

# LAPT

LONDON ACADEMY OF PROFESSIONAL TRAINING

CERTIFICATE

## ISO 75 — Plastics Temperature of Deflection Under Load

*ISO Certification Programme*



---

### LAPT — London Academy of Professional Training

**Address** 85 Great Portland Street, W1W 7LT, London, United Kingdom

**Email** [info@lapt.org](mailto:info@lapt.org)

**Telephone** +44 7513 283044

**Web** [lapt.org](http://lapt.org)

**Reference** MTL-NMM-75 • ISO Materials

UKPRN 10067351 • Registered in England and Wales, company 4984798

AT A GLANCE

|               |                                                |
|---------------|------------------------------------------------|
| REFERENCE     | MTL-NMM-75                                     |
| AWARD         | Certificate                                    |
| ASSESSMENT    | 430 marks — 258 to pass (60%)                  |
| PREREQUISITES | None                                           |
| VALIDITY      | Lifetime                                       |
| AWARDING BODY | LAPT — London Academy of Professional Training |

CURRICULUM

1

Compliance Management Frameworks

5 chapters · 30 classes 45 marks

• 1 Understanding Compliance Management Frameworks for ISO Standards — 6 classes

› 1.1 Define Compliance Management Frameworks and their Importance

› 1.2 Identify Key ISO Standards Relevant to Compliance Management

› 1.3 Explore the Structure of ISO 75 and its Requirements

› 1.4 Assess the Impact of Non-Compliance on Organizations

› 1.5 Develop Strategies for Implementing Compliance Management Frameworks

› 1.6 Evaluate Real-World Applications of ISO Compliance in Industry

• 2 Key ISO Standards in Plastics and Their Compliance Requirements — 6 classes

› 2.1 Understand ISO 75: Overview of Plastics Temperature of Deflection Under Load

› 2.2 Identify Key Compliance Requirements of ISO 75 for Plastics

› 2.3 Analyze the Importance of Temperature Deflection Testing in Plastics

› 2.4 Explore Testing Procedures for ISO 75 Compliance

› 2.5 Evaluate the Implications of Non-Compliance with ISO 75 Standards

› 2.6 Implement Best Practices for Maintaining ISO 75 Compliance in Operations

• 3 Developing Effective Compliance Strategies for ISO 75 — 6 classes

› 3.1 Identify Key Compliance Requirements for ISO 75

› 3.2 Analyze the Importance of Temperature of Deflection Under Load

› 3.3 Develop Risk Assessment Methods for ISO 75 Compliance

› 3.4 Create a Compliance and Monitoring Plan for ISO 75

› 3.5 Implement Training Strategies for ISO 75 Compliance Awareness

› 3.6 Evaluate Compliance Strategies and Continuous Improvement Measures

• 4 Risk Management Frameworks in Compliance Operations — 6 classes

› 4.1 Identify Key Components of Risk Management Frameworks

› 4.2 Analyze the Role of Compliance in Risk Management

› 4.3 Evaluate Risk Assessment Techniques in Compliance Operations

› 4.4 Develop Mitigation Strategies for Identified Risks

› 4.5 Implement Monitoring Procedures in Compliance Frameworks

› 4.6 Create a Risk Management Action Plan for Compliance

• 5 Auditing and Continuous Improvement in Compliance Management — 6 classes

› 5.1 Identify Key Elements of a Compliance Management Framework

› 5.2 Explore the Role of Auditing in Compliance Management

› 5.3 Analyze Types of Audits and Their Objectives

› 5.4 Implement Effective Audit Planning Strategies

› 5.5 Evaluate Audit Findings and Identify Areas for Improvement

› 5.6 Develop a Continuous Improvement Plan Based on Audit Results

**• 1 Fundamentals of Plastic Materials and Their Properties** — 6 classes

- › 1.1 Identify Key Properties of Plastic Materials
- › 1.2 Explain the Importance of Temperature of Deflection Under Load
- › 1.3 Analyze Different Types of Plastics and Their Applications
- › 1.4 Describe Testing Methods for Assessing Plastic Performance
- › 1.5 Compare ISO 75 Standards with Other Material Testing Certifications
- › 1.6 Apply Knowledge to Evaluate Plastic Selection for Projects

**• 2 Understanding Temperature and Load Effects on Plastics** — 6 classes

- › 2.1 Define Key Terms Related to Temperature and Load in Plastics
- › 2.2 Explore the Basics of ISO 75 Testing Methodology
- › 2.3 Examine the Relationship Between Temperature and Deflection in Plastics
- › 2.4 Investigate Load Types and Their Impact on Plastic Materials
- › 2.5 Analyze Real-World Applications of ISO 75 Testing Results
- › 2.6 Conduct a Practical Experiment to Measure Plastic Deflection

**• 3 Introduction to ISO 75 Standards and Testing Procedures** — 6 classes

- › 3.1 Understand the Purpose of ISO 75 Standards
- › 3.2 Identify Key Terminology in ISO 75 Testing
- › 3.3 Explore the Testing Procedures Outline
- › 3.4 Analyze Sample Preparation Techniques
- › 3.5 Examine Data Interpretation in Deflection Testing
- › 3.6 Apply ISO 75 Results to Material Selection

**• 4 Analyzing Material Performance Through ISO 75 Data** — 6 classes

- › 4.1 Understand ISO 75: Key Concepts and Terminology
- › 4.2 Explore the Importance of Temperature of Deflection Under Load
- › 4.3 Analyze ISO 75 Standards: Testing Procedures and Guidelines
- › 4.4 Interpret ISO 75 Data: Understanding Results and Implications
- › 4.5 Compare Material Performance: Case Studies Using ISO 75 Data
- › 4.6 Apply ISO 75 Findings: Making Informed Material Selection Decisions

**• 5 Advancing Material Selection and Engineering Strategies** — 6 classes

- › 5.1 Identify Key Factors Influencing Material Performance
- › 5.2 Analyze ISO 75: Standard Requirements for Plastics
- › 5.3 Compare Material Properties for Thermal Deflection
- › 5.4 Evaluate Engineering Strategies for Enhanced Material Selection
- › 5.5 Conduct Case Studies on Material Failures and Successes
- › 5.6 Apply Advanced Techniques in Material Selection for Specific Applications

**• 1 Understanding ISO 75: Fundamentals of Plastics Deflection Testing** — 6 classes

- › 1.1 Define ISO 75: Overview of Standards and Importance
- › 1.2 Explore the Science Behind Temperature of Deflection Under Load
- › 1.3 Identify Key Terms and Concepts Related to Plastics Testing
- › 1.4 Examine Testing Procedures and Equipment for ISO 75 Compliance
- › 1.5 Analyze Case Studies: Real-World Applications of ISO 75
- › 1.6 Develop a Quality Assurance Plan Incorporating ISO 75 Guidelines

**• 2 Quality Assurance Principles in Materials Testing** — 6 classes

- › 2.1 Understand the Importance of Quality Assurance in Materials Testing
- › 2.2 Identify Key Standards and Certifications in Materials Testing
- › 2.3 Explore the ISO 75 Certification and Its Implications
- › 2.4 Analyze Temperature of Deflection Under Load Testing Procedures
- › 2.5 Evaluate the Role of Leadership in Implementing Quality Assurance
- › 2.6 Apply Quality Assurance Techniques to Real-World Scenarios

**• 3 Interpreting ISO 75 Test Results: Key Metrics** — 6 classes

- › 3.1 Analyze the Importance of ISO 75 in Quality Assurance
- › 3.2 Identify Key Metrics Derived from ISO 75 Test Results
- › 3.3 Interpret Thermal Deflection Data: Case Studies
- › 3.4 Compare ISO 75 Results with Industry Standards
- › 3.5 Assess Variability in Test Results and Its Implications
- › 3.6 Develop Actionable Strategies Based on Deflection Metrics

**• 4 Implementing Quality Control Protocols in Plastics Testing** — 6 classes

- › 4.1 Understand ISO 75 Standards for Plastics Testing
- › 4.2 Identify Key Quality Control Protocols in Testing
- › 4.3 Develop Effective Testing Procedures for Plastics
- › 4.4 Implement Data Collection Methods for Quality Assurance
- › 4.5 Analyze Testing Results to Ensure Compliance with ISO 75
- › 4.6 Create a Continuous Improvement Plan for Quality Control

**• 5 Leadership in Quality Assurance: Strategies for Continuous Improvement** — 6 classes

- › 5.1 Identify Key Leadership Qualities in Quality Assurance
- › 5.2 Analyze Effective Communication Strategies for Teams
- › 5.3 Implement Continuous Improvement Techniques in Quality Processes
- › 5.4 Evaluate the Role of Data in Quality Assurance Decision Making
- › 5.5 Foster a Culture of Accountability and Empowerment
- › 5.6 Develop a Personal Action Plan for Quality Leadership

### • 1 Understanding ISO 75: Principles of Plastics Temperature Deflection — 6 classes

- › 1.1 Define Key Concepts of ISO 75 in Plastics Testing
- › 1.2 Explore the Importance of Temperature Measurement in Material Performance
- › 1.3 Analyze the Methodology for Determining Temperature of Deflection Under Load
- › 1.4 Identify Factors Affecting Temperature Deflection in Various Plastics
- › 1.5 Examine Real-world Applications of ISO 75 in Material Selection
- › 1.6 Develop Strategic Decision-Making Skills for Implementing ISO 75 Standards

### • 2 Key Factors Influencing Plastics Temperature of Deflection — 6 classes

- › 2.1 Identify Key Properties of Plastics Affecting Deflection Temperature
- › 2.2 Analyze the Impact of Material Composition on Temperature Deflection
- › 2.3 Evaluate Environmental Factors Influencing Plastics Performance
- › 2.4 Compare Testing Methods for Measuring Deflection Temperature
- › 2.5 Discuss the Role of Load Conditions in Temperature Deflection
- › 2.6 Apply Best Practices for Selecting Plastics Based on Deflection Temperatures

### • 3 Strategic Decision-Making Frameworks for Material Selection — 6 classes

- › 3.1 Identify Key Strategic Decision-Making Frameworks for Material Selection
- › 3.2 Evaluate the Impact of Material Properties on Strategic Decisions
- › 3.3 Analyze Stakeholder Influence in Material Selection Processes
- › 3.4 Apply Cost-Benefit Analysis to Material Choice Decision-Making
- › 3.5 Develop Risk Management Strategies for Material Selection
- › 3.6 Create a Material Selection Action Plan Based on Strategic Frameworks

### • 4 Risk Assessment and Quality Control in Material Management — 6 classes

- › 4.1 Identify Key Risks in Materials Management
- › 4.2 Analyze the Impact of Quality Control on Material Selection
- › 4.3 Evaluate Methods for Conducting Risk Assessments
- › 4.4 Implement Quality Control Measures in ISO Standards
- › 4.5 Develop a Risk Mitigation Strategy for Material Suppliers
- › 4.6 Create a Quality Assurance Checklist for Material Management

### • 5 Optimising Supply Chain Strategies for Non-Metallic Materials — 6 classes

- › 5.1 Analyze Current Supply Chain Trends for Non-Metallic Materials
- › 5.2 Assess the Impact of ISO 75 on Material Selection
- › 5.3 Identify Key Stakeholders in Non-Metallic Material Supply Chains
- › 5.4 Develop Strategies for Cost-Effective Sourcing of Non-Metallic Materials
- › 5.5 Evaluate Risks and Opportunities in Non-Metallic Material Management
- › 5.6 Implement Continuous Improvement Practices in Non-Metallic Material Supply Chains

### • 1 Introduction to Plastics and Thermal Properties — 6 classes

- › 1.1 Define Key Terminology Related to Plastics and Thermal Properties
- › 1.2 Explore Different Types of Plastics and Their Characteristics
- › 1.3 Understand the Importance of Thermal Properties in Plastic Testing
- › 1.4 Explain the Temperature of Deflection Under Load (TDOL) Concept
- › 1.5 Demonstrate the Procedures for Conducting ISO 75 Testing
- › 1.6 Analyze Real-World Applications of ISO 75 Results in Industries

### • 2 Understanding ISO 75 Standards and Testing Principles — 6 classes

- › 2.1 Explore the Importance of ISO 75 in Plastics Testing
- › 2.2 Identify Key Components of ISO 75 Standards
- › 2.3 Understand the Testing Environment Requirements for ISO 75
- › 2.4 Describe the Sample Preparation Process for ISO 75 Testing
- › 2.5 Analyze the Test Methodology as per ISO 75
- › 2.6 Apply ISO 75 Standards to Real-World Testing Scenarios

### • 3 Preparation of Test Samples for ISO 75 Evaluation — 6 classes

- › 3.1 Understand ISO 75 Standards for Test Sample Preparation
- › 3.2 Identify Suitable Materials for Test Sample Fabrication
- › 3.3 Describe Required Dimensions and Tolerances for Samples
- › 3.4 Demonstrate Proper Cutting Techniques for Sample Preparation
- › 3.5 Apply Quality Control Measures to Ensure Sample Integrity
- › 3.6 Conduct Final Inspection before ISO 75 Testing Procedures

### • 4 Conducting the ISO 75 Deflection Test — 6 classes

- › 4.1 Understand the Principles of the ISO 75 Deflection Test
- › 4.2 Identify the Equipment and Materials Required for Testing
- › 4.3 Prepare the Plastic Sample for the ISO 75 Test
- › 4.4 Set Up the Testing Machine According to ISO Standards
- › 4.5 Conduct the ISO 75 Deflection Test with Precision
- › 4.6 Analyze and Report Results Following Testing Protocols

### • 5 Interpreting Results and Reporting Findings — 6 classes

- › 5.1 Analyze the Basic Principles of ISO 75 Testing Procedures
- › 5.2 Examine the Equipment and Setup for Plastics Testing
- › 5.3 Conduct Hands-On Testing: Step-by-Step Execution
- › 5.4 Interpret Data: Understanding Results from Plastic Deflection Tests
- › 5.5 Distinguish Between Standard and Anomalous Results in Testing
- › 5.6 Report Findings Effectively: Creating Clear and Comprehensive Reports

**• 1 Introduction to ISO Standards and Their Importance in Plastics —**

6 classes

- › 1.1 Define ISO Standards and Their Significance in Plastics
- › 1.2 Explain the Key Components of ISO 75
- › 1.3 Identify Applications of ISO 75 in the Plastics Industry
- › 1.4 Analyze the Benefits of Compliance with ISO 75
- › 1.5 Discuss the Impact of ISO Standards on Quality Assurance
- › 1.6 Evaluate Real-World Case Studies on ISO 75 Implementation

**• 2 Understanding the ISO 75 Standard: Scope and Objectives —**

6 classes

- › 2.1 Explore the History and Development of ISO 75 Standards
- › 2.2 Identify Key Components of the ISO 75 Standard
- › 2.3 Discuss the Importance of Plastic Temperature Deflection Testing
- › 2.4 Analyze the Scope and Limitations of the ISO 75 Standard
- › 2.5 Illustrate the Application of ISO 75 in Quality Control
- › 2.6 Evaluate Compliance and Challenges in ISO 75 Implementation

**• 3 Testing Methodologies for ISO 75 Compliance —**

6 classes

- › 3.1 Identify Key Elements of ISO 75 Standards
- › 3.2 Explain the Importance of Temperature of Deflection Under Load
- › 3.3 Outline Testing Methodologies for ISO 75 Compliance
- › 3.4 Demonstrate Sample Preparation for Testing
- › 3.5 Analyze Data Collection Techniques in ISO 75 Testing
- › 3.6 Evaluate Results to Ensure ISO 75 Compliance

**• 4 Interpreting ISO 75 Results and Data Analysis —**

6 classes

- › 4.1 Identify Key Components of ISO 75 Results
- › 4.2 Analyze Deflection Measurements in Data Sets
- › 4.3 Compare Material Performance Based on ISO 75 Standards
- › 4.4 Interpret Graphical Representations of Test Results
- › 4.5 Evaluate Compliance with ISO 75 Regulations
- › 4.6 Apply ISO 75 Data in Practical Scenarios

**• 5 Applications of ISO 75 in Industry and Future Developments —**

6 classes

- › 5.1 Examine the Importance of ISO 75 in Material Selection
- › 5.2 Identify Key Industries Utilizing ISO 75 Standards
- › 5.3 Analyze Case Studies: ISO 75 in Action
- › 5.4 Discuss Benefits of ISO 75 Compliance in Manufacturing
- › 5.5 Explore Innovations in Temperature Testing Methodologies
- › 5.6 Predict Future Trends Impacting ISO 75 Applications