



In-Line Inspection (ILI) Exam

Exam Preparation Guide

December 2020

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Introduction

The In-Line Inspection (ILI) exam is designed to assess whether a candidate has the requisite knowledge, skills, and abilities (KSA) that a minimally qualified person responsible for implementation or management of an integrity program for a pipeline system must possess. The 50 questions are based on the KSAs a person conducting in-line inspections needs to be successful in the job.

Exam Name	In-Line Inspection (ILI) Exam
Time	1.5 Hours (90 minutes)
Number of Questions	50
Format	Live Online Remote Proctoring (Examity*)
Passing Score	Pass or Fail

**Delivered through Examity, NOT AT Pearson Testing Center*

Target Audience

In-Line Inspection (ILI) benefits individuals responsible for implementation and/or management of an integrity program for a pipeline system with an emphasis on integrity verification and maintenance optimization.

Candidates who may successfully complete the ILI course and exam are able to collect data used for the evaluation and monitoring of a pipeline corrosion integrity plan, describe ILI and its relationship to overall integrity assessment, recall relevant industry standards, regulations and best practices, recognize the types of ILI technologies and the benefits and limitations of each, select an appropriate ILI technology for a given situation, define the responsibilities of the operator and/or service provider, be aware of safety and operations associated with running an ILI tool, describe the basics of ILI data analysis, and respond to and use ILI findings for run verification, remediation and/or repair.

Requirements

Requirements for In-Line Inspection

Prerequisites
<ul style="list-style-type: none">• 2 years of pipeline inspection or integrity management experience (recommended)
Core Exam Requirements
<ul style="list-style-type: none">• In-Line Inspection (ILI) Exam
Application Requirements
<ul style="list-style-type: none">• None required

Exam Body of Knowledge

NOTE: At the end of the exam, the candidate will receive a chart with strengths and weaknesses that correspond to the Domains listed below. You will have the option to email or print it.

1. INTRODUCTION

- 1.1 In-Line Inspection and Relationships to Other Integrity Assessments
- 1.2 Terminology
- 1.3 Benefits of Utilizing ILI
- 1.4 Limitations of Utilizing ILI
- 1.5 Industry Standards, Regulations, and Best Practices

2. ILI SYSTEM SELECTION

- 2.1 Types of Tools
- 2.2 Tool Selection

3. SAFETY

- 3.1 Introduction
- 3.2 Pipeline Operation
- 3.3 Abnormal Operating Conditions
- 3.4 Common Pipeline Fluids
- 3.5 In-Line Inspection
- 3.6 Excavation

4. PIPELINE OPERATIONS

- 4.1 Risk of In-Line Inspection
- 4.2 Responsibilities of the Operator and/or Service Provider
- 4.3 Planning and Scheduling
- 4.4 Preparing the Pipeline
- 4.5 Running the Tool(s)
- 4.6 Offshore Considerations

5. ILI DATA ANALYSIS

- 5.1 Determining the Validity of the ILI Data
- 5.2 Interpretation/ Analysis of ILI Data
- 5.3 Criteria for Prioritizing and Ranking Anomalies for Investigation
- 5.4 In-Line Inspection Verification Reporting
- 5.5 Advanced ILI Analysis

6. POST ILI ACTIVITIES

- 6.1 ILI Data Management
- 6.2 Lessons Learned
- 6.3 Reassessment Interval

7. QUALITY MANAGEMENT SYSTEM

- 7.1 Introduction
- 7.2 Quality System Documentation
- 7.3 Quality Control
- 7.4 Continuous Improvement
- 7.5 Quality System Review

Types of Questions

Description of Questions

This open-book exam consists of multiple-choice questions where some questions require one answer and some require more than one answer choice. Questions that require more than one answer will include the note **SELECT ALL THAT APPLY**.

The questions are based on the knowledge and skills required in the in-line inspection 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 exam.

1. Which of the following are methods of locating geometric anomalies in a pipeline?
SELECT ALL THAT APPLY
 - A. Digital
 - B. Touchless
 - C. Mechanical
 - D. Mechatronic

2. What are gouges called when they are caused by construction, excavation, and agricultural equipment?
 - A. Erosion
 - B. Grinding
 - C. Metal Loss
 - D. Mechanical Damage

Answer Key:

1. **B, C, D**

Reference: ILI Course Manual

2. **D**

Reference: ILI Course Manual

Preparation

Required Training

NACE In-Line Inspection course

Suggested Study Material

NACE In-Line Inspection Course Manual

Reference Material Provided During Exam

The ILI Course Manual is provided in electronic form during the exam.

What to Expect on Test Day

Remote Online Exam Proctoring

** Remote online proctored exams are offered for select exams.*

The NACE Institute has partnered with Examity to offer remote online proctoring for the In-Line Inspection (ILI) Exam. With the new Examity platform, you can take the exam from home without arranging for a proctor or traveling to a test site. Please visit this link for information you should know.

<https://naceinstitute.org/certification-resources/online-exam-proctoring>

Examity Demonstration with Automated Proctor

Please visit this link for a demonstration of the computer-based exam. You will have the opportunity to get familiar with how it all works.

<https://vimeo.com/399635210/2eb75207b8>

Computer-Based Exam Tutorial

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 the CBT exam format. You will also receive this tutorial link when you register for the exam:

[NACE Examity Tutorial Video](#)