

**“To prevent industrial accidents”**





# **Safety Certification Guide**

**- Hazardous machines -**

# General

## Safety Certification

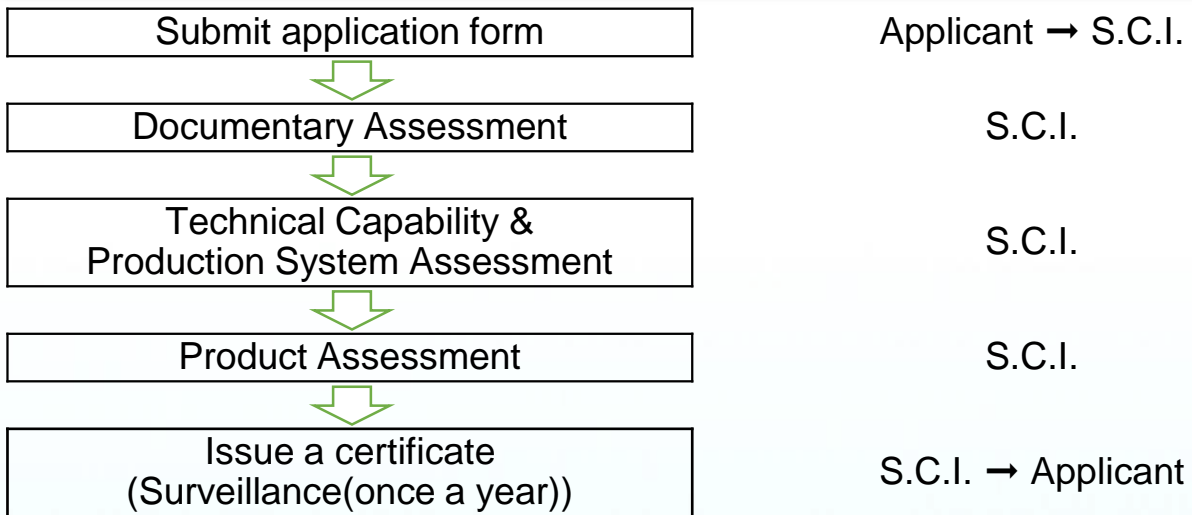
- Safety certification for 'Harmful/Hazardous machines/equipment' is a mandatory system to affix  marking on the machines to ensure that the machines meet requirements stipulated in all applicable regulations.
- It shall be achieved through Korean Notified Bodies designated by the Ministry of Labor. To permit the use of a  marking on a product, proof that the product meets relevant requirements must be documented.

## Report of Declaration of Conformity (D.o.C.)

- It shall be achieved by a company's internal self-certification process. Manufacturers or importers shall indicate that products conform to all safety requirements set out in Labor Notification.
- The declaration can be finalized by submitting suitable documents to Korea Occupational Safety and Health Agency(KOSHA).
  - Documents include instruction manual and materials showing conformity of all safety requirements such as EMC test report, etc.

# Procedure for mark

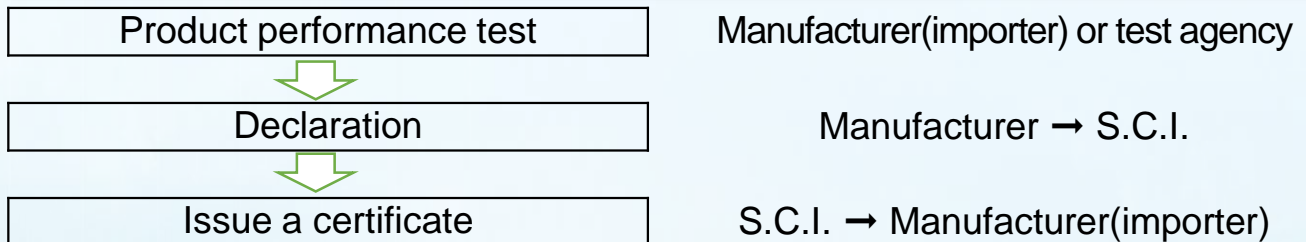
## Safety Certification



※ Technical capability & production system assessment and Surveillance is exempt for Cranes, Lifts and Pressure vessels

※ S.C.I.: Safety Certification Institution

## Report of Declaration of Conformity (D.o.C.)



## Processing period

Type of work		Processing period
Safety Certification	Documentary Assessment	Within 15 days from the date of application (Overseas: within 30 days)
	Technical Capability & Production System Assessment	Within 30days from the date of application (Overseas: within 45 days)
	Product Assessment	. Individual product assessment - Within 15 days from the date of application . Product type assessment - Within 30 days from the date of application
Declaration of Conformity		Within 15 days from the date of application

# Assessment

## Safety Certification

- **Documentary assessment**
  - To assess Technical documentation providing information on design, manufacture and parts of the applied product which is drawn up by applicants.
- **Technical capability & production system assessment**
  - To assess Technical capability & Production system of applied company
  - ✘ Objects under Individual products assessment, such as Cranes, Lifts, Pressure Vessels will be exempted from Technical capability & Production system assessment.
- **Product assessment**
  - To assess safety performance and function of applied products
  - 1) Individual product assessment: all the number of applied products should be subject to assessment.  
I.e.) Lifts, Cranes, Pressure Vessels, Gondola
  - 2) Product type assessment: Products manufactured for the first time should be subject to assessment by type  
I.e.) Presses, Shearing/folding machines, Hoists, Cranes fitted on vehicles, Rollers, Lifts (for moving only), Injection molding machines, Aerial work platforms, Gondola lifts (Seat-type gondola lifts only)
- **Surveillance**
  - To confirm whether the certified products and technical capability & production system are satisfied with all applied requirements.
  - ✘ Period : once a year (twice a year under the condition of well compliance with the rules or regulations of safety certification)

# Items and scope

## Safety Certification

Items	Scope
Cranes	o Cranes driven by power including hoist with rated load 0.5 ton or more. Mobile cranes ruled by the Construction Management Act are excluded
Pressure vessels	o Pressure vessel, served as containing or transporting the fluid in chemical process, or as handling an Air or Nitrogen, shall be true only if it is deemed for design pressure as gauge pressure to exceed 0.2 Mpa (2 kgf/cm <sup>2</sup> ). But Pressure Vessel served as the dimension of the inner diameter, width, height, and cross-section length of the vessel is no bigger than 150mm, regardless of length or pressure of the vessel shall be excluded.
Lifts	o Lifts with carrying load of 0.5ton or more(Lifts fitted on a vehicle and with carrying load of less than 0.1ton would be excluded) But, small lift or delivery equipment used for general working which has shorter running distance than 3.0m or the exclusive facilities worker's cannot access to as parts of Automatic Conveyor shall be excluded.
Presses, Shearing/Bending machine	o Presses, Shearing/Bending machines driven by power
Rollers	o Rollers which soften or deform rubber, rubber compounds and synthetic plastics by using roller pressure. But, the closed type rollers which workers cannot access to shall be excluded.
Injection molding machines	o Injection molding machines for the processing of plastics and/or rubber and driven by power.
Aerial work platforms	o All types and sizes of Aerial work platforms intended to move persons to working positions where they are carrying out work from the work platform
Gondola Lifts	o Gondolas driven by power, excluding the following case: - Gondolas installed on any type of crane. - Gondolas driven by any kind of engine. - Gondolas with an incline of 45 degrees or less. - Gondolas installed in any place within a workplace
Portable Chain-Saw	o Portable-type sawing machines driven by motor with chain saw for processing wood such as logging, pruning, or etc. (excluding 'pole saw' for the process of wood pruning)

# Items and scope

## Report of Declaration of Conformity (D.o.C.)

Items	Scope
Grinders	◦Grinders for grinding, cutting, or polishing of workpiece using a power-driven abrasive wheel as the cutting tool. (exclude portable type)
Industrial Robots	◦Fixed-type of robots which have more than 3 manipulators including cartesian coordinate robot, and are automatically controlled and programmed through designated controllers
Mixers	◦Mixers combining the materials using different types of blades fixed on a live spindle.
Crushers	◦Crushers reducing the size of materials (e.g. rock, metal, plastic) into smaller ones excluding one with a capacity of under 50kg per hour and food crushers.
Food processing machine (Crushers, Cutters, Mixers, Noodle making machines)	<ul style="list-style-type: none"> <li>◦Food crushers: Crushers which crush food such as vegetables, meat, grain or fish</li> <li>◦Food cutters: Cutters which cut food such as vegetables, meat, grain or fish into certain size</li> <li>◦Food mixers: Mixers which mix food such as vegetables, meat, grain or fish</li> <li>◦Noodle making machines: Machines which make noodles in certain length from grain flour such as wheat flour or buckwheat flour</li> </ul>
Conveyors	◦Power-driven belt; chain; roller; trolley; bucket; screw conveyors which automatically convey materials, half-finished goods, and freight excluding one can convey goods less than 3 meters
Automobile lifts	◦Power-driven machines lifting vehicles placed on the machines for check and maintenance

# Items and scope

## Report of Declaration of Conformity (D.o.C.)-continued

Items	Scope
Machine tools (Lathes, Drills, Planing machines, Shaping machines, Milling machines)	<ul style="list-style-type: none"> <li>◦Lathes: Lathes which rotate the workpiece (cylinder shape) on its axis to process by using cutting tools</li> <li>◦Drills: Drills which bore holes in materials fastened on a table using drill bit while advancing along its rotation axis</li> <li>◦Planing machines: Machines which process the surface of materials fastened on a table moving back-and-forth in horizontal way</li> <li>◦Shaping machines: Machines which cut the vertical plane of materials fastened on a table moving in a vertically reciprocating motion by ram</li> <li>◦Milling machines: Machines which process materials fastened on a table rotating cutting tools with several cutting edges</li> </ul>
Fixed-type wood processing machines (Circular sawing machines, Planing machines, Routers, Band sawing machines, Chamfering machines)	<ul style="list-style-type: none"> <li>◦Circular sawing machines: Machines which cut and process wood using rotating circular saw blade</li> <li>◦Planing machines: Machines which process materials by planing, chasing or chamfering with rotating saw blade</li> <li>◦Routers: Routers which carve, chamfer, or cut with a high-speed rotating tool</li> <li>◦Band sawing machines: Machines which process wood materials by rotating an endless-type band saw blade; The band usually rides on two wheels (top and bottom or left and right) attached on the frame.</li> <li>◦Chamfering machines: Machines which cut curved surface or in curve shape and other process with a rotating tool</li> </ul>
Printing presses	<ul style="list-style-type: none"> <li>◦Presses for printing ink onto a print medium such as paper, film, cloth, etc. The device applies pressure to print. This can include cutters, binders, paper reversers.</li> </ul>
Chambers	<ul style="list-style-type: none"> <li>◦Chambers which apply or reduce pressure to workers working under water (excluding medical apparatus)</li> </ul>

# Related Act and Penalty

## Safety Certification

### [Article 34 to 34-4 of the Occupational Safety and Health Act]

- Notification of procedure for Safety Certification and Declaration of Conformity (Labor Notification No.2017-24)
- Notification of Safety Certification for Harmful/Hazardous machinery and equipment (Labor Notification No.2016-29)

## Report of Declaration of Conformity (D.o.C.)

### [Article 35 to 35-4 of the Occupational Safety and Health Act]

- Notification of procedure for Safety Certification or Declaration of Conformity (Labor Notification No.2017-24)
- Notification of Declaration of Conformity (Labor Notification No.2015-24)

## Fee

- Fees for Occupational Safety and Health services (Labor Notification No.2017-6)

# Penalty

Regulation	Penalty	Reference
Safety Certification	Less than 3 years in prison or a fine not exceeding 20 million won	Article 67-2 of the Occupational Safety and Health Act
Declaration of Conformity	A fine not exceeding 10 million won	Article 69 of the Occupational Safety and Health Act



# Required documents

## Safety Certification

Assessment	Required Documents
Documentary Assessment	<ol style="list-style-type: none"> <li>1. Application form</li> <li>2. A copy of business license</li> <li>3. Documents verifying the state of import (only applied to import)</li> <li>4. Documents verifying identification of representative (when a manufacturer at an overseas site designate a Korean resident as its representative)</li> <li>5. Specification and Instruction manual of the machinery, apparatus, and equipment</li> <li>6. Assembling drawings of the machinery, apparatus, and equipment</li> <li>7. Specifications and drawings related to the protective devices included in the machinery, apparatus, and equipment</li> <li>8. Strength calculation and strength-related drawings of parts, materials, or bodies of the machinery, apparatus, and equipment only including the followings:               <ol style="list-style-type: none"> <li>a. Drawings of Individual component of parts, materials, or finished goods of the machinery and apparatus; Detailed drawings to check the structure and strength calculation</li> <li>b. Drawings of electronic components including electronic network diagrams, etc.</li> <li>c. Drawings of hydraulic or pneumatic components including network diagrams, etc.</li> </ol> </li> </ol>
Technical Capability & Production System Assessment	<ol style="list-style-type: none"> <li>1. Application form</li> <li>2. Documents verifying followings:               <ol style="list-style-type: none"> <li>a. Way to establish and implement Quality Management System</li> <li>b. Procedure and content to check the safety of the product</li> <li>c. Procedure and content of follow-ups before and after the process production management and product shipments</li> <li>d. Identification system of parts and products and preservation measures of products</li> <li>e. Facility management and management of test &amp; inspection equipment</li> <li>f. Proposal process of defective products</li> <li>g. Procedure to deal with customer complaint and the follow-ups</li> </ol> </li> </ol>

# Required documents

## Safety Certification

Cases	Required Documents
Product Assessment	<ol style="list-style-type: none"><li>1. Application form</li><li>2. Notification of the result of documentary assessment</li><li>3. Notification of Technical Capability &amp; Production System (only for product type assessment)</li><li>4. Test report of every material within the machinery, apparatus, and equipment</li><li>5. Arrangement drawings of machinery, apparatus, and equipment (only for product to be installed)</li><li>6. Documents verifying safety of the structure for supporting cranes (10 tons or more of rated load)</li></ol>

## Report of Declaration of Conformity (D.o.C.)

Required Documents
<ol style="list-style-type: none"><li>1. Application form</li><li>2. Instruction manual of the product</li><li>3. Documents verifying the qualification of machinery or apparatus subject to self-regulatory safety check, which meet the self-regulatory safety standards<ol style="list-style-type: none"><li>a. Result of risk assessment</li><li>b. Test result by KOSHA or qualified inspection institutions (or the result of self-regulatory safety check)</li></ol></li></ol>

# Fee for Certification

## Fee (Common)

- Fee for domestic manufactured machine and apparatus
  - Documentary/product assessment: Assigned fee of every product + travel expenses
  - Technical capability & product system assessment: KRW 125,000 + travel expenses
  - Surveillance: 50% of Technical capability & product system assessment fee + product assessment fee + travel expenses
- Fee for overseas manufactured machine and apparatus
  - Assigned fee of every product + standard fee (KRW 480,000) × days of assessment × number of examiner + travel expenses

※ Standard fee annually reflects the increase rate of the unit cost of wage for intermediate-level technician in "industrial factory" based on the standard cost of engineering business from year 2014.

※ Travel expenses (within the standard travel expenses of the fifth class public official in accordance with the rules of the travel expenses of public official)

※ Days of assessment

Types of assessment	1-2 models	3-5 models	6 models or more
Documentary, technical capability & product system, surveillance	2 days		
Product	1 day	2 days	3 days

- Under the circumstances of more than 2 days of travel, every 2 days of travel will be counted as a day of assessment.

- Fee for issue of Certificate
  - Fee for re-issue or additional issue of test report: KRW 5,000 per application

# Fee for Certification

(unit : Korean won)

Products		Payment for safety certification				
		Documentary assessment			product assessment	
Cranes	Ceiling, Gantry	Rated load			Rated load	
		under 10ton	172,000		under 10ton	66,000
		under 50ton	193,000		under 50ton	71,000
		under 100ton	215,000		under 100ton	75,000
		100ton or more	236,000		200ton or less	79,000
					500ton or less	101,000
	Hoist	129,000			Rated load	
					under 5ton	58,000
					5 ton or more	62,000
	Tower, Jib, Vehicle mounted and Others	Rated load			Rated load	
		under 50ton	215,000		under 10ton	101,000
		50ton and more	280,000		under 50ton	107,000
					100ton or less	116,000
				over 100ton	116,000 +116,000 per100ton (Overall payment must not exceed 500,000)	
	Unloader	Rated load			Rated load	
under 30ton		323,000		under 30ton	168,000	
30ton or more		430,000		under 50ton	216,000	
				50ton and more	259,000	
Lifts, Gondola	107,000			53,000		
Pressure Vessels	Inner volume	Class "Gab"	Class "Eul"	Internal volume	Class "Gab"	Class "Eul"
	under 5m <sup>3</sup>	172,000	86,000	under 2m <sup>3</sup>	34,000	16,000
				under 5m <sup>3</sup>	43,000	19,000
	under 30m <sup>3</sup>	193,000	107,000	under 30m <sup>3</sup>	64,000	24,000
	30m <sup>3</sup> or more	215,000	129,000	40m <sup>3</sup> or less	77,000	32,000
				100m <sup>3</sup> or less	82,000	38,000
				over 100m <sup>3</sup>	82,000 +82,000 per 100m <sup>3</sup> (Overall payment must not exceed 500,000)	38,000 +38,000 per 100m <sup>3</sup> (Overall payment must not exceed 500,000)

# Fee for Certification

(unit : Korean won)

Products	Payment for Safety certification			
	Documentary assessment		product assessment	
Presses and shearing/ Bending machines	pressing capacity		pressing capacity	
	Less than 200ton	140,000	under 50ton	34,000
			under 200ton	43,000
	200ton or more	183,000	300ton or less	51,000
			500ton or less	62,000
over 500ton			62,000+ 62,000 per 500ton (Overall payment must not exceed 500,000)	
Machine Saw	240,000		500,000	
Rollers	140,000		49,000	
Injection molding machines	Clamping force		Clamping force	
	Less than 2,942kN	140,000	less 294kN	34,000
			less 2,942kN	43,000
	2,942kN or more	183,000	5,884kN or less	51,000
over 5,884kN			51,000+ 51,000 per 1,000kN (Overall payment must not exceed 500,000)	
Aerial work platforms	107,000		53,000	

For more information, please contact  
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