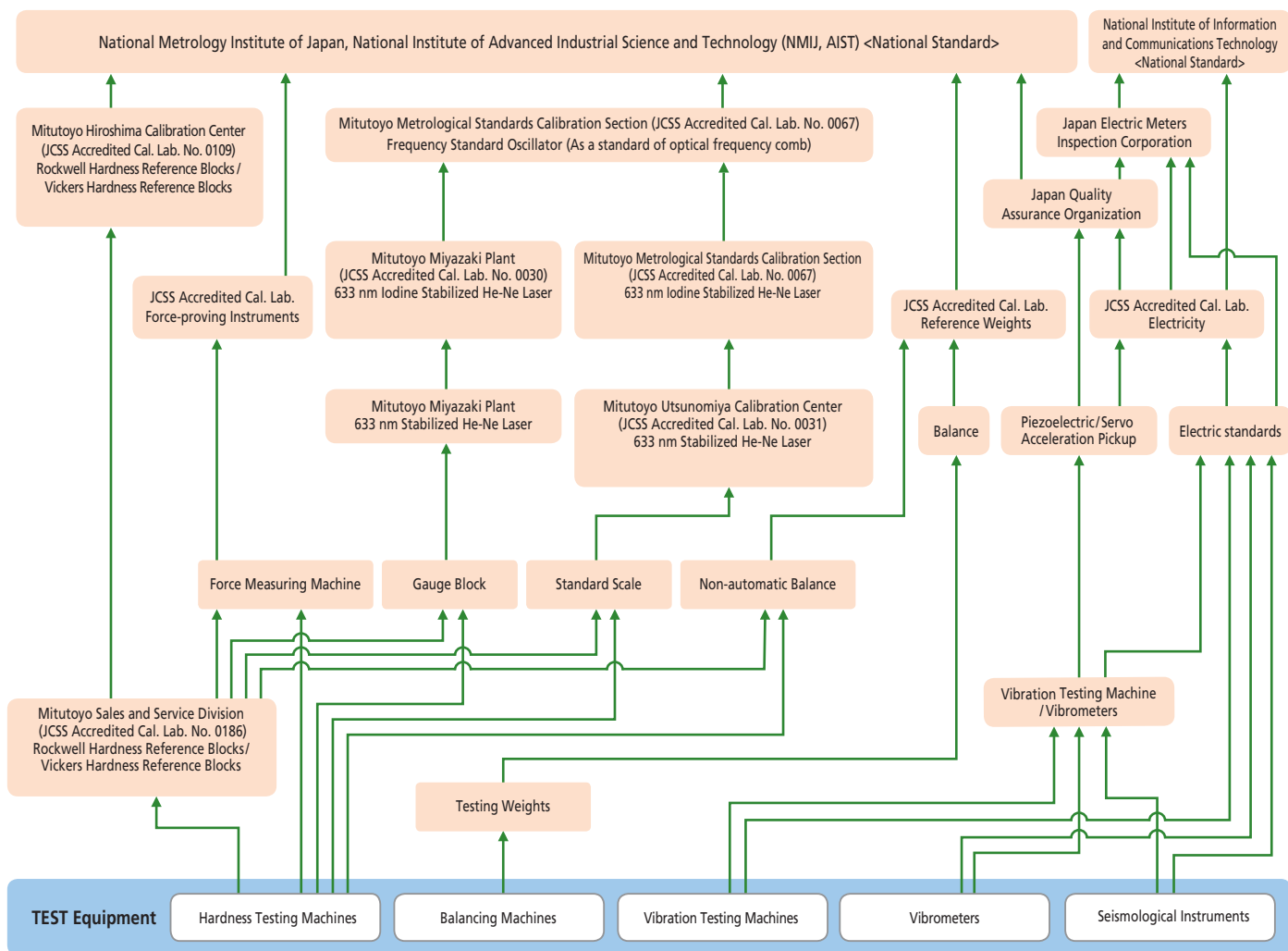


Traceability of Test Equipment



Note: This chart shows a simplified traceability system of a part of Mitutoyo products. Detailed traceability charts are published for each product. (As of July, 2022)

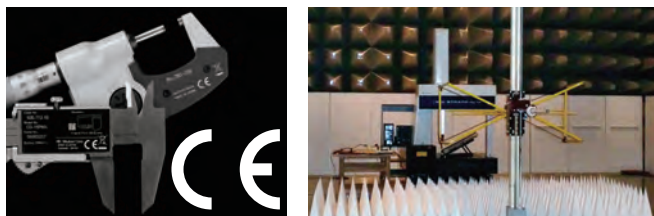
For the latest information, please refer to our website. <https://www.mitutoyo.co.jp>

Response to Safety and Environmental Protection Regulations

To deliver safe and reliable products to our customers, Mitutoyo evaluates its products to ensure that they adhere to applicable product safety and environmental standards, including CE marking.

CE Marking

CE marking indicates that a product complies with the essential requirements of the relevant European health, safety and environmental protection legislation.



Conformity evaluation for CE marking (EMC Directives)


Major applicable Directives relating to Mitutoyo products

Applicable Directives	Applicable range
Machinery Directive	At least one part of a machine that may cause injury to the human body if it moves due to movement of an actuator such as a motor.
EMC Directive (Electromagnetic Compatibility Directive)	A product that may produce electromagnetic radiation or which is influenced by electromagnetic radiation from outside.
Low Voltage Directive	Equipment (device) that uses AC voltage of 50 to 1000 V or DC voltage of 75 to 1500 V.
Radio Equipment Directive	All electrical and electronic equipment that intentionally transmits and receives radio waves at frequencies below 3000 GHz.
RoHS Directive	Restriction of the use of certain hazardous substances in electrical and electronic equipment. Restricted substances and maximum concentration values tolerated by weight: <ul style="list-style-type: none"> · Lead (0.1%) · Cadmium (0.01%) · Mercury (0.1%) · Hexavalent chromium (0.1%) · Polybrominated biphenyls (PBB) (0.1%) · Polybrominated diphenyl ethers (PBDE) (0.1%) · Bis (2-ethylhexyl) phthalate (DEHP) (0.1%) · Butyl benzyl phthalate (BBP) (0.1%) · Dibutyl phthalate (DBP) (0.1%) · Diisobutyl phthalate (DIBP) (0.1%) Note: Our products fall under Cat.9 "Monitoring and control instruments including industrial monitoring and control instruments".

UKCA Marking

UKCA marking indicates that the products conform to the applicable requirements for products sold in Great Britain.

Response to WEEE Directive

The WEEE Directive*1 is a directive that mandates appropriate collection and recycling of electrical and electronic equipment waste. The purpose of this directive is to increase the reuse and recycling of these products. To differentiate between equipment waste and household waste, a crossed-out wheeled-bin symbol  is marked on a product.

*1 WEEE Directive: Directive 2012/19/EU of the European Parliament and of the Council on waste electrical and electronic equipment.

Response to REACH Regulation

REACH Regulation*2 is a regulation governing registration, evaluation, authorization and restriction of chemical substances in Europe, and all products such as substances, mixtures and molded products (including accessories and packaging materials) are regulated.

Chemical substances scientifically proven to be substances that are hazardous to human health and the global environment (Candidate List of substances of very high concern for Authorisation (CLSV)) are prohibited to be sold or information concerning them disclosed is mandated in Europe.

We will actively disclose information about our products and provide replacement if we find our products contain any of the listed substances.

*2 REACH Regulation: Regulation (EC) No1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorization and Restriction of Chemicals

Response to Management Methods for Restricted Use of Hazardous Substances in Electrical and Electronic Product (China RoHS 2)

We set the environmental protection use period regulated by China RoHS 2 per product and label with the marks shown on the right, together with a list of the contained substances.



"Environmental Protection Use Period" mark*3

*3 The environmental protection use period does not indicate the product warranty period.

Precautions to be taken when handling button cells


Warning

Failure to comply with the following could result in "death or serious injury".


- Do not place the cell within an infant's reach. If swallowed, contact a doctor immediately.
- Do not dismantle, heat or throw the cell in a fire.
- If alkaline solution leaks from the cell and contacts your skin or clothes, immediately wash the affected area with water. IF IN EYES, immediately rinse eyes cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing and summon immediate assistance from a doctor.


Caution

Failure to comply with the following could result in "injury".

- Do not try to charge the cell as it is not chargeable. Install the cell with correct polarity. Failure to do so can cause cell leakage or burst resulting in damage to the instrument or personal injury.
- Do not solder directly to a cell.
- Do not use new and used cells together. Do not use different types of cells together.
- Do not use nor leave cells in direct sunlight nor in locations subject to high temperature or humidity.
- Avoid letting cells contact water.
- Ensure cells are inserted without coming into contact with metal parts of equipment.
- Read the equipment instruction manual and precautions carefully before using.
- Remove cells from equipment that will not be used for a prolonged period.
- In case of disposal, insulate (+) and (-) terminals of a cell by applying an insulating material.
- Follow the regulations of each country when disposing of batteries.

Meaning of Symbols



ABSOLUTE is a trademark of Mitutoyo Corporation.

ABSOLUTE Linear Encoder

This is an electronic measuring scale that provides a direct readout of absolute linear position when switched on, without needing to be zeroed or reset. Mitutoyo measuring instruments incorporating these scales provide the significant benefit of being always ready for measurement without the need of preliminary setting after switching on. There are three types of absolute linear encoders depending on whether the method used is electrostatic, electromagnetic, or optical. They are widely used in various measuring instruments as measuring systems endowed with enhanced reliability of measured values.

Advantages:

1. No count error occurs even if you move the slider or spindle extremely rapidly.
2. You do not have to reset the system to zero when turning on the system after turning it off^{*1}.
3. As this type of encoder can drive with less power than the incremental encoder, the battery life is prolonged to about 5 years (continuous operation of 18,000 hours)^{*2} under normal use.

^{*1} Unless the battery is removed.

^{*2} In the case of ABSOLUTE Digimatic calipers and ABSOLUTE coolant proof calipers.



IP is a trademark of Mitutoyo Corporation.

IP Codes

These are codes that indicate the degree of protection provided (by an enclosure) for the electrical function of a product against the ingress of foreign bodies, dust and water as defined in IEC standards (IEC 60529: 2001) and JIS C 0920: 2003. [IEC: International Electrotechnical Commission]

First characteristic numeral	Degrees of protection against solid foreign objects	
	Brief description	Definition
0	Unprotected	—
1	Protected against solid foreign objects of ≥ 50 mm and greater	A ≥ 50 mm object probe shall not fully penetrate enclosure*
2	Protected against solid foreign objects of ≥ 12.5 mm and greater	A ≥ 12.5 mm object probe shall not fully penetrate enclosure*
3	Protected against solid foreign objects of ≥ 2.5 mm and greater	A ≥ 2.5 mm object probe shall not fully penetrate enclosure*
4	Protected against solid foreign objects of ≥ 1.0 mm and greater	A ≥ 1.0 mm object probe shall not fully penetrate enclosure*
5	Protected against dust	Ingress of dust is not totally prevented, but dust that does penetrate must not interfere with satisfactory operation of the apparatus or impair safety.
6	Dust-proof	No ingress of dust allowed.

* For details of the test conditions used in evaluating each degree of protection, please refer to the original standard.

Second characteristic numeral	Degrees of protection against water	
	Brief description	Definition
0	Unprotected	—
1	Protected against vertical water drops	Vertically falling water drops shall have no harmful effects.
2	Protected against vertical water drops within a tilt angle of 15°	Vertically falling water drops shall have no harmful effects when the enclosure is tilted at any angle up to 15° on either side of the vertical.
3	Protected against spraying water	Water sprayed at an angle up to 60° either side of the vertical shall have no harmful effects.
4	Protected against splashing water	Water splashed against the enclosure from any direction shall have no harmful effects.
5	Protected against water jets	Water projected in jets against the enclosure from any direction shall have no harmful effects.
6	Protected against powerful water jets	Water projected in powerful jets against the enclosure from any direction shall have no harmful effects.
7	Protection against water penetration	Ingress of water in quantities causing harmful effects shall not be possible when the enclosure is temporarily immersed in water under standardized conditions of pressure and time.
8	Protected against the effects of continuous immersion in water	Ingress of water in quantities causing harmful effects shall not be possible when the enclosure is continuously immersed in water under conditions which shall be agreed between manufacturer and user but which are more severe than for IPX7.

Third characteristic numeral	Degrees of protection against oil	
	Abstract	
F	Oil-resistant	Drops or splashes of oil from any direction cause no harmful effects.
G	Oil-proof	Protection against entry of oil droplets or splashes from all directions.

The protection levels against oil are specified only in the appendix of JIS C 0920.



Dust- and Water- Protected

TÜV Rheinland certification marks

All products with the marks shown on the left have passed the IP test carried out by the German accreditation organization, TÜV Rheinland.



Measuring Instruments Shipped with Inspection Certificate

Mitutoyo guarantees product quality as a leading precision measuring instrument manufacturer and ships measuring instruments with an inspection certificate that includes inspection data so that customers can use them with confidence. Mitutoyo also calibrates the purchased measuring instrument and issues, for a fee, a calibration certificate that proves traceability to the relevant standard.


Note: For the meaning of the inspection marks shown at left, refer to the detailed description of each product.



Data Management Software by Mitutoyo

MeasurLink® ENABLED marks

Products equipped with the measurement data output function can be connected to the measurement data network system MeasurLink®. MeasurLink® is a registered trademark of Mitutoyo Corporation in Japan and Mitutoyo America Corporation in the United States.



Installation of Main Unit Startup System

As a part of the enhancement of our export control system, the large CNC measuring machines (all the CNC Coordinate Measuring Machines, Vision Measuring Systems, and Form Measuring Machines) are now equipped with a Main Unit Startup System (relocation detecting system) before export.

This system is designed to take a machine out of operation upon detecting the mechanical shock that accompanies relocation. If you intend to relocate a measuring machine fitted with this system, please contact us beforehand so that our service engineers can assist you.

On the other hand, the system may be triggered in the event of a natural event such as a powerful earthquake. In this case, our service engineers will deal with the situation at the earliest opportunity.