

■ Japan Calibration Service System (JCSS)

What is JCSS (Japan Calibration Service System)?

JCSS consists of the National Standards Provision System and the Calibration Laboratory Accreditation System introduced by the revised Measurement Law that was enforced in November 1993. Calibration laboratories are assessed and accredited for their technological capabilities and traceability by the National Institute of Technology and Evaluation (NITE) to meet the requirements of certified international standard, ISO/IEC 17025.

What is MRA?

MRA (Mutual Recognition Arrangement) is an international agreement by which two or more countries agree to recognize one another's traceability system. JCSS signed an MRA with APLAC (Asia Pacific Laboratory Accreditation Cooperation) in December 1999, and signed an MRA with ILAC (International Laboratory Accreditation Cooperation) in November 2000. JCSS has been accepted as an accreditation operator conforming to international criteria.

JCSS Calibration Service (Stainless Steel Rule, Steel Tape Measure, Vernier Caliper, Micrometer)

The Quality Assurance Department at Shinwa Rules Co., Ltd. was registered as a registered calibration laboratory in the "length" field in February 2001 and accredited as an MRA conforming JCSS laboratory in November 2013. Under this program, we are able to issue a JCSS calibration certificate with an MRA accreditation symbol. This certificate is internationally accepted to conform to one of the MRA signatory countries.

Contents of Business

Shinwa Rules Co., Ltd. Quality Assurance Department Registration number 0092

Item / Scope of Service		Maximum Measurement Capability (Minimum Uncertainty of Measurement*)	Remark
Stainless Steel Rule Up to 1,000 mm		0.02 mm	Calibrated by Working Standard Calibratable graduation is 50 mm pitch
Stainless Steel Rule (The base point on the edge) Up to 1,000 mm		0.02 mm	
Stainless Steel Rule from 1,000 mm up to 2,000 mm		0.05 mm	
Stainless Steel Rule (The base point on the edge) from 1,000 mm up to 2,000 mm		0.06 mm	
Stainless Steel Rule (Precision type) Up to 1,000 mm		11 μm	Calibrated by Laboratory Reference Standard (Our highest rank gauge) Calibratable graduation is 100 mm pitch
Steel Tape Measure Up to 100 m		Up to 5 m: 0.08 mm More than 5 m up to 100 m: 0.08 mm added to the above value in every 5 m increase	Limited to tensile strength of more than 10 N up to 100 N Compact tape measures (with a hook and auto roll up function) are not included. Calibratable graduation is 1 m pitch
Vernier Caliper Up to 300mm	Scale Interval 0.10 mm	0.08 mm	Calibratable graduation is 20, 50, 100, 150, 200, 250, 300 mm **Depth probe zero point deviation* is not applicable
	Scale Interval 0.05 mm	0.06 mm	
	Scale Interval 0.02 mm	0.04 mm	
	Scale Interval 0.01 mm	0.03 mm	
Outside Micrometer Up to 50 mm		3 μm	Combination of 16-piece set of gauge blocks from 1 - 50 mm

*Uncertainty is based on the assumption that the absolute true value cannot be known, so variation etc. is comprehensively evaluated, and the value is statistically estimated to be within the range thought to include the true value.

Measuring Point

Applicable Calibration		Measuring Point	Additional Measuring Point
Stainless Steel Rule	Up to 2,000 mm	Basic 4 points are at 100 mm and the entire length on the upper and lower graduations. For 100 mm rules, they are at 50 mm and 100 mm on the upper and lower graduations. Please inquire about rules with only one side graduations or ones with graduations on both faces.	Measuring point can be added if requested, which will incur an extra charge to the package price. (Please see the next page for details.)
Stainless Steel Rule (Precision Type)	Up to 1,000 mm	1 point at every 100 mm (one side graduation) 10 points for 1,000 mm rules	
Steel Tape Measure	Up to 5 m	1 point per 1 m, 5 points for the total length of 5 m.	
	From 5 m – 20 m	1 point per 1 m up to 5 m, 1 point per 5 m for 5 m or more For the total length of 20 m, total 8 points at 1,2,3,4,5,10,15,20 m	
	From 20 m – 50 m	1 point per 1 m up to 5 m, 1 point per 5 m for 5 m or more For the total length of 50 m, total 14 points at 1,2,3,4,5,10,15,20...45, 50 m	
	From 50 m – 100 m	Set package is not available. Please specify your requirements.	Since there is no set package available, please inquire for an quote.
Vernier Caliper	70 mm	4 points at 20 mm and 50 mm for inside and outside	Measuring points can be added if requested, which will incur an extra charge to the package price. (Please see the next page for details.)
	100 mm	6 points at 20 mm, 50 mm, and 100 mm for inside and outside	
	150 mm	6 points at 50 mm, 100 mm, and 150 mm for inside and outside	
	200 mm	6 points at 50 mm, 100 mm, and 200 mm for inside and outside	
	300 mm	6 points at 100 mm, 200 mm, and 300 mm for inside and outside	
Micrometer	0 – 25 mm	Total 3 points at 1.25, 11.5, 25 mm	
	25 – 50 mm	Total 3 points at 25.25, 36.5, 50 mm	