財團法人全國認證基金會
Taiwan Accreditation Foundation

Certificate of Accreditation

(Certificate No：L1314-230601)

This is to certify that

Footwear and Recreation Technology Research Institute

Testing and Inspection Laboratory

No. 11, 8th Rd., Industrial Park, Xitun Dist., Taichung City, Taiwan,ROC

is accredited in respect of laboratory

Accreditation Criteria	：	ISO/IEC 17025:2017；CNS 17025:2018
Accreditation Number	：	1314
Originally Accredited	：	November 15, 2004
Effective Period	：	July 06, 2023 to July 05, 2026
Accredited Scope	：	Testing Field, see described in the Appendix
Specific Accreditation Program	：	Accreditation Program for Designated Testing Laboratory for Commodities Inspection

Scan to verify

Ching-Chang Lien

Ching-Chang Lien
President, Taiwan Accreditation Foundation
June 01, 2023

The Appendix forms an integral part of this Certificate, which shall be invalid when use without the Appendix

Accreditation Number ：1314

Laboratory Head ：HU, Ching-Hou

◤ 01. 99 Metals and Alloys Products
Metal Parts, Metal Coating
C074 Hexavalent Chromium Test
CNS 15331 Sec. 5.5 (2021)
CNS 15050 Appendix B (2010)
Spot Test:
Positive: ≧ 1 mg/kg
Negative: < 1 mg/kg
Boiling Water Test:
Positive: ≧ 0.02 mg/kg with 50 cm^2
Negative: < 0.02 mg/kg with 50 cm^2

Approval Signatory: HU, Ching-Hou

◤ 06. 03 Polymer and Composite Materials
Leather
Leather for Safety Footwear, Protective Footwear, Occupational Footwear
C074 Hexavalent Chromium Test
CNS 15331 Appendix A (2021)
ISO 17075: 2007
ISO 17075-1
CNS 20344 Sec. 6.11 (2015)
CNS 20345 Sec. 5.4.9 (2015)
CNS 20346 Sec. 5.4.9 (2016)
CNS 20347 Sec. 5.4.9 (2016)
ISO 20344 Sec. 6.11 (2011)
ISO 20345 Sec. 5.4.9 (2011)
ISO 20346 Sec. 5.4.9 (2014)
ISO 20347 Sec. 5.4.9 (2012)
(3 to 80) mg/kg

Approval Signatory: HU, Ching-Hou

C091 pH Value Test
CNS 1294
ISO 4045
CNS 20344 Sec. 6.9 (2015)
CNS 20345 Sec. 5.4.7 (2015)
CNS 20346 Sec. 5.4.7 (2016)
CNS 20347 Sec. 5.4.7 (2016)
ISO 20344 Sec. 6.9 (2011)

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ISO 20345 Sec. 5.4.7 (2011)
ISO 20346 Sec. 5.4.7 (2014)
ISO 20347 Sec. 5.4.7 (2012)
pH (3.0 to 10.0)

Approval Signatory: HU, Ching-Hou

◤ 06. 03 Polymer and Composite Materials
Leather
M002 Tensile Strength
CNS 1278
(19.6 to 1765) N
(2 to 180) kgf

Approval Signatory: HU, Ching-Hou

M017 Thickness
CNS 1274
(0.1 to 4.0) mm

Approval Signatory: HU, Ching-Hou

M018 Determination of Tear Load-Single Edge Tear
CNS 1279
ISO 3377-1
(19.6 to 1765) N
(2 to 180) kgf

Approval Signatory: HU, Ching-Hou

◤ 07. 99 Textiles and Related Products
Textile
C084 Free Formaldehyde Content
CNS 15580-1
ISO 14184-1
(12 to 300) mg/kg

Approval Signatory: HU, Ching-Hou

◤ 07. 99 Textiles and Related Products
Resin Finished Woven and Knitted Fabrics
C084 Free Formaldehyde Content
CNS 12943 Sec. 5.3.1 (2) (b) Method B (1991)
CNS 15331
(12 to 300) mg/kg

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Approval Signatory: HU, Ching-Hou

◤ 18. 09 Commodity
Safety Footwear, Protective Footwear
M017 Toe Protection-General
CNS 20345 Sec. 5.3.2.1 (2015)
CNS 20346 Sec. 5.3.2.1 (2016)
ISO 20345 Sec. 5.3.2.1 (2011)
ISO 20346 Sec. 5.3.2.1 (2014)
(0 to 150) mm

Approval Signatory: HU, Ching-Hou

◤ 18. 09 Commodity
Safety Footwear, Protective Footwear, Occupational Footwear
M996 Dimensional Conformity of Inserts
Determination of Resistance to Hot Contact
Determination of Abrasion Resistance of Lining and Insock
Determanation of Resistance to Flexing of Rubber Upper
Method for Outsole Materials which Shrink or Become Hardened
Determination of Water Penetration and Water Absorption for Upper
Test Method for Metallic Toecaps and Metallic Inserts in Classification II Footwear
Determination of Resistance to Fuel Oil-General Method
Specific Ergonomics Features
Determination of the Penetration Resistance of Footwear Using a Metallic Anti-penetration Inserts
Determination of the Penetration Resistance of Footwear Using a Non-metallic Anti-penetration Inserts
Determination of Flex Resistance of Penetration-resistance Inserts
Determination of Insulation Against Heat
Determination of Energy Absorption of Seat Region
Determination of Resistance to Water for Whole Footwear-Trough Test
Determination of Resistance to Water for Whole Footwear-Dynamic Footwear Water Penetration Test
Determination of Insole Thickness
Determination of Water Absorption and Desorption of Insole and Insock
Rigidity Test
Determination of insulation of cold
Electrical properties-Conductive footwear
Electrical properties-Antistatic footwear
Determination of Abrasion Resistance of Insole
CNS 20344 (2015)
CNS 20345 (2015)
CNS 20346 (2016)
CNS 20347 (2016)
ISO 20344 (2011)
ISO 20345 (2011)

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ISO 20346 (2014)
ISO 20347 (2012)

Approval Signatory: HU, Ching-Hou

M996 Measurement of the Height of the Upper
Determination of Upper/Outsole and Sole Interlayer Bond Strength
Determination of Internal Toecap Length
Determination of Impact Resistance
Determination of Compress Resistance
Behavior of Toecaps (Thermal and Chemical)
Determination of Leakproofness
Determination of Footwear Slip Resistance
Determination of Thickness of Upper
Determination of Tear Strength of Upper, Lining and/or Tongue
Determination of Tensile Properties of Upper Material-General (Polymeric, Leather)
Determination of the Breaking Force of a Rubber Boot Upper
Determination of Upper Flexing Resistance
Determination of Water Vapor Permeability (WVP)
Determination of Water Vapor Absorption (WVA)
Determination of Water Vapor Coefficient
Determination of Resistance to Hydrolysis of Upper
Determination of Conformity of Cleated Area (Design)
Outsole Thickness (Design)
Determination of Tear Strength of Outsole
Determination of Outsole Abrasion Resistance
Flexing Test
Determination of Resistance to Hydrolysis of Outsole
CNS 20344 (2015)
CNS 20345 (2015)
CNS 20346 (2016)
CNS 20347 (2016)
ISO 20344 (2011)
ISO 20345 (2011)
ISO 20346 (2014)
ISO 20347 (2012)

Approval Signatory: HU, Ching-Hou

M999 Upper-General
Sole Performance Construction
Penetration Resistance-Construction
Seat Region (Design B, C, D, E)
Determination of Insock Thickness
Outsole-Design
CNS 20345 (2015)
CNS 20346 (2016)
CNS 20347 (2016)

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ISO 20345 (2011)
ISO 20346 (2014)
ISO 20347 (2012)

Approval Signatory: HU, Ching-Hou

◤ 18. 09 Commodity
Footwear, Material
M999 Footwear − Test method for slip resistance
ISO 13287
CNS 16167
Coefficient of friction: (0.10 to 1.96)

Approval Signatory: HU, Ching-Hou

◤ 18. 09 Commodity
Material/Sole/Footwear
M999 Footwear — Determination of coefficient of friction for footwear and sole components
ISO 24267
Coefficient of friction: (0.10 to 1.96)

Approval Signatory: HU, Ching-Hou

M999 Falling Mass Shock Absorption Test
SATRA TM142
g value: (5 to 60) g
Deceleration: (50 to 585) m/s^2
Energy return: (10 to 100) %
Rebound Height: (5 to 50) mm

Approval Signatory: HU, Ching-Hou

◤ 18. 09 Commodity
Insert of Footwear
M999 Penetration Resistance
EN 12568 Sec. 7.2.1 (2010)
Load: ≦ 1765 N
Load: ≦ 180 kgf

Approval Signatory: HU, Ching-Hou

◤ 18. 12 Commodity
Bags, Cases and Trunks

The Appendix forms an integral part of this Certificate, which shall be invalid when use without the Appendix

M996 Falling Test
Loading Test
Cold-resisting and Heat-proof Test
Expand and Contract Pull-handle Functioning Test
Walking Test
CNS 15331

Approval Signatory: HU, Ching-Hou

Accreditation Program for Designated Testing Laboratory for Commodities Inspection

◤ 06. 03 Polymer and Composite Materials
Safety Footwear, Protective Footwear
C074 Hexavalent Chromium Test
CNS 20345 Sec. 5.4.9 (2015/1)
CNS 20346 Sec. 5.4.9 (2016/1)
(3 to 80) mg/kg

Approval Signatory: HU, Ching-Hou

C091 pH Value Test
CNS 20345 Sec. 5.4.7 (2015/1)
CNS 20346 Sec. 5.4.7 (2016/1)
pH (3.0 to 10.0)

Approval Signatory: HU, Ching-Hou

◤ 18. 09 Commodity
Safety Footwear, Protective Footwear
M017 Toe Protection-General
CNS 20345 Sec. 5.3.2.1 (2015/1)
CNS 20346 Sec. 5.3.2.1 (2016/1)
(0 to 150) mm

Approval Signatory: HU, Ching-Hou

M017 Upper-General
CNS 20345 Sec. 5.4.1 (2015/1)
CNS 20346 Sec. 5.4.1 (2016/1)
(0 to 300) mm

Approval Signatory: HU, Ching-Hou

M996 Height of Upper

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Upper/Outsole Bond Strength
Internal Toecap Length
Impact Resistance of Safety Footwear
Compression Resistance of Safety Footwear
Behavior of Toecaps
Leakproofness of Safety Footwear
Slip Resistance Requirement of Safety Footwear
Thickness of Upper
Tear Strength of Upper
Tensile Properties of Upper
Flexing Resistance of Upper
Water Vapor Permeability and Coefficient
Hydrolysis of Upper
Design of Outsole
Tear Strength of Outsole
Abrasion Resistance of Outsole
Flexing Resistance of Outsole
Hydrolysis of Outsole
Interlayer Bond Strength of Outsole
CNS 20345 (2015/1)
CNS 20346 (2016/1)

Approval Signatory: HU, Ching-Hou

M999 Sole Performance Construction
CNS 20345 Sec. 5.3.1.1 (2015/1)
CNS 20346 Sec. 5.3.1.1 (2016/1)

Approval Signatory: HU, Ching-Hou

◤ 18. 09 Commodity
Safty Footwear, Protective Footwear
M999 Seat Region (Design B, C, D, E)
CNS 20345 Sec. 5.2.3 (2015/1)
CNS 20346 Sec. 5.2.3 (2016/1)

Approval Signatory: HU, Ching-Hou

◤ 18. 12 Commodity
Bags, Cases and Trunks
M996 Falling Test
Loading Test
Expand and Contract Pull-handle Functioning Test
Walking Test
CNS 15331 (2018/12)

Approval Signatory: HU, Ching-Hou

(Null below)

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