



NACE Corrosion Technologist Written Exam NACE-CTt-001

Exam Preparation Guide
October 2019

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Introduction

The Corrosion Technologist exam is designed to assess whether a candidate has the requisite knowledge, skills and abilities (KSAs) that a minimally qualified Corrosion Technologist must possess. The 100 questions are based on the KSAs a Corrosion Technologist needs to be successful in the job. A candidate should have at least four (4) years of experience, possess a wide range of general corrosion related knowledge, and be able to perform a variety of corrosion related tasks.

Test Name	NACE-Certified Corrosion Technologist
Test Code	NACE-CTt-001
Time	180 Minutes*
Number of Questions	100
Format	Computer Based Testing (CBT)
Passing Score	Pass or Fail

**NOTE: Includes 4 minutes for the non-disclosure agreement and 6 minutes for the system tutorial.*

Target Audience

A Corrosion Technologist is responsible for understanding the theory of corrosion and corrosion prevention. The certification is geared toward persons who will work in all types of corrosion and means of prevention as well as have knowledge and experience within the field of specializations. The Corrosion Technologist may have specialized knowledge or experience related to corrosion prevention by protective coatings, testing, stress corrosion cracking, chemical processes, and/or in pipelines.

Requirements

Requirements for Certified Corrosion Technologist

Work Experience & Education Requirements:
Four (4) years verifiable corrosion-related work experience
Core Course & Exam Requirements:
<i>Option 1:</i> Corrosion Technician Certification -OR- NACE Basic Corrosion Course or e-Course & Exam -AND- One Certification from Menu A: CP Tester Certification CP Technician Certification CP Technologist Certification CP Specialist Certification -AND- One Certification from Menu B: PCS 1 Basic Principles Course PCS 2 Basic Principles Course CIP Level 1 Course <i>Option 2:</i> Corrosion Technologist Exam
Application Requirements:
Approved Corrosion Technologist Application

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.

<p>Domain 1 – Cathodic Protection</p> <ul style="list-style-type: none"> • Impressed currents • Galvanic series • Fundamentals of cathodic protection • Standards (SP0169), • Cathodic protection basics 	19-23 %
<p>Domain 2 - Coatings</p> <ul style="list-style-type: none"> • Surface preparation • Application techniques • Standards (NACE 3/SSPC SP6) • Coating anomalies/defects • Protective coatings 	12-16 %
<p>Domain 3 - General Corrosion</p> <ul style="list-style-type: none"> • Corrosion cells • Types of corrosion • Fundamentals of corrosion 	32-36 %
<p>Domain 4 - Metallurgy</p> <ul style="list-style-type: none"> • Material properties • Material selection • Metallurgy standards (MR0175) • Interaction of materials 	3-7 %
<p>Domain 5- Internal Corrosion</p> <ul style="list-style-type: none"> • Corrosion inhibitors • Chemical treatment • Monitoring methods 	4-8%
<p>Domain 6- Safety</p> <ul style="list-style-type: none"> • General knowledge of safety • Personal responsibility • Coating application safety 	2-5 %
<p>Domain 7- Design</p> <ul style="list-style-type: none"> • System design • Material selection 	8-12 %

Domain 8- Maintenance <ul style="list-style-type: none"> • General maintenance • Rectifiers 	3-7 %
Domain 9- Ethics <ul style="list-style-type: none"> • Professional and personal responsibility • Regulations • Roles/responsibilities 	1-4 %

Types of Questions

Description of Questions

This is a closed book exam. The questions consist of multiple-choice questions where some questions may have more than one answer. Items with more than one correct answer may contain the phrase **“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 Corrosion Technologist industry.

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.

- Pearlite is a mixture of what substances?
SELECT ALL THAT APPLY
 - Cementite
 - Ferrite
 - Ironite
 - Martensite
- NACE International TM 0172 relates to abrasive blasting of steel and:
 - Abrasive Cleaning of Steels Structures
 - Determining Corrosive Properties of Cargoes in Petroleum Product Pipelines
 - Stress Corrosion Cracking in Steel
- An unfavorable galvanic couple would result if _____ is connected to _____.
SELECT ALL THAT APPLY
 - Teflon
 - Type 304 stainless steel
 - PVC
 - Carbon steel

Answer Key:

1. **A, B**

Reference: NACE International TM 0172

2. **B**

NACE Corrosion Engineer's Reference Guide/Metallic Materials

3. **B, D**

Reference: Galvanic Series

Preparation

Available Training*

NACE Basic Corrosion Course or e-Course

*NACE courses connected to parallel path options

Suggested Study Material

Handbook of Corrosion Engineer's Reference Guide

Corrosion Prevention by Protective Coatings, 3rd Ed

Peabody's Control of Pipeline Corrosion, 3rd Ed

NACE Basic Corrosion Manual

NACE Cathodic Protection Tester Manual

NACE Protective Coating Specialist-Basic Manual

NACE Direct Assessment Manual

Local and International safety rules/regulations (i.e. OSHA, ISO, etc.)

Standards

NACE SP 01699 - Control of External Corrosion on Underground or Submerged Metallic Piping Systems

NACE International TM0172 - Determining Corrosive Properties of Cargoes in Petroleum Product Pipelines

NACE MR0175 - Selection and qualification of carbon and low-alloy steels, corrosion-resistant alloys, and other alloys for service in equipment in oil and natural gas production

NACE 3/SSPC SP6 – Commercial Blast Cleaning

Reference Material Provided During Exam

No reference material provided. It is closed book exam.

What to Expect on Test Day

Arriving at the Person Test Center

When you go to the Pearson Testing Center, there are a few things you should know. Please visit this link for information you should know before you go.

<https://home.pearsonvue.com/test-taker/security.aspx>

Computer Based Test Demonstration

Once you are in the testing room and at the computer, you will start with agreeing to the non-disclosure agreement and have a brief tutorial of using the system. Please visit this link for a demonstration of the computer-based exam. You will have the opportunity to practice answering a variety of questions to help you get familiar with how it all works.

<https://wsr.pearsonvue.com/demo/>