

CERTIFICATE OF ACCREDITATION

Kyeong-do Hitech Co., Ltd

Accreditation No. : KC01-056

Corporation Registration No. : 135511-0115052

Address of Laboratory : #712, 219, Gyeonggigwagidae-ro, Siheung-si Gyeonggi-do,
Republic of Korea

Date of Initial Accreditation : September 28, 2001.

Validity of Accreditation : December 20, 2022. ~ December 19, 2026.

Scope of Accreditation : Attached Annex

Date of issue : December 14, 2022.

This calibration laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to Joint ISO-ILAC-IAF Communiqué).



Sanghoon Lee

Head

Korea Laboratory Accreditation Scheme

SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017 & KS Q ISO/IEC 17025:2017

Kyeong-do Hitech Co, Ltd
 #712, 219, Gyeonggiwagidae-ro Siheung-si Gyeonggi-do, Republic of Korea
 Phone : 82-31-8063-4221~2 Fax : 81-31-8063-4220 e-mail : kdht1111@naver.com

CALIBRATION

Valid To : Dec. 19, 2026.

Accreditation No : KC01-056

In recognition of the successful completion of the KOLAS evaluation process,
 accreditation is granted to this laboratory to perform the following calibrations

Field Code	Item of Calibration	on-site	Field Code	Item of Calibration	on-site	Field Code	Item of Calibration	on-site
102. Linear dimension			210. Hardness					
10210	Extensometers, linear displacement transducers	Y	21001	Brinell hardness testers	Y			
			21002	Rockwell hardness testers	Y			
20216	Height gauges/measuring machines	Y	21003	Shore hardness testers	Y			
			21004	Vickers hardness testers	Y			
10233	Taper thickness gauges	N	21005	Durometer hardness testers	N			
104. From			211. Impact					
10407	Precision surface plates	Y	21102	Charpy impact testers	Y			
105. Complex geometry			21103					
10504	non-contact coordinate measuring machines	Y						
10511	Measuring microscopes, profile projectors	Y						
106. Various dimensional								
10601	Inside/outside/gear tooth calipers, caliper gauges	Y						
10603	Cylinder/bore gauges	Y						
10605	Dial/digital gauges	Y						
10609	Micro indicators, test indicators	Y						
10612	Inside micrometers	Y						
10613	Outside micrometers	Y						
10617	Standard sieves	N						
201. Mass								
20102	Auto-hopper scale balances	Y						
20109	Electric balances	Y						
20112	Platform scale balances	Y						
20116	Weights	N						
202. Force								
20203	Tension/compression testing machines	Y						
20204	Push-pull gauges	N						
203. Torque								
20303	Torque wrenches/drivers	Y						

Note

1. This laboratory provides calibration services in permanent standard laboratory and at on-site.
2. Laboratory conducts on-site calibration should meet requirements of KOLAS-SR-007.
3. On-site calibration is allowed to items with marking 'Y', not allowed to items with marking 'N'.
4. Measurement uncertainty normally is quoted as an expanded uncertainty at a coverage probability of 95 %, which usually requires the use of a coverage factor of $k=2$. It expresses the lowest uncertainty of measurement that can be provided by accredited calibration laboratories in normal conditions.
5. Due to the calibration environment such as reference standards or customers' facilities, it is note that uncertainty of measurement on a calibration certificate may be expressed larger than measurement uncertainty on scope of accreditation in general.

102. Linear dimension

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
Extensometers, linear displacement transducers	10210	(0 ~ 500) mm	$\sqrt{1.9^2+(0.003 \times l)^2} \mu\text{m}$ (l unit : mm)	Gauge blocks /KDHT-CG-10210
Height gauges/ measuring machines	10216	(0 ~ 1 000) mm	$\sqrt{1.0^2+(0.007 \times l)^2} \mu\text{m}$ (l unit : mm)	Gauge blocks, Precision surface plates, Test indicators /KDHT-CG-10216
Taper thickness gauges	10233	(0 ~ 50) mm	3.1 μm	Measuring microscopes /KDHT-CG-10233

104. Form

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
Precision surface plates	10407	(0 ~ 850) mm (850 ~ 1 750) mm (1 750 ~ 2 500) mm	1.0 μm 1.4 μm 2.4 μm	Electronic levels /KDHT-CG-10407

105. Complex geometry

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
non-contact coordinate measuring machines Indication accuracy Squareness Magnification error	10504	(0 ~ 600) mm (0 ~ 90) °	$\sqrt{0.51^2+(0.003 \times l)^2} \mu\text{m}$ (l unit : mm) 1.5 ′ 5.2×10^{-4}	Standard scale /KDHT-CG-10504
Measuring microscopes, Profile projectors Measuring microscopes Indication accuracy Squareness Profile projectors Indication accuracy Squareness Angular division accuracy Magnification error	10511	(0 ~ 300) mm (0 ~ 90) ° (0 ~ 300) mm (0 ~ 90) ° (0 ~ 360) °	$\sqrt{0.92^2+(0.004 \times l)^2} \mu\text{m}$ (l unit : mm) 3.2 μm $\sqrt{3.0^2+(0.007 \times l)^2} \mu\text{m}$ (l unit : mm) 3.2 μm 2 ′ 0.038 %	Standard scale /KDHT-CG-10511-1 Standard scale /KDHT-CG-10511-2

106. Various dimensional

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
Inside/outside/ gear tooth calipers, caliper gauges Caliper gauges Inside/outside calipers	10601	(0 ~ 150) mm (0 ~ 1 000) mm	$\sqrt{0.71^2+(0.008 \times l)^2} \mu\text{m}$ (l unit : mm) $\sqrt{9.4^2+(0.007 \times l)^2} \mu\text{m}$ (l unit : mm)	Gauge blocks, Long gauge blocks, Gauge block accessories /KDHT-CG-10601-1, KDHT-CG-10601-2. Gauge blocks, Long gauge blocks, Gauge block accessories, Step gauges. /KDHT-CG-10601,
Cylinder/bore gauges	10603	(0 ~ 400) mm	1.0 μm	Dial gauge testers /KDHT-CG-10603-1, KDHT-CG-10603-2
Dial/digital gauges	10605	(0 ~ 1) mm (1 ~ 25) mm	0.5 μm 1.6 μm	Gauge blocks /KDHT-CG-10605
Micro indicators, test indicators	10609	± 1 mm (0 ~ 2) mm	0.5 μm 1.4 μm	Dial gauge testers /KDHT-CG-10609-1, KDHT-CG-10609-2
Inside micrometers	10612	(5 ~ 100) mm (100 ~ 1 000) mm	$\sqrt{1.0^2+(0.007 \times l)^2} \mu\text{m}$ (l unit : mm) $\sqrt{1.7^2+(0.007 \times l)^2} \mu\text{m}$ (l unit : mm)	Gauge blocks /KDHT-CG-10612
Outside micrometers	10613	(0 ~ 100) mm (100 ~ 1 000) mm	$\sqrt{1.0^2+(0.007 \times l)^2} \mu\text{m}$ (l unit : mm) $\sqrt{1.7^2+(0.007 \times l)^2} \mu\text{m}$ (l unit : mm)	Gauge blocks /KDHT-CG-10613
Standard sieves Wire diameter Sieve size	10617	(0 ~ 10) mm (0 ~ 50) mm	3 μm 5 μm	Measuring microscopes /KDHT-CG-10617

201. Mass

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
Auto-hopper scale balances	20102	(0 ~ 10) kg (10 ~ 50) kg (50 ~ 200) kg (200 ~ 500) kg (500 ~ 1 000) kg (1 000 ~ 2 000) kg	1.0 g 7.1 g 50 g 0.10 kg 0.20 kg 0.50 kg	Weights /KDHT-CG-20102

201. Mass

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
Electric balances	20109	(0 ~ 6) g (6 ~ 30) g (30 ~ 100) g (100 ~ 300) g (300 ~ 1 200) g (1.2 ~ 3) kg (3 ~ 10) kg (10 ~ 40) kg (40 ~ 60) kg (60 ~ 100) kg (100 ~ 500) kg (500 ~ 1 000) kg (1 000 ~ 2 000) kg (2 000 ~ 3 000) kg	66 μ g 88 μ g 0.15 mg 0.25 mg 1.1 mg 2.1 mg 12 mg 0.53 g 4.4 g 8.9 g 44 g 88 g 0.12 kg 0.29 kg	Weights /KDHT-CG-20109
Platform scale balances	20112	(0 ~ 20) kg (20 ~ 50) kg (50 ~ 100) kg (100 ~ 200) kg (200 ~ 500) kg (500 ~ 1 000) kg	1.8 g 4.5 g 9.1 g 18 g 91 g 0.23 kg	Weights, Electric balances /KDHT-CG-20112
Weights	20116	(1 mg ~ 5 kg) 1 mg 2 mg 5 mg 10 mg 20 mg 50 mg 100 mg 200 mg 500 mg 1 g 2 g 5 g 10 g 20 g 50 g 100 g 200 g 500 g 1 kg	(F2 class) 11 μ g 11 μ g 11 μ g 11 μ g 11 μ g 11 μ g 11 μ g 11 μ g 12 μ g 13 μ g 15 μ g 25 μ g 25 μ g 28 μ g 0.11 mg 0.11 mg 0.13 mg 1.1 mg 1.1 mg	Weights, Electric balances, Absolute pressure gauges /KDHT-CG-20116
		2 kg 5 kg (10 kg ~ 20 kg) 10 kg 20 kg	10 mg 11 mg (M1 class) 0.10 g 0.10 g	

202. Force

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
Tension/compression testing machines	20203	ComperSSION		Force measuring devices /KDHT-CG-20203
		(2 ~ 20) N	9.0×10^{-4}	
		(20 ~ 50) N	9.0×10^{-4}	
		(50 ~ 100) N	1.2×10^{-3}	
		(100 ~ 200) N	1.1×10^{-3}	
		(200 ~ 500) N	9.0×10^{-4}	
		(0.5 ~ 1) kN	1.0×10^{-3}	
		(1 ~ 2) kN	1.4×10^{-3}	
		(2 ~ 5) kN	1.0×10^{-3}	
		(5 ~ 10) kN	1.0×10^{-3}	
		(10 ~ 30) kN	1.1×10^{-3}	
		(30 ~ 50) kN	1.5×10^{-3}	
		(50 ~ 100) kN	1.5×10^{-3}	
		(100 ~ 300) kN	1.7×10^{-3}	
		(300 ~ 500) kN	1.9×10^{-3}	
		(0.5 ~ 1) MN	1.3×10^{-3}	
		(1 ~ 3) MN	2.0×10^{-3}	
		Tension		
		(20 ~ 200) N	9.0×10^{-4}	
		(200 ~ 500) N	9.0×10^{-4}	
		(0.5 ~ 1) kN	8.0×10^{-4}	
		(1 ~ 2) kN	1.1×10^{-3}	
		(2 ~ 5) kN	1.1×10^{-3}	
(5 ~ 10) kN	8.0×10^{-4}			
(10 ~ 20) kN	1.6×10^{-3}			
(20 ~ 50) kN	1.0×10^{-3}			
(50 ~ 100) kN	1.7×10^{-3}			
(100 ~ 300) kN	1.8×10^{-3}			
Push-pull gauges	20204	ComperSSION		Weights /KDHT-CG-20204
		(0.4 ~ 1 000) N	1.1×10^{-3}	
		Tension		
		(0.4 ~ 1 000) N	1.1×10^{-3}	

203. Torque

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
Torque wrenches/drivers	20303	(0.1 ~ 1) N.m	4.2×10^{-3}	Torque measuring devices /KDHT-CG-20303
		(1 ~ 3) N.m	5.4×10^{-3}	
		(3 ~ 6) N.m	4.2×10^{-3}	
		(6 ~ 20) N.m	3.5×10^{-3}	
		(20 ~ 50) N.m	4.0×10^{-3}	
		(50 ~ 200) N.m	3.9×10^{-3}	
		(200 ~ 500) N.m	3.2×10^{-3}	
		(500 ~ 1 000) N.m	3.7×10^{-3}	
		(1 000 ~ 2 000) N.m	3.0×10^{-3}	

210. Hardness

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
Brinell hardness testers	21001	(40 ~ 200) HB 10/3 000 (300 ~ 400) HB 10/3 000 (400 ~ 600) HB 10/3 000	3.1 HB 10/3 000 4.8 HB 10/3 000 8.1 HB 10/3 000	Hardness test blocks, Measuring microscopes, Standard scales /KDHT-CG-21001
Rockwell hardness testers	21002	(20 ~ 70) HRC (20 ~ 100) HRB	0.44 HRC 0.67 HRB	Hardness test blocks, Measuring microscopes /KDHT-CG-21002
Shore hardness testers	21003	(20 ~ 100) HS	1.6 HS	Hardness test blocks, Measuring microscopes /KDHT-CG-21002
Vickers hardness testers	21004	(40 ~ 225) HV 0.2 (400 ~ 600) HV 0.2 (700 ~ 1 300) HV 0.2 (40 ~ 225) HV 0.3 (400 ~ 600) HV 0.3 (700 ~ 1 300) HV 0.3 (400 ~ 600) HV 0.5 (700 ~ 1 300) HV 0.5 (40 ~ 225) HV 10 (400 ~ 600) HV 10 (700 ~ 1 300) HV 10	4.7 HV 0.2 17 HV 0.2 26 HV 0.2 4.7 HV 0.3 13 HV 0.3 25 HV 0.3 14 HV 0.5 24 HV 0.5 2.6 HV 10 7.3 HV 10 12 HV 10	Hardness test blocks, Measuring microscopes, Standard scales /KDHT-CG-21004
Durometer hardness testers	21005	(0 ~ 100) HDA (0 ~ 100) HDD	0.3 HDA 0.3 HDD	Durometer calibrator, Gauge blocks /KDHT-CG-21005

211. Impact

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
Charpy impact testers	21102	(0.1 ~ 1 000) J	-	Height gauges Plate gauges & bar gauges Force measuring devices Precision Level /KDHT-CG-21102-01, KDHT-CG-21102-02
Izod impact testers	21103	(0.1 ~ 1 000) J	-	Height gauges Plate gauges & bar gauges Force measuring devices, Precision Level /KDHT-CG-21103-01, /KDHT-CG-21103-02