, etc. conform to drawings, Purchase Order, and specification requirements. When it is not practicable or feasible to assure quality upon receipt, the Seller shall make provision for

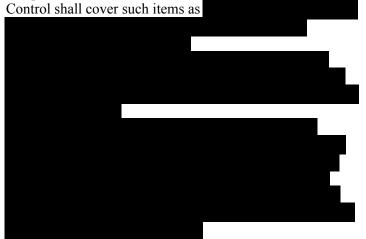
Your Company Name

REV CAGE

3 of 4

### STOCK CONTROL

The Seller shall provide for protection and control of supplies and materials stored for use in deliverable (Your Co) products.



#### **SAMPLING INSPECTION**

Acceptance sampling procedures, if other than ANSI Z 1.4, must have (Your Co) approval prior to use; sampling to permit defects is not allowed.

#### **TOOL, GAGE, and TEST EQUIPMENT**

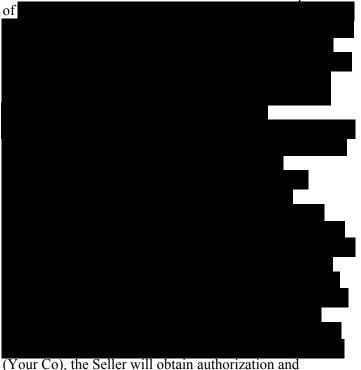
The Seller shall be responsible for providing and ascertaining the accuracy and stability of tools, gages, and test equipment to assure supplies conform to contractual requirements.



MATERIAL CONTROL

The Seller shall maintain traceability of raw material used in the manufacture of deliverable products. A correlation shall be made between the data derived from test, inspection, and processing for each item produced and each lot of raw material, and delivered to (Your Co) with each shipment.

The Seller shall maintain controls to assure accomplishment



(Your Co), the Seller will obtain authorization and instruction from (Your Co) Purchasing prior to returning products, and shall

#### **TECHNICAL REQUIREMENTS**

Unless otherwise specified, (Your Co) is responsible for compliance to reliability, safety, weight, or other special requirement, unusual test or inspection procedures or equipment, and any special revision or model identification.

Your Company Name	REV	CAGE	DOC#:	4 of 4
1 2				Your Procedure #

# **BASIC CONTRACT REVIEW**

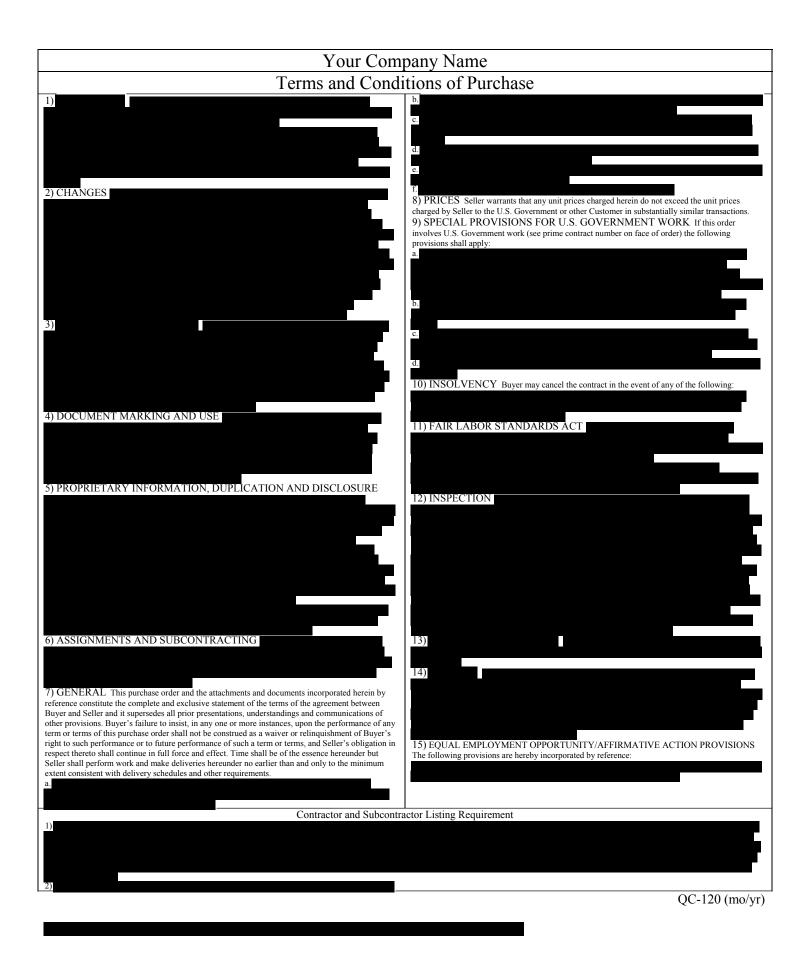
rogram Name:			
Program Name: Program Source: RFP#:			
FP#:	Contract Ty	pe:	
_			
	Date:		Date:
			QC-118 (mo

Your Company Name M			/IFG/QA TRAVELER				QC-119 (mo/yr) Page 1 of 3				
						Your Title				1 u	50 1 01 5
Your	#		Rev mo	o/yr		Customer P/N-R	lev:				
	Progr	am:				P.O.# & R	lev:				
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	Custor	ner:									
SPEC	IAL INS	<b>FRU</b> C	CTIONS:				_				
									r .		
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OPER	DEPT	D	escription of Task		~	<b>.</b>	SIGN	MR – EC	P - ACN	Date	Gage
	i	-				place content a	is requ	uired)			-
5	QC					orward copy of test					
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21	QC		uest Customer So								
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	or QC					minimum. Repeat					
			est; a 2nd indication		e for reject. Reco	rd accurate					
			rvations on this tra right © JnF Specialties		ights reserved worldw	ide. www.quality-control-					
		plan.c	com/copyright.htm								
30	TECH		all items into fixtur								
			r #. Rework appar			cord accurate					
35	QC		osition on Your # fy data Your # IA			nd spread from					
55	QC					ttach data to traveler.					
			F =	<i></i>	PART						<u>.</u>
40	TECH	Pren	are items for testi	ng IAW Y		ceability of each item	1			1	
10	ilen					in calibration cycle,					
			nused test leads are			<b>,</b>					
50	TECH		orm test cycles 1-5			fy items meet all					
	00	-	irements. Forward			1 1 1					
55	QC		orm data review of Inspection Instruc			m test lab IAW Your					
57	QC					Customer prior to					
51	QC		when required by								
60	TECH		are assemblies IA								
62	ENG		orm calculations &			our #.					
	&TECH	-									
70	TECH		orm Test IAW Yo								
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80 85	TECH QC		orm cycles (1-3) L iew data from cycl								
90	TECH		orm test IAW You		$\pi$ w 10ul $\pi$ .						
95	QC		iew data IAW You								
100	TECH		ork cell(s) with ou		condition IAW Yo	our # & record					
		accu	rate disposition or	this trav	eler.						
105	QC		osition rework IA								
110	TECH		eler. Verify rewor								
110	TECH		rate disposition or			Your # A/R & record					
DEEE							1				
DEFIN	ITIONS:		Packing Slip		PR=Product Re	1		Specificat		ъ <i>т</i>	
			=In accordance		-	Instruction Sheet	-	· ·			gr
			As required		CEI=Contract			tem Data		·	
		ROL	=Beginning of	Lite	PPP&M=Prese	rvation, Packaging	g, Pack	ing and M	/larking	5	

Company Name			MFG/QA TRAVELE	QC-119 (mo/yr) PAGE 2 of 3			
	1	5	Your #			PAG	iE 2 of 3
OPER	DEPT	Description of Tasl	ζ	SIGN	MR – ECP - ACN	Date	Gage
115	QC	1	W Your #. Verify rework observations are				Ũ
		accurately recorded.	-				
120	ENG	Select item for DPA to	est & record S/N in accepted column of this				
	&TECH	operation.					
122	TECH		one sample from approximately 50 items IAW				
			e assembly to temperature in excess of 75°F.				
105	00	Forward components				.0	. +
125	QC		provided by engineering & attach supporting				,
127	QC	documentation to trav			d world		
127	QC		erify test tolerances reflect CEI BOL		6,		
			ipment tolerance, and a test flow			, 	
		_	nted for each test. Verify Customer		<u>`</u> O`		
			rocedure is in contract file-Consult		, <i>S</i>		
		QAM			_0		
			PART III		6		
128	TECH	Computer program: N					
128.1	TECH		mechanical connection to each item for	S			
			ly check each mechanical connection from the	05			
			ta acquisition equipment for tightness, i.e., TC's,				
			ads, torqued threads, etc.			-	
130	TECH	Perform test IAW You				-	
135	QC	Verify test IAW Your					
140	TECH	Perform test IAW You	If #. s, LLC. All rights reserved worldwide, www.quality-control-				
		plan.com/copyright.htm	s, LLC. All rights reserved worldwide, www.quality-control-				
145	QC	Verify test IAW Your	#.				
150	TECH	Perform test IAW You					
155	QC	Verify test IAW Your	#.				
160	TECH	Perform test IAW Your	#.				
165	QC	Verify test IAW Your	#. 61				
170	TECH	Perform test IAW You	ır #				
175	QC	Verify test IAW Your	#.				
180	TECH	Perform test IAW You					
185	QC	Verify test IAW Your	#				
190	TECH	Perform test IAW You					
195	QC		p 190 and compliance to Notes supplied with				
	0.7		by contract - consult QAM.			-	
197	QC		ection for ATP data review A/R.			-	
199	CUST		ection for ATP data IAW contract				
		requirements.					
	1	X	PART IV	1		1	
201	QC		completed prior to next Op. If not completed,				
202		notify Engineering for				-	
203	QC		& record results on Your #.			-	
205	QC	-	ource for Monitoring.				
<b>207</b> 220	TECH		ections IAW Contract directives. ework A/R IAW Your # & record accurate				
220	TECH	disposition on this trav					
225	QC		ur #. Test weld IAW <b>Op 25</b> ; record results on				
223	QC.		was performed IAW Your # & disposition was				
		accurately recorded or					
				1		1	1
COM	MENTS:						

	Compa	any Name	MFG/QA TRAVELE Your #	ER			9 (mo/yr) GE 3 of 3
OPER	DEPT	Description of Task		SIGN	MR – ECP - ACN	Date	Gage
230	TECH	If radiographs were no	t produced prior to Op Your # then radiograph red by contract - consult QAM.		MIC-LEI - ACN		Gage
235	QC	Record dimensions on					
237	LAB		liographs IAW Your #unless Level II l by contract; forward radiographs to Supplier				
247	QC	Perform final test on it Your #.	ems IAW <b>Op 25</b> , Your #, & record results on				
250	PROD	Clean items IAW You	# (provide QC with first article for marking).				
255	QC	Perform final visual in					
260	PROD	instructions. A remove each unit pack - const					
265	QC		ackaging IAW Your # & PPP&M instructions. n or damaged at packaging.				
267	QC	<ol> <li>Cert. of Compliane</li> <li>Pre-ATP &amp; ATP to</li> <li>Item weights.</li> <li>Flowcharts from a</li> <li>End Item Data Pace</li> <li>Verify each page of Revision (and S/N</li> <li>EIDP Summary IA</li> <li>Produce deliverable Format consult of Ensure Open Actions I</li> </ol>	ll tests kage IAW Customer Format - consult QAM of the EIDP specifies the CEI name, P/N & listing when appropriate) W Customer Format - consult QAM e data package and shipping list IAW Customer QAM have been resolved prior to final acceptance.				
271	QC	Produce traceability lo assemblies. Provide co	deliver with end item data package. gbook for all materials, components, and sub- opy of traceability logbook for the final logbook.				
273	QC		urce Inspection for FINAL ACCEPTANCE.				
275	CUST	Acceptance is defined and the contract end					
280	PROD	Pack items and 2 data contract unique PPP&	packages, & mark carton & crate IAW Your # & M instructions.				
285	QC	Verify packing & exar # & PPP&M instruction the cartons. Determined with P/S. Items must be excess of one week. If	nine all cartons & crates for marking IAW Your ns. Verify 2 copies of the data package are in e need for crate handling procedure inclusion e maintained at $32^{\circ}$ to $68^{\circ}$ F if items are stored in items are to be stored more than 2 weeks they $32^{\circ}$ to $40^{\circ}$ F - <b>consult QAM</b> .				
295	QC	Prepare and store data	for 20 years contact DCC for assistance.				

Your Company Name Purchase Order #:   Phone: xxx-xxxx Fax: xxx-xxxx Address, City, State, Zip Code     If a Prine Contract # is emered hereon, this procurement is     Supplier:     Ship To:     Phone#:        DPAS Rated:
Address, City, State, Zip Code     If a Prime Contract # is entered hereon, this procurement is     Supplier:     Ship To:     Phone#•
If a Prime Contract # is entered hereon, this procurement is     Supplier:     Ship To:     Phone#:
Supplier: Ship To:
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Phone#: DPAS Rated: USE States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States States
Purchase Order Amount:
QC-120 (mo/yr)



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Your Dept:		Date	Size:	Α	CAGE:		Your Form #	(mo/yr)	1 of 1

Your Company Logo

1	Quality Group	<ul> <li>The reviewer determines the need for, and if justified, imposes the requirements of QC-117, Supplier Quality Requirements, to the Requisition or P.O.</li> <li>Complete the Used-On and Contract# sections on the cover page of QC-117 Used-On = J/N or Program Acronym; Contract# = P.O.#</li> </ul>
		Check-off applicable requirement boxes on Requisition
2	Quality Group	<ul> <li>Add known QA requirements to the requisition for entry on the PO; such as letter survey to Suppliers to determine their conformance to MIL-STD-45662 or ANSI/NCSL Z540-1;</li> </ul>
	IF	THEN
2.1	Older Revision Supply Required	
2.2	Requisition is marked "Under Revision"	
2.3	A Raw Material Requirement <b>is not</b> Specified	
2.4	Deviation to drawing is noted on Requisition such as "Less Note" Deviation to drawing is	
		REV CAGE DOC#: 2 of
Ŷ	our Company Name	Your Procedure #

- P		1						
		noted on Requisition such as "Less Note"						
	2.5	Order is for production but doesn't reference engineering drawing #					oduce drawing A/R; ally available supplies	
	3	Quality Group		ions for any or P.O. who			f the following to the	
				of P.O. who	en justified.			
			]					
						goods conf	orm to the procurement	
			documer	nt requireme	nts			
	Y	our Company Name		REV	CAGE	DOC#:		3 of
	1						Your Procedure #	

permission.		
		control
4	Quality Group	Relative to the procurement of software, the reviewer determines the need for, and if justified, adds to the procurement document provisions for any one or combination of the following:
	D'	
5	Discrepancy in Requisition or P.O.	
5.1	Supplier Quality	
	Requirements applies	Copy to R&I
5.2	P.O. requires additional	Record supplier related add-on text to Requisition or P.O.
	conditions related to	
	supplier IF	THEN
5.2.1		Record add-on text to Requisition or P.O. and forward to User
	conditions related to in-	
	house processing	
5.2.2	Requisition or P.O. Ok	When R&I QC is required, sign and forward <i>PO's in numerical order</i> to
		<i>R&amp;I (Procurement Technician</i> must be cognizant of all purchases)
6	Quality Group	Forward Subcontractor Evaluation Questionnaire to the Supplier; perform
	ISO 9001 Applies	required follow-up routines (Your #).

Your Company Name	REV	CAGE	DOC#:	4 of 3
1 5				Your Procedure #

(Your Company Name) Dimensional Analysis Record

Item Name:		omer:	
Drawing Number:	Inspe	ector:	
Key Parameter	 _Key Parame	ter	
ogo			QC-122 (

(Your Co Name) DATA LIST	DATA LIST REVISION:		PROJECT:		Page 1 of
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#### FEDERAL, MILITARY and SOCIETY SPECIFICATIONS

SPECIFICATION NUMBER	REV	DESCRIPTION	

Use latest revision at the time of contract, or as specified by contract

A/D = As Designed; A/B = As Built; or use A/T = As Tested

* An asterisk placed in the revision column indicates a tabulated drawing. Use the latest revision of the tabulated drawing at the time of contract.

SUMMARY OF DATA LIST REVISIONS

D/L REV	DOCUMENT AFFECTED	E.O.#	E.O. DATE	D/L REV	DOCUMENT AFFECTED	E.O.#	E.O. DATE

QC-123 (mo/yr)

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Page 1 / of /		SURV	EY REPORT			
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# **CERTIFICATE OF COMPLIANCE**

From:         To:         To:         Attention: Receiving Inspection         PO#:         Customer P/N:         Your Co P/N:	NOTICE THIS CERTIFICATE OF COMPLIANCE MUST
PO#: Customer P/N:	OF COMPLIANCE

Form Rev: Orig

Your Logo

# Your Logo

# GENERAL REQUIREMENTS

Origination Date: XXXX

Document Identifier:	Name, Number, Unique ID
Date:	Latest Revision Date
Project:	Customer, Unique ID, Part Number
Document Status:	Draft, Redline, Released, Obsolete
Document Link:	Location on Server (if used)

Abstract:

This document describes general manufacturing and interpretation requirements.



### **REVISION LOG**

Issue	Date	Comment	Author
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## DOCUMENT CHANGE RECORD

Issue	Item	Reason for Change		



Rev: Orig

# TABLE OF CONTENTS

1.	SCOPE	4
2.	THEORY	4
3.	REFERENCES	4
4.	REQUIREMENTS	4
4.1	Order of Precedence	4
4.2	Significant Digits	4
4.3	Determining Conformance; Absolute Method or Rounding Method (ASTM E 29)	5
4.4	Target, Goal and Should-Be Specification	6
4.5	Potting and Encapsulation	7
4.6	Dimensional Requirements and Allowances	7
4.7	Requirements for Cleaning, Protection and Identification of Raw Material, Parts and Assemblies	10
DEF	INITION OF TERMS	. 11



CAGE: xxxxx

## 1. SCOPE

This document describes general requirements and methods of interpreting engineering requirements specified in specifications and/or drawings.

# 2. THEORY

The space available on product drawings sometimes limits the opportunity for a clear description of engineering requirements. Details that the engineer would like to include on the drawing are sometimes left off with the assumption that the User will understand what is meant within the notation(s). These assumptions are valid only when the User is the engineer; otherwise, concise training of personnel is required.

# 3. **REFERENCES**

ANSI B46.1, Surface Roughness ASME B1.1, Unified Inch Screw Threads ASME B18.2.2, Square and Hex Nuts ASTM E 29, Significant Digits FED-STD-H28, Screw Thread Standards for Federal Services

# 4. **REQUIREMENTS**

### 4.1 Order of Precedence

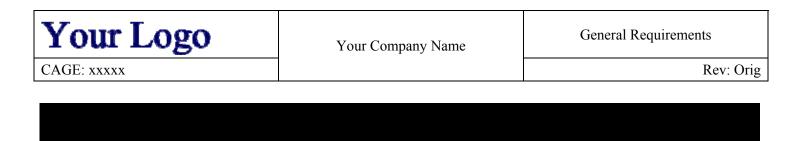
In the event of conflicting requirements the following order of precedence governs: The Customer's requirements always supersede Company requirements unless approved by the CCB.

•	
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•	Company Drawing(s)
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•	Military or Society Procedures or Standards

## 4.2 Significant Digits

Calculations may be performed with a greater number of significant digits than shown on the applicable drawing; however, <u>measurements and calculations</u> must be *reported* to the same number of significant figures as specified by the applicable drawing. For instance,

Page 4 of 11

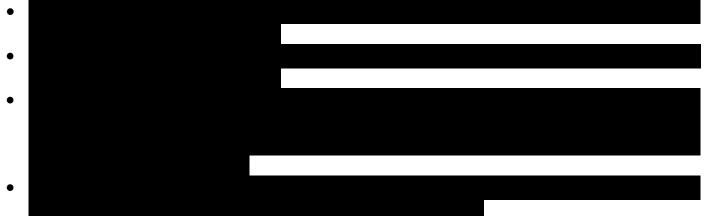


however, the drawing specification requires reporting the calculated value to no more significant digits than shown.

#### 4.3 Determining Conformance; Absolute Method or Rounding Method (ASTM E 29)

Unless otherwise specified by the CCB, the 'rounding method' is used for determining compliance of test data to product specifications according to ASTM E 29: (some contracts specify "NO ROUNDING — TOLERANCES ARE ABSOLUTE")

Rounding is performed as follows: [quoted from ASTM E 29]



### Example — 0.0<u>21</u>"±0.001"

0.0211" to 0.0214" *must* be rounded down to for 2 significant digit specifications; 0.0215" to 0.0219" *must* be rounded up to for 2 significant digit specifications; (unless the last retained digit from the rounding method is even, e.g., 0.0225" is rounded down to 0.022" since the last digit retained is even, while 0.0226" is rounded up to

#### Example — 0.0215"±0.0015"

0.0211" to 0.0219" must be applied as observed - no rounding is possible if the measurement equipment can only read to the 4th decimal place. If the equipment is capable of reading beyond the 4th decimal place then round to the last digit retained as described herein paying particular attention to whether the retained digit is odd or even when followed by the numeral 5.

#### Example — 550±50

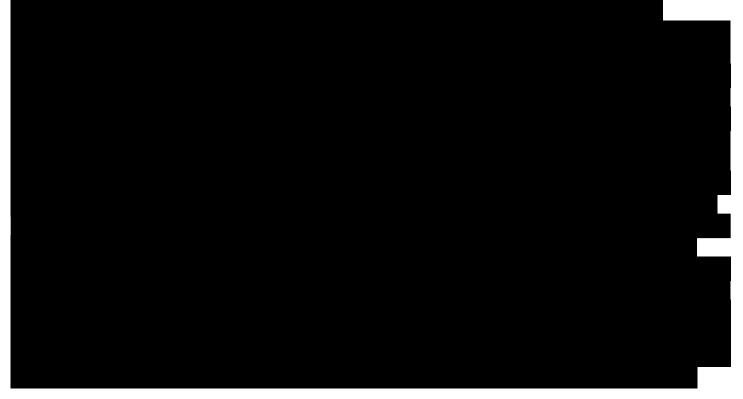
499.1 to 499.4 *must* be rounded down to 499.5 to 499.9 *must* be rounded up to 600.1 to 600.5 *must* be rounded down to 600.6 to 600.9 *must* be rounded up to

Your Logo	Your Company Name	General Requirements
CAGE: xxxxx		Rev: Orig

#### 4.3.1 Equipment Tolerance

0.0211" or 0.0214" **must** be rounded down to for **2** significant digit specifications; however, for **3** significant digit specifications, where instrument accuracy is specified as  $\pm 0.0001$ ", the original measurement figure of 0.0211" may actually be 0.0210" or 0.0212".

The instrument tolerance **can** be used to affect 'rounding' by an amount equal to the plus *or* minus accuracy stated by the instrument's calibration tag or record.



### 4.4 Target, Goal and Should-Be Specification

Target, Goal and Should-Be specifications are suggested specifications, they are not fixed and compliance is more a judgment than a rule.

4.4.1 Application of the Drawing or Procedure Specification

Monitor data for compliance to the target value. When the product or process does not match the target value specified by the product drawing or process procedure,

#### 4.4.2 Target and Range Specification

When Range values are specified in addition to a Target value then product compliance to the Range values is



#### 4.5 Potting and Encapsulation

4.5.1 Engineering Drawing Note(s)

Potting and encapsulation operations may or may not be defined by a drawing note that references a manufacturing procedure that defines the lot formation and use of an epoxy log book for every mix.

4.5.1.1 Application of Drawing Specification

Unless otherwise specified, potting and encapsulation materials whose shelf-life has expired must not be used on deliverable products unless authorized in writing by the MRB or CCB.

All potting and encapsulation materials are identified with a shelf-life expiration date.

The expiration date is sometimes modified by an annotation that applies an additional expiration date after the container is opened, e.g., 6 month shelf-life while un-opened and properly stored and then a 3 month shelf-life after opening the container. Prior to using any potting or encapsulation material, determine its shelf-life expiration date by



#### 4.6 Dimensional Requirements and Allowances

4.6.1 Surface Flaws Surface flaws include

Acceptance of parts having surface flaws shall be at the discretion of the REA and shall be based upon the function of the part.

#### 4.6.2 Free State Variation

If material flexibility or normal stresses can be expected to cause parts to be out of tolerance, appropriate inspection procedures shall be obtained from the REA prior to inspection of parts.

4.6.3 Blind Holes The drill point shall

#### 4.6.4 Gaging Hole Diameters

The diameter of a hole is within required limits when accepted by "GO" and "NOT GO" plug gages of appropriate size without reasonable evidence during plug gaging that the hole is out-



General Requirements

CAGE: xxxxx

of-round in excess of the diameter limits. Bell-mouthed holes are

#### 4.6.5 Hole Quality

The walls of holes shall be clean cut and shall present a uniform machined surface.

Hole edges shall be free from burrs and shall not

These requirements are subject to visual inspection only and are to be evaluated in terms that are

### 4.6.6 Removing Burrs and Sharp Edges

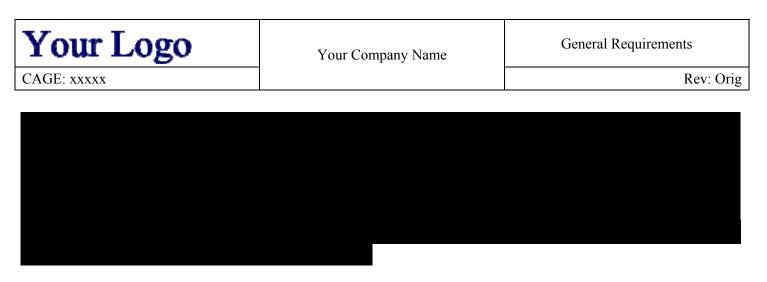
All burrs and sharp edges shall be removed to the extent that material fragments are not visible and sharpness cannot be felt by using either a chamfer or radius. If it is necessary to break sharp edges or to deburr after application of chemical surface treatment, the bared metal shall be touched-up according to section herein named "Correcting Defects in Coating". Flash on molded plastic parts that does not cause the part to exceed maximum dimensional limits need not be removed. These requirements do not apply to rough and semi-finished

4.6.7 Correction of Manufacturing Defects4.6.7.1 Permissible CorrectionsCorrection is permissible if

4.6.7.2 Non-permissible Corrections Corrective methods that add material to the product or that employ techniques abnormal to the production process are

4.6.8 Correcting Defects in Coating Defects in chemical organic and metallic coatings may be corrected by

#### Page 8 of 11



#### 4.6.9 Flat Surfaces

Where no parallelism tolerance is specified, flat surfaces of a part shown as parallel on a drawing shall be parallel within their limits of size. Flat surfaces of a part shown as perpendicular on a drawing shall be perpendicular within

4.6.10 Thread Form All threads shall be free from

Where no thread form is specified, threads shall comply with

Cold forming thread tools such as Besly "X-Press" may be used in lieu of metal cutting tools. A slight groove may appear along the thread crest as a result of the metal flowing action of a Besly tool and is acceptable if the overall thread crest height conforms to limits specified by and applicable specification sheet.

#### 4.6.11 Thread Gaging

Thread wires and measurement indicators may be used to accept thread dimensions.

When "GO" gages are used, the product shall allow the "GO" gage to enter or to be entered the specified full length or depth of the thread; however, the thread must be functional.

When "NOT GO" plug or ring gages are used, the product is acceptable when it does not enter the gage or there is

#### Page 9 of 11

Your Logo	Your Company Name
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General Requirements

Rev: Orig

CAGE: xxxxx

4.6.12 Surface Roughness

When the surface roughness specified is less than 32 microinches, measurement shall be performed according to When the surface with commercial roughness comparison specimens is acceptable in lieu of

# 4.7 Requirements for Cleaning, Protection and Identification of Raw Material, Parts and Assemblies

4.7.1 Protection

All parts and assemblies shall be adequately protected from accumulation of foreign matter, corrosion, physical damage or deterioration. These requirements shall apply to



4.7.2 Cleanup of Parts and Assemblies

All finished parts and subassemblies shall be adequately cleaned before final assembly. Final assembly and necessary subassembly shall be performed in an environment appropriate to the type of product. All parts and assemblies shall be thoroughly cleaned to remove foreign and manufacturing waste material such as:



Page 10 of 11



**General Requirements** 

CAGE: xxxxx

Rev: Orig

## **DEFINITION OF TERMS**

Accuracy:	
CCB	Configuration Control Board
Goal Posts	A range that defines a minimum and maximum specification
GR&R	Gage Reproducibility and Repeatability
IAW:	In accordance with
Independent	Results obtained in a manner not influenced by any previous result on
Test Results:	the same or similar test object
MRB:	Material Review Board
Precision:	
REA:	Responsible Engineering Authority
Repeatability	
Conditions:	
Repeatability:	
Reproducibility	
Conditions:	
Reproducibility:	
	Population standard deviation is known
S:	Population standard deviation is estimated
Trueness:	

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