

## Machine Safety Assessor Course

Accidents involving machinery are among the most common workplace accidents. It is essential to correctly assess and reduce machine-related risks to effectively lower the accident rate. The "Machine Safety Assessor" course was first offered and examined in Thailand in 2015. This was made possible by experts from the Technology Promotion Association (Thai-Japan), with support and knowledge transfer from NECA (Nippon Electric Control Technology Industries Association), to widely disseminate knowledge on "Safe Machine Design and Use" in accordance with ISO/IEC standards within the country.

The course content is divided into 3 levels:

- **Safety Basic Assessor (SBA)**

Introductory Machine Safety Assessor Course

- **Safety Sub Assessor (SSA)**

Intermediate Machine Safety Assessor Course

- **Safety Assessor (SA)**

Advanced Machine Safety Assessor Course




### Certificate & Card



### Schedule SBA, SSA, SA 2025

SBA (Safety Basic Assessor)		
Training / Test	3 Feb 2025	E24VS006SC
Training / Test	7 May 2025	E25VS001SC
Training / Test	7 Aug 2025	E25VS002SC
Training / Test	2 Dec 2025	E25VS005SC
SSA (Safety Sub Assessor)		
Training	2 – 4 Jul 2025	E25VS006SC
Test	16 Jul 2025	
Training	17 – 19 Sep 2025	E25VS003SC
Test	30 Sep 2025	
SA (Safety Assessor)		
Training	17 - 19 Nov 2025	E25VS004SC
Test	25 Nov 2025	

### Contact for more information

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# Safety Basic Assessor (SBA)



## Introductory Machine Safety Assessor Course

Workplace safety is an important indicator of management performance, alongside quality, cost and delivery. Workplace accidents can lead to injuries or even fatalities, and inevitably affect employee morale, especially those involving machinery, which occur frequently. We can reduce the rate of machine-related accidents by sufficiently assessing risks in all tasks involving human interaction and implementing appropriate risk reduction measures.

### What you will gain

- 1) Increased awareness and consciousness of machine-related workplace safety within the establishment.
- 2) Ability to explain the structure of international machine safety standards and Thailand's safety standard system.
- 3) Ability to explain the basics of machine safety risk assessment and steps of risk reduction according to ISO 12100.
- 4) Familiarity with examples of various safety devices and the ability to select appropriate ones.
- 5) Understanding of international standards for preventing hazards from ergonomic errors in work.
- 6) Ability to explain how electric shocks occur and how to prevent them.



### Course Content

- Why safety comes first (raising safety awareness).
- Structure of international machine safety standards and Thai safety laws.
- Terminology related to machine safety.
- Fundamentals of machine safety risk assessment (ISO 12100)
- Concepts and steps of risk reduction according to ISO 12100
  - Inherently Safe Design Measures
  - Safeguarding and Complementary Protective Measure
  - Information for Use
- Guards and Interlocks
- Examples of machine safety devices such as safety light curtains, interlocking guards, laser scanners, emergency stop buttons, etc.
- Human and Machine Interface
- Protection against electrical shock



### Who should attend

- Safety officers at management, professional, and supervisory levels.
- Engineers who design, manufacture or procure machinery.
- Factory engineers or those responsible for improving machinery and/or work processes.
- General public interested in increasing knowledge of machine-related workplace safety.

### Qualifications

- High Vocational Certificate level or equivalent and above.
- Industrial technician, engineering or related fields.

### Price (Training and Exam 1 time)

**General Public 3,500 Baht**  
**(including VAT: 3,745 Baht)**  
**Members 3,000 Baht**  
**(including VAT: 3,210 Baht)**

### Contact for more information



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# Safety Sub Assessor (SSA)



## Intermediate Machine Safety Assessor Course

This course is the "Intermediate Machine Safety Assessor" program, which contains more in-depth and practical knowledge for safe machine operation. It covers detailed design and risk assessment and prepares participants for higher-level learning (Safety Assessor: SA).

### What you will gain

- 1) Ability to correctly and practically machine safety risk assessment.
- 2) Ability to conceive and define appropriate preventive measures to eliminate or reduce risks.
- 3) Ability to determine guard installation positions and design safe opening sizes for guards.
- 4) Ability to calculate safety distances for installing electrical protective devices.
- 5) Ability to explain the concept of electrical hazard prevention for machine equipment.
- 6) Understanding of international standards for preventing hazards from ergonomic errors in work.
- 7) Understanding of general principles for designing Safety-Related Parts of Control Systems (SRP/CS).

### Course Content

#### Day 1

- In-depth machine safety risk assessment (ISO 12100).
- In-depth 3-Step Method for eliminating or reducing risks.

#### Day 2

- Guards and Interlocks and determining safety distances for guard installation (ISO 14120 / ISO 13857).
- Determining safety distances for installing protective devices (ISO 13855).
- Protection against electrical shock and fire from machine equipment.
- Human and Machine Interface.

#### Day 3

- General principles for designing Safety-Related Parts of Control Systems: SRP/CS (ISO 13849-1)
- Workshop on machine safety risk assessment.



### Who should attend

- Safety officers at management, professional, and supervisory levels.
- Engineers who design, manufacture or procure machinery.
- Factory engineers or those responsible for improving machinery and/or work processes.
- General public interested in increasing knowledge of machine-related workplace safety.



### Qualifications

Only those who have completed the training and passed the SBA level examination

### Contact for more information



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## Price (Training and Exam 1 time)

**General Public 8,500 Baht**

**(including VAT: 9,095 Baht)**

**Members 7,800 Baht**

**(including VAT: 8,346 Baht)**

# Safety Assessor (SA)



## Advanced Machine Safety Assessor Course

This course is the "Advanced Machine Safety Assessor" program, which includes additional in-depth knowledge for design, risk assessment, and defining protective measures to eliminate or reduce risks. It covers the design of safety control systems, calculation of performance level and validation of design.

### What you will gain

- 1) Understanding of the roles and responsibilities of machine safety assessors at all levels.
- 2) Ability to apply international machine safety standards.
- 3) Ability to design electrical safety measures and electrical control circuits related to machinery.
- 4) Knowledge of machine design for safety, covering critical aspects of current machine operations.
- 5) Ability to design, assess and validate the design of SRP/CS.
- 6) Ability to define appropriate and concrete protective measures to eliminate or reduce machine safety risks.

### Course Content

#### Day 1

- Examples of applying international machine safety standards.
- Electrical safety of machinery.

#### Day 2

- Safety technology for control systems and safety design in pneumatic systems.
- Exercise on designing protective measures to eliminate or reduce risks.
- Evaluation of the achieved performance level.

#### Day 3

- Design of safety control systems and calculation of performance level.
- Validation of the design of Safety-Related Parts of Control Systems: SRP/CS (ISO 13849-2).
- Workshop on machine safety risk assessment and risk reduction.



### Who should attend

- Engineers who design, manufacture or procure machinery.
- Engineers or technicians responsible for improving machinery.

### Qualifications

Only those who have completed the training and passed the SSA level examination



## Price (Training and Exam 1 time)

**General Public 9,500 Baht**

**(including VAT: 10,486 Baht)**

**Members 8,900 Baht**

**(including VAT: 9,523 Baht)**

### Contact for more information



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