

Lab. No.: 3758

Basic Info

Organization	Qualitec International, Inc
Organization Address	2F,No.75, Shuyi Road, Shuyi Village, Taichung, 402, Taiwan, R.O.C.
Organization Representative	YT HSIEH
Web site	qt.qualitec.com.tw

Laboratory	Calibration laboratory
Lab. Address	2F,No.75, Shuyi Road, Shuyi Village, Taichung 402, Taiwan, R.O.C.

Accreditation Criteria : ISO/IEC 17025:2017 ; CNS 17025:2018**Accreditation Number** : 3758**Originally Accredited** : April 25, 2021**Effective Period** : April 25, 2021 to April 24, 2024**Accredited Scope** : Calibration Field, see described in the Appendix

Laboratory Head : HSIEH, Simon

Mass/Force

calibration items	working standard	calibration method	measurand level or range				measurement conditions /independent variable	smallest uncertainty	
	brand /model	document name /no.	mini mum value	units	maxi mum value	units	explanation	value	units
KC5001 Brinell Hardness Tester Test Block HBW	Brinell Hardness Tester SUN-TEC /DLC-3100S Brinell Hardness Block SUN-TEC /HBW	ASTM E10 calibration procedure (Document No.: QTI-E10 -A4)	76.8	HBW	114	HBW	HBW (10 mm /500 kg)	1.4	%
			109	HBW	438	HBW	HBW (10 mm /3000 kg)	1.5	%

P1, total 5 pages

Approval Signatory: HSIEH, Simon									
KC5001 Rockell Hardness Test Block HRC, HRBW, HRA, HR30N, HR30T	Rockwell Hardness Tester Future Tec /FR-3e Rockwell Hardness Block SUN-TEC /HRC, HRBW, HRA, HR30N, HR30T	ASTM E18 calibration procedure (QTI-E18 -A4)	25.8	HRC	61.8	HRC	HRC	0.5	HRC
			35.6	HR BW	96.7	HR BW	HRBW	0.9	HR BW
			64.2	HRA	81.2	HRA	HRA	0.5	HRA
			47.0	HR 30N	78.6	HR 30N	HR30N	0.8	HR 30N
			46.7	HR 30TW	78.7	HR 30TW	HR30TW	0.6	HR 30TW
Approval Signatory: HSIEH, Simon									

calibration items	working standard	calibration method	measurand level or range				measurement conditions /independent variable	smallest uncertainty	
	brand /model	document name /no.	mini mum value	units	maxi mum value	units	explanation	value	units
KC5001 Vickers hardness standard block HV	Microinden tation Hardness Tester Matsuzawa /MMT-X7B Vicker Hardness Tester Matsuzawa /VMT-X7 Vicker Hardness Block SUN-TEC /HV	ASTM E92 calibration procedure (QTI-E92 -A4)	203	HV	689	HV	HV0.1	4.8	%
			202	HV	687	HV	HV0.3	2.4	%
			203	HV	689	HV	HV0.5	3.4	%
			200	HV	689	HV	HV1.0	2.0	%
			189	HV	721	HV	HV5	3.5	%
			188	HV	721	HV	HV10	2.9	%
			189	HV	716	HV	HV30	2.5	%
Approval Signatory: HSIEH, Simon									
KC5002 Brinell Hardness Tester (on-site calibration included)	Load Cell JIHSENSE /LRM-500 Load Cell JIHSENSE /LM-3T Brinell Harbness Block SUN-TEC /HBW	ASTM E10 calibration procedure (Document No.: QTI-E10 -A1)	62.5	kgf	500	kgf	Load	0.6	kgf
			500	kgf	3000	kgf	Load	1.8	kgf
			76.8	HBW	114	HBW	HBW (10 mm /500 kg)	1.4	%
			109	HBW	438	HBW	HBW (10 mm /3000 kg)	1.5	%
Approval Signatory: HSIEH, Simon									

calibration items	working standard	calibration method	measurand level or range				measurement conditions /independent variable	smallest uncertainty	
	brand /model	document name /no.	minimum value	units	maximum value	units	explanation	value	units
KC5002 Rockwell hardness tester (on-site calibration included)	Load Cell AND /AD1661 -600N 0.3kN~2kN 50N~500N. Rockwell hardness standard block SUN-TEC /HRC, HRBW, HRA, HR30N, HR30T. Index master N.S.S /NM-1	ASTM E18 calibration procedure, Document No.: QTI-E18 -A1 (Rev1.1)	29.45 (3)	N (kgf)	441 (45)	N (kgf)	Load Rockwell superficial	0.3 (0.03)	N (kgf)
			98 (10)	N (kgf)	1471 (150)	N (kgf)	Load Rockwell superficial	0.4 (0.04)	N (kgf)
			25.8	HRC	61.8	HRC	Hardness	0.5	HRC
			35.6	HRBW	96.7	HRBW	Hardness	0.9	HRBW
			64.2	HRA	81.2	HRA	Hardness	0.5	HRA
			47.0	HR30N	78.6	HR30N	Hardness	0.7	HR30N
			46.0	HR30TW	78.7	HR30TW	Hardness	0.6	HR30TW
			0	HR	100	HR	Depth-measuring system	0.3	HR
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calibration items	working standard	calibration method	measurand level or range				measurement conditions /independent variable	smallest uncertainty	
	brand /model	document name /no.	minimum value	units	maximum value	units	explanation	value	units
KC5002 Vicker hardness tester (on-site calibration included)	Electronic balance AND /FX3000i Load Cell AND /AD1661 -2KN Stage Micrometer Olmpus /LECO464 Vicker hardness standard block SUN-TEC /HV	ASTM E92 calibration procedure Document No.: QTI-E92 -A1 (Rev1.1)	0.98 (100)	N (gf)	9.8 (1000)	N (gf)	Load	0.0007 (0.07)	N (gf)
			0	µm	120	µm	manual measuring scale	4.2	µm
			203	HV	689	HV	manual measuring hardness HV0.1	4.0	%
			202	HV	687	HV	manual measuring hardness HV0.3	2.1	%
			203	HV	689	HV	manual measuring hardness HV0.5	2.8	%
			200	HV	687	HV	manual measuring hardness HV1.0	1.8	%
			189	HV	721	HV	manual measuring hardness HV5	3.1	%
			188	HV	721	HV	manual measuring hardness HV1	3.1	%
			189	HV	726	HV	manual measuring hardness HV30	2.5	%
			49.03 (5)	N (kgf)	294.2 (30)	N (kgf)	Load	0.19 (0.02)	N (kgf)
			0	µm	500	µm	manual measuring scale	6.1	µm
			Approval Signatory: HSIEH, Simon						

Note : Smallest uncertainty represents an expanded uncertainty using a coverage factor approximately 95 % level of confidence.

(Null Below)