NACE Shipboard Corrosion Assessment Training (S-CAT) Technician-Written Exam
NACE-SCAT-001

Exam Preparation Guide
August 2017
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Introduction

The S-CAT Technician written exam is designed to assess whether a candidate has the requisite knowledge and skills that a minimally qualified person must possess to survey and evaluate the condition of the protective coating system on specific areas of U.S. Navy vessels. The 50 multiple-choice questions are based on the S-CAT body of knowledge. A candidate should have working knowledge of assessing the condition of tanks and other military ship structures, while determining the required actions necessary to effectively maintain full operational status.

<table>
<thead>
<tr>
<th>Test Name</th>
<th>NACE- S-CAT written Exam</th>
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</thead>
<tbody>
<tr>
<td>Test Code</td>
<td>NACE-SCAT-001</td>
</tr>
<tr>
<td>Time</td>
<td>90 Minutes*</td>
</tr>
<tr>
<td>Number of Questions</td>
<td>50</td>
</tr>
<tr>
<td>Format</td>
<td>Computer Based Testing (CBT)</td>
</tr>
<tr>
<td>Passing Score</td>
<td>Pass or Fail</td>
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*NOTE: Includes 4 minutes for the non-disclosure agreement and 6 minutes for the system tutorial.

Target Audience

Ideal candidates for S-CAT Technician certification are coating inspectors, shipyard planners, design engineers, type commander representatives and/or port engineers. It is highly recommended that one have three months of work experience in the evaluation of corrosion or coatings breakdown on marine vessels.

Requirements

**Requirements for S-CAT Technician**

**Prerequisite (choose one of the following options):**

- None required

**Course Requirements**

- Strongly recommend the following course(s):
  - *Course- Shipboard Corrosion Assessment Training (S-CAT)*;
  - and/or
  - *Basic Corrosion Course or Basic Corrosion e-Course*

**Core Exam Requirements**

- Exam – S-CAT Technician written exam

**Renewal requirements:** Recertification application* required every 3 years

*Approval required
Exam Blue Print
NOTE: At the end of the CBT exam the candidate should log on to their NACE profile to view a bar chart of strengths and weaknesses that correspond to these Domains.

<table>
<thead>
<tr>
<th>Domain</th>
<th>Description</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Domain 1- Visual Assessments</strong></td>
<td>Perform visual assessments for all ship areas</td>
<td>18-22 %</td>
</tr>
<tr>
<td><strong>Domain 2- Corrosion Control Methods</strong></td>
<td>Determine corrosion control methods: Design; Inhibitors; Protective coatings; Cathodic protection; Corrosion resistant materials; Alteration of environment</td>
<td>4-8 %</td>
</tr>
<tr>
<td><strong>Domain 3- Evaluation Tools and Equipment</strong></td>
<td>Utilize evaluation tools and equipment, such as a pit gauge and DFT gauge</td>
<td>4-8 %</td>
</tr>
<tr>
<td><strong>Domain 4- Corrosion Protection System</strong></td>
<td>Evaluate a corrosion protection system</td>
<td>22-26%</td>
</tr>
<tr>
<td><strong>Domain 5- Maintenance and Manage Inspection Results</strong></td>
<td>Plan maintenance and manage inspection results in a Corrosion Control Information Management System (CCIMS)</td>
<td>16-20 %</td>
</tr>
<tr>
<td><strong>Domain 6- Tank Inspection</strong></td>
<td>Conduct a tank inspection using the Corrosion Control Assessment Maintenance Manual (CCAM)</td>
<td>10-14 %</td>
</tr>
<tr>
<td><strong>Domain 7- Total Tank Scoring</strong></td>
<td>Perform total tank scoring</td>
<td>4-8 %</td>
</tr>
<tr>
<td><strong>Domain 8- General Knowledge</strong></td>
<td>Understanding of general knowledge applicable to S-CAT</td>
<td>6-10 %</td>
</tr>
</tbody>
</table>

Types of Questions
Description of Questions
The questions on this exam are multiple-choice questions, where some questions may have select all that apply and you will need to select more than one answer choice. The questions are based on the knowledge and skills required in the S-CAT industry. While the NACE training course is an excellent method of preparation it may not be the only reference used in the development of the questions.
Sample Questions
The sample questions are included to illustrate the formats and types of questions that will be on the exam. Your performance on the sample questions should not be viewed as a predictor of your performance on the actual test.

1. Which of the following structure observations do NOT automatically require a follow-up Level 2 structural inspection to be requested?
   A. Rusting
   B. Holing
   C. Cracking
   D. Buckling

2. Due to the severe service environment in bilges and the high costs of under-reported and neglected coating repairs, what is the minimum coating condition rating P-# that is required to be assigned to coating system deficiencies in order to give them a higher maintenance action priority?
   A. P3
   B. P2
   C. P10
   D. P5

3. Contact with _______ alloys can cause some of the most severe and rapid galvanic corrosion of aluminum structural alloys.
   A. steel
   B. cooper
   C. stainless steel
   D. other aluminum

4. Which of these types of test instruments uses a microscope to determine the thickness of the layers (coats) in a coating system?
   A. Type 2 electronic gauge
   B. Fixed-alignment adhesion tester
   C. Tooke gauge
   D. Type A ultrasonic thickness gauge
Answer Key

1. A
   Reference: NACE S-CAT course materials.

2. A
   Reference: NACE S-CAT course materials.

3. B
   Reference: NACE S-CAT course materials.

4. C
   Reference: NACE S-CAT course materials.

Preparation

Training

NACE - Shipboard Corrosion Assessment Training (S-CAT) Course

Reference Material

NACE S-CAT course materials