


CDM Apvd

RELEASED By: Blayne Monén
General Atomics
Configuration and Data Management
2021/09/02

09492S00015
Revision A

GENERAL ATOMICS ELECTROMAGNETIC SYSTEMS

COMMERCIAL NON-DESTRUCTIVE EXAMINATION REQUIREMENTS SPECIFICATION

Contractor: General Atomics
Address: PO Box 85608
San Diego, CA 92186-5608

GA PROJECT 09492

Printed material is uncontrolled and for reference only.

Title: Commercial Non-Destructive Examination Requirements Specification	Number: 09492S00015	Revision: A
--	-------------------------------	-----------------------

REVISION HISTORY

Revision	Date	Description of Change
A	2021/09/02	Initial Release; ECN-103006.

Title: Commercial Non-Destructive Examination Requirements Specification	Number: 09492S00015	Revision: A
--	-------------------------------	-----------------------

TABLE OF CONTENTS

REVISION HISTORY	ii
ACRONYMS	iv
GLOSSARY	iv
1 INTRODUCTION	1
2 APPLICABLE/REFERENCE DOCUMENTS	1
3 NON-DESTRUCTIVE EXAMINATION REQUIREMENTS	2
3.1 General Requirements	2
3.2 Personnel Qualification	2
3.3 NDE Process Procedures	2
3.4 NDE Reports.....	2
4 DOCUMENTS REQUIRED FOR SUBMITTAL.....	3

LIST OF TABLES

Table 1. GA-EMS Documents	1
Table 2. Non-GA-EMS Documents	1
Table 3. NDE Documents Required	3

Title: Commercial Non-Destructive Examination Requirements Specification	Number: 09492S00015	Revision: A
--	-------------------------------	-----------------------

ACRONYMS

Acronym	Definition
ASME	American Society of Mechanical Engineers
AWS	American Welding Society
Doc.	Document
ET	Electromagnetic Testing
GA	General Atomics
GA-EMS	General Atomics Electromagnetic Systems
LPT	Liquid Penetrant Testing
LT	Leak Testing
MT	Magnetic Particle Testing
NAVSEA	Naval Sea Systems Command
NDE	Non-Destructive Examination
No.	Number
QC	Quality Clause
RT	Radiographic Testing
UT	Ultrasonic Testing
VT	Visual Testing

GLOSSARY

Term	Description
Buyer	General Atomics Electromagnetic Systems (GA-EMS)
Certifying Authority	The person or persons properly designated in the written practice to sign certifications on behalf of the employer.
Product	The item specified in contract to produce and/or deliver
Seller	Supplier/vendor who has been directly awarded a GA-EMS purchase order. The supplier is an agent entering into a procurement contract with the purchaser to supply product described in the contract documents. Any other vendor providing a part or service in support of the supplier to fulfill the requirements of the GA-EMS purchase order is a sub-tier supplier.
Written Practice	A written procedure developed by the employer that details the requirements for qualification and certification of their employees.

Title: Commercial Non-Destructive Examination Requirements Specification	Number: 09492S00015	Revision: A
--	-------------------------------	-----------------------

1 INTRODUCTION

This specification defines the Non-Destructive Examination (NDE) requirements for General Atomics Electromagnetic Systems (GA-EMS) for non-Department of Defense or commercial applications. The requirements specified in this document shall be met when GA-EMS Standard Quality Clause (QC) 280b is specified within GA-EMS purchasing documents.

2 APPLICABLE/REFERENCE DOCUMENTS

Table 1 and Table 2 list the applicable/reference material for this document. Refer to the General Atomics (GA) web site for the document numbers listed in Table 1.

Table 1. GA-EMS Documents

Doc. Number	Doc. Title
09492L00008	GA-EMS Standard Quality Clauses
EMS-0364	Supplier Document Reuse Request

Table 2. Non-GA-EMS Documents

Doc. Number	Doc. Title
SNT-TC-1A	Personnel Qualification and Certification of Nondestructive Testing Personnel
AWS QC1	Specification for AWS Certification of Welding inspectors
NAS 410	Qualification and Certification of Nondestructive Testing Personnel.
ASME (BPVC) Section V	Nondestructive Examination

Title: Commercial Non-Destructive Examination Requirements Specification	Number: 09492S00015	Revision: A
--	-------------------------------	-----------------------

3 NON-DESTRUCTIVE EXAMINATION REQUIREMENTS

3.1 General Requirements

NOTE: This item requires one or more methods of NDE – Leak Testing (LT), Liquid Penetrant Testing (LPT), Magnetic particle Testing (MT), Radiographic Testing (RT), Electromagnetic Testing (ET), Ultrasonic Testing (UT), or Visual Testing (VT).

The Seller is responsible for performing NDE in accordance with the code/specification/standard specified on the drawing or purchasing documents. As a minimum, the Seller shall maintain an NDE program as specified as follows. Procedures and records shall be made available to Buyer upon request.

3.2 Personnel Qualification

All NDE processes shall be performed and interpreted by qualified personnel certified in accordance with a written practice developed by the Seller that meets the requirements of SNT-TC-1A or equivalent standard (i.e., Certifying Authority). The Seller shall maintain personnel certification records.

3.3 NDE Process Procedures

All NDE shall be performed in accordance with detailed written procedures that meet the requirements of the applicable specification(s) called out on the Buyer released drawings or purchasing documents.

3.4 NDE Reports

With each shipment of product on which NDEs have been performed, Seller shall submit NDE reports that include the following:

- Procedure number and revision
- Summary of the technique
- Equipment and materials used
- Test results
- Name and signature of persons performing and authenticating the test
- Qualification levels of persons interpreting the results (e.g., Level I, II, or III)
- Part numbers, serial numbers, lot number, heat number, and other appropriate identification

Title: Commercial Non-Destructive Examination Requirements Specification	Number: 09492S00015	Revision: A
--	-------------------------------	-----------------------

4 DOCUMENTS REQUIRED FOR SUBMITTAL

The seller shall provide the documents listed in Table 3 to the buyer for review and approval as specified in Table 3.

Table 3. NDE Documents Required

Document	Submittal	Required for Use	Time
NDE Reports		See Section 3.4	



P.O. BOX 85608 SAN DIEGO, CA 92186-5608 (858) 455-3000