

Name of Accreditation Program	JCSS Accreditation Program
Accreditation No.	JCSS0022
Date of Initial Accreditation	1994-03-01
Latest Date of Issue	2018-03-22
Name and Address of Accredited Organization	Laboratory, Japan Bearing Inspection Institute 2-1-7 Minamishimizu-cho, Sakai-ku, Sakai-shi, Osaka 590-0005, Japan JCN 8010705001292
Inquiry Point	Laboratory Tel: +81-72-238-0641      FAX: +81-72-229-5853
Accreditation Standards	ISO/IEC 17025:2005 (Calibration)
Accreditation Scope	As attached

\*JCN: Japan Corporate Number

General Field of Calibration: LengthDate of Initial Accreditation of the Field: 1994-03-01Permanent Laboratory/On-site Calibration: Permanent LaboratoryCalibration and Measurement Capabilities

Calibration Procedures# and Type of Instruments/Materials to be calibrated		Range	Expanded Uncertainty (Level of Confidence Approximately 95 %) (L(mm): Nominal length)	
Length Measuring Instrument	Gauge Blocks (Interferometry method)	From 0.1 mm up to 100 mm	0.04 $\mu\text{m}$	
		More than 100 mm up to 250 mm	$(0.011+2.8 \times 10^{-4} L) \mu\text{m}$	
	Gauge Blocks (Comparison Method)	From 0.1 mm up to 100 mm	0.08 $\mu\text{m}$	
		More than 100 mm up to 250 mm	$(0.048+3.44 \times 10^{-4} L) \mu\text{m}$	
		More than 250 mm up to 500 mm	$(0.034+3.65 \times 10^{-4} L) \mu\text{m}$	
	End Gauges with Flat Ends (Comparison Method)	From 0.1 mm up to 600 mm	$(0.88+2.78 \times 10^{-3} L) \mu\text{m}$	
	Ring gauges	From 2 mm less than 10 mm	1.6 $\mu\text{m}$	
		From 10 mm less than 30 mm	1.4 $\mu\text{m}$	
		From 30 mm up to 50 mm	1.1 $\mu\text{m}$	
		More than 50 mm up to 100 mm	1.0 $\mu\text{m}$	
More than 100 mm up to 200 mm		1.2 $\mu\text{m}$		

#All Calibration Procedures are in-house procedures developed by this laboratory.

General Field of Calibration: HardnessDate of Initial Accreditation of the Field: 2004-03-15Permanent Laboratory/On-site Calibration: Permanent Laboratory and On-site CalibrationCalibration and Measurement Capabilities

Calibration Procedures# and Type of Instruments/Materials to be calibrated		Range	Expanded Uncertainty (Level of Confidence Approximately 95 %)	
			Permanent Laboratory	On-site Calibration
Rockwell Hardness Testing Machine, etc.	Rockwell Hardness Reference Blocks	From 20 HRC up to 25 HRC	0.52 HRC	-
		More than 25 HRC less than 35 HRC	0.43 HRC	-
		From 35 HRC up to 45 HRC	0.43 HRC	-
		More than 45 HRC less than 55 HRC	0.38 HRC	-
		From 55 HRC up to 65 HRC	0.36 HRC	-
	Rockwell Hardness Testing Machines	From 20 HRC up to 25 HRC	0.36 HRC	0.36 HRC
		More than 25 HRC less than 35 HRC	0.36 HRC	0.36 HRC
		From 35 HRC up to 45 HRC	0.32 HRC	0.32 HRC
		More than 45 HRC less than 55 HRC	0.32 HRC	0.32 HRC
		From 55 HRC up to 65 HRC	0.31 HRC	0.31 HRC

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Calibration Procedures# and Type of Instruments/Materials to be calibrated		Range		Expanded Uncertainty (Level of Confidence Approximately 95 %)	
				Permanent Laboratory	On-site Calibration
Vickers Hardness Testing Machine, etc.	Vickers Hardness Testing Machines	200 HV *	Test force 9.807 N	3.6 %	3.6 %
			Test force 98.07 N	2.1 %	2.1 %
			Test force 294.2 N	2.1 %	2.1 %
		600 HV *	Test force 9.807 N	5.5 %	5.5 %
			Test force 98.07 N	2.4 %	2.4 %
			Test force 294.2 N	2.1 %	2.1 %
		900 HV *	Test force 9.807 N	6.5 %	6.5 %
			Test force 98.07 N	2.7 %	2.7 %
			Test force 294.2 N	2.1 %	2.1 %
				From 100 HV up to 900 HV except for * marked points above. (Test force from 0.09807 N up to 490.3 N)	a) $d < 130 \mu\text{m}$ $388 / d \%$ b) $d \geq 130 \mu\text{m}$ $2 \times (2.25 + (40.4 / d)^2)^{1/2} \%$ Where: $d$ is the length of a diagonal line of the indentation( $\mu\text{m}$ )
Vickers Hardness Reference Blocks	From 85 HV up to 930 HV (Test force from 0.09807 N up to 490.3 N)	a) $d < 130 \mu\text{m}$ $379 / d \%$ b) $d \geq 130 \mu\text{m}$ $3.0 \%$ Where: $d$ is the length of a diagonal line of the indentation( $\mu\text{m}$ )	-		

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