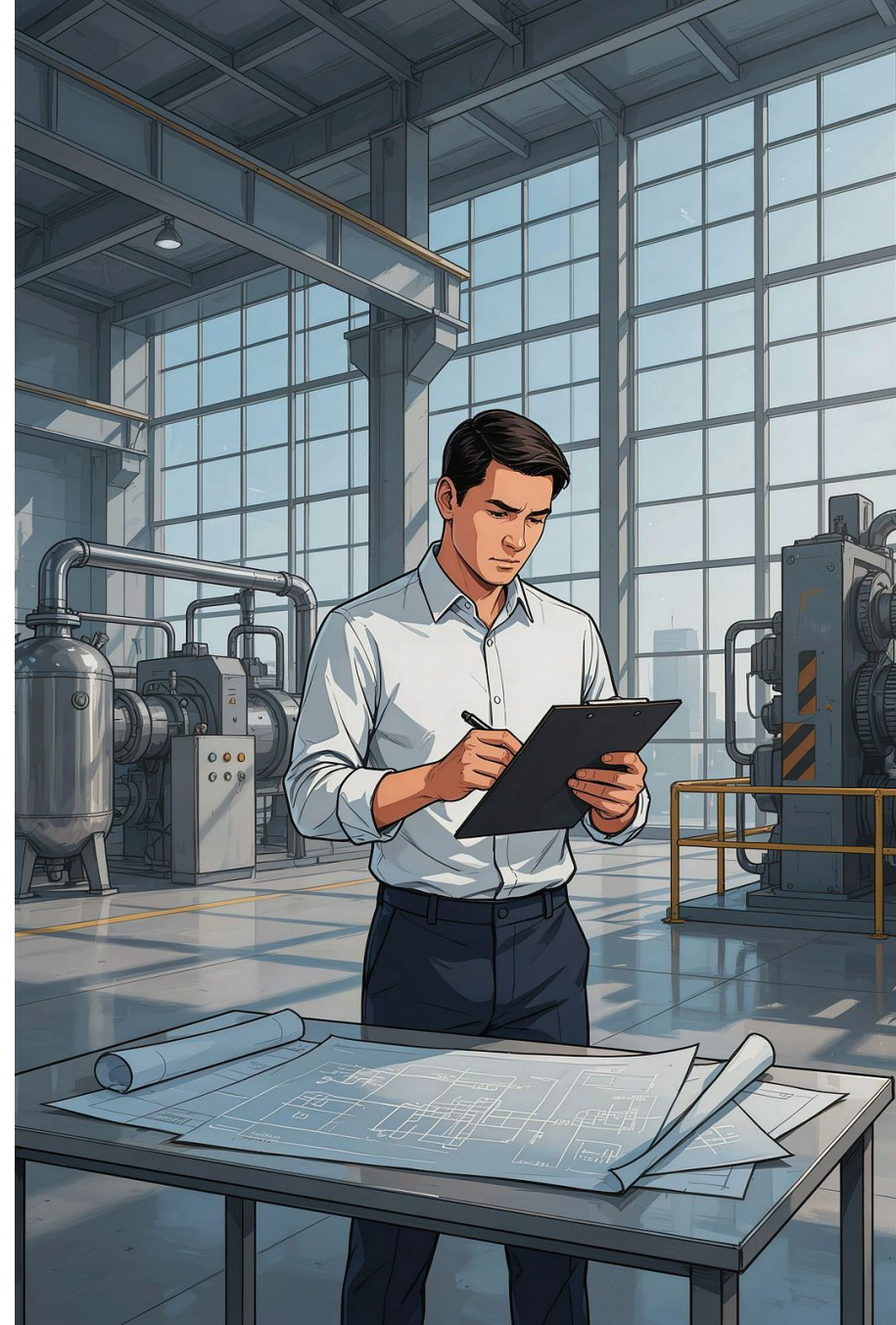


2.1 Critically Evaluate the Principles and Structure of ISO 45001

Learning Outcome: By the end of this session, learners should be able to critically evaluate the principles and structure of ISO 45001:2018 Occupational Health and Safety Management Systems (OH&SMS). Learners will examine the Plan-Do-Check-Act (PDCA) cycle, risk-based thinking, leadership commitment, the High-Level Structure (HLS), and governance mechanisms that support continual improvement and organisational resilience.



Learning Objectives

After completing this topic, learners will be able to:

01

Explain the purpose and principles of ISO 45001.

02

Evaluate the application of the Plan-Do-Check-Act (PDCA) cycle.

03

Analyse the importance of risk-based thinking and leadership commitment.

04

Explain the High-Level Structure (Annex SL) and its benefits.

05

Evaluate how ISO 45001 supports governance, accountability, and continual improvement.



Introduction

ISO 45001:2018 is the world's first internationally recognised standard for Occupational Health and Safety Management Systems (OH&SMS). Published by the International Organization for Standardization (ISO), it provides organisations with a systematic framework for preventing work-related injuries and ill health while continually improving OH&S performance. Unlike earlier standards that focused primarily on compliance, ISO 45001 promotes proactive leadership, worker participation, risk-based thinking, and integration of occupational health and safety into overall business strategy. It is applicable to organisations of all sizes and sectors and aligns with other ISO management system standards, enabling organisations to integrate quality, environmental, and occupational health and safety management into a single framework.

What is ISO 45001?

ISO 45001:2018 is an international standard that specifies the requirements for establishing, implementing, maintaining, and continually improving an Occupational Health and Safety Management System (OH&SMS). Its primary objectives are to:

- Prevent work-related injury and ill health.
- Provide safe and healthy workplaces.
- Eliminate hazards and reduce OH&S risks.
- Fulfil legal and other compliance obligations.
- Improve OH&S performance through continual improvement.

Principles of ISO 45001

ISO 45001 is based on several key principles:

Leadership and commitment

Worker consultation and participation

Risk-based thinking

Process approach

Continual improvement

Evidence-based decision-making

Organisational context

Compliance obligations

Integration with business strategy

These principles ensure that occupational health and safety becomes part of organisational culture rather than a stand-alone compliance activity.

Plan-Do-Check-Act (PDCA) Cycle

ISO 45001 follows the Plan-Do-Check-Act (PDCA) continual improvement model.

Stage	Purpose	Example
Plan	Identify hazards, assess risks, establish objectives and processes	Conduct risk assessments and develop OH&S objectives
Do	Implement planned processes and controls	Provide training, implement safe work procedures and operational controls
Check	Monitor, measure and evaluate performance	Conduct inspections, audits and performance reviews
Act	Correct deficiencies and improve the system	Implement corrective actions and update procedures

Why PDCA is Important

The PDCA cycle:

Promotes continual improvement.

Encourages proactive risk management.

Improves organisational learning.

Supports evidence-based decision-making.

Strengthens governance and accountability.

Risk-Based Thinking and Leadership Commitment

Risk-Based Thinking

ISO 45001 requires organisations to identify hazards, assess risks, and determine opportunities before implementing controls. Risk-based thinking involves:

Identifying hazards proactively.

Assessing likelihood and consequences.

Applying the Hierarchy of Controls.

Monitoring risks continuously.

Reviewing emerging risks.

The emphasis is on preventing incidents before they occur, rather than reacting after failures.

Leadership Commitment

Unlike previous OH&S standards, ISO 45001 places significant responsibility on top management. Leadership responsibilities include:



Establishing the OH&S policy.



Integrating OH&S into business processes.



Providing resources.



Promoting a positive safety culture.



Supporting worker participation.



Monitoring performance.



Driving continual improvement.

Visible leadership commitment is essential for an effective management system.

High-Level Structure (Annex SL)

ISO 45001 adopts the Annex SL High-Level Structure, enabling compatibility with other ISO management system standards.

Ten Clauses of ISO 45001

Clause	Purpose
1	Scope
2	Normative References
3	Terms and Definitions
4	Context of the Organisation
5	Leadership and Worker Participation
6	Planning
7	Support
8	Operation
9	Performance Evaluation
10	Improvement

The HLS enables easier integration with:

ISO 9001

Quality

ISO 14001

Environment

ISO 50001

Energy

ISO 27001

Information Security

Benefits of the High-Level Structure

The HLS:

Creates consistency across ISO standards.

Reduces duplication.

Simplifies integrated management systems.

Improves governance.

Enhances strategic alignment.

Supports organisational efficiency.

Governance and Accountability Mechanisms

ISO 45001 strengthens governance by clearly assigning responsibilities and promoting accountability. Key governance mechanisms include:

Leadership commitment.

Defined organisational roles.

Legal compliance monitoring.

Worker consultation and participation.

Internal audits.

Management reviews.

Performance measurement.

Corrective actions.

Continual improvement.

These mechanisms ensure that OH&S performance is regularly monitored and improved.

Advantages and Limitations of ISO 45001

Advantages	Limitations
Internationally recognised	Requires leadership commitment to be effective
Encourages proactive risk management	Can be resource-intensive for smaller organisations
Supports legal compliance	Certification alone does not guarantee good safety performance
Integrates easily with other ISO standards	Success depends on organisational culture and employee engagement
Improves stakeholder confidence	Poor implementation may result in excessive documentation without meaningful improvement

International Standards Supporting ISO 45001

ISO 45001 is closely aligned with:

ISO 9001:2015

Quality Management Systems.

ISO 14001:2015

Environmental Management Systems.

ISO 31000:2018

Risk Management.

ISO 19011:2018

Guidelines for Auditing Management Systems.

ILO-OSH 2001

ILO Guidelines on Occupational Safety and Health Management Systems.

Practical Case Study

Scenario

A multinational manufacturing organisation experiences repeated manual handling injuries and inconsistent safety practices across multiple sites. The organisation implements ISO 45001 by:

Analysing organisational context (Clause 4).

Demonstrating leadership commitment (Clause 5).

Conducting hazard identification and risk assessments (Clause 6).

Providing training and resources (Clause 7).

Implementing operational controls (Clause 8).

Monitoring KPIs and conducting internal audits (Clause 9).

Taking corrective actions following incident investigations (Clause 10).

- ✔ Outcome: Within two years, injury rates decrease significantly, legal compliance improves, employee participation increases, and the organisation successfully integrates ISO 45001 with ISO 9001 and ISO 14001.

Critical Evaluation

ISO 45001 represents a significant advancement in occupational health and safety management by moving beyond compliance towards strategic risk management, leadership accountability, and continual improvement. Its emphasis on organisational context, worker participation, and risk-based thinking enables organisations to proactively manage OH&S risks while supporting business objectives. The adoption of the Annex SL High-Level Structure also facilitates integration with other management systems, improving efficiency and governance.

However, ISO 45001 is not a guarantee of good safety performance. Its effectiveness depends on genuine leadership commitment, active worker participation, adequate resources, and a culture that prioritises continual improvement rather than certification alone.





Summary Table

ISO 45001 Principle	Contribution to OH&S Performance
PDCA Cycle	Drives continual improvement
Risk-Based Thinking	Prevents incidents through proactive risk management
Leadership Commitment	Strengthens governance and organisational culture
High-Level Structure (Annex SL)	Enables integration with other ISO standards
Worker Participation	Improves hazard identification and ownership
Governance Mechanisms	Promote accountability, compliance, and continual improvement



Reflective Questions

1

Why is leadership commitment considered one of the most important requirements of ISO 45001?

2

How does the PDCA cycle support continual improvement within an OH&S management system?

3

What advantages does the High-Level Structure provide for organisations implementing multiple ISO standards?

4

Why is risk-based thinking more effective than relying solely on reactive safety management?

Key Takeaways

- ISO 45001:2018 provides a systematic framework for managing occupational health and safety risks and improving organisational performance.
- The Plan–Do–Check–Act (PDCA) cycle promotes continual improvement through planning, implementation, monitoring, and corrective action.
- Risk-based thinking and leadership commitment are fundamental principles that distinguish ISO 45001 from earlier OH&S standards.
- The Annex SL High-Level Structure enables seamless integration with standards such as ISO 9001 and ISO 14001.
- Effective governance mechanisms—including leadership, worker participation, audits, management reviews, and corrective actions—support accountability, legal compliance, and continual improvement.
- The success of ISO 45001 depends not on certification alone but on committed leadership, engaged workers, and a culture of continuous improvement.