



TURKISH ACCREDITATION AGENCY

ACCREDITATION CERTIFICATE

As a Testing Laboratory

KARADENİZ TEKNİK TEST TİCARET LİMİTED ŞİRKETİ

Central Address: ÜNİVERSİTE MAH. HASTANE CAD. TRABZON TEKNOKENT No:19 B/2104 ORTAHISAR/TRABZON Trabzon / Türkiye

is accredited in accordance with TS EN ISO/IEC 17025:2017 standard within the scope given in Annex following the assessment conducted by TURKAK.

Accreditation Number : AB-1669-T

Accreditation Date : 05.01.2022

Revision Date / Number : 25.12.2025 / 03

This certificate shall remain in force until **03.01.2030**, subject to continuing compliance with the standard **TS EN ISO/IEC 17025:2017**, related regulations and requirements.

Gülden Banu Müderrisoğlu
Secretary General



Turkish Accreditation Agency (TURKAK) is a signatory to the European co-operation for Accreditation (EA) Multilateral Agreement (MLA) and International Laboratory Accreditation Cooperation (ILAC) Mutual Recognition Agreement (MRA) in the scope of ISO/IEC 17025.

This document has been signed by Gülden Banu Müderrisoğlu with a secure electronic signature in accordance with the electronic signature law numbered 5070. Use the QR code to verify the e-signed document.

 <p>Türk TS EN ISO/IEC 17025 AB-1669-T</p>	KARADENİZ TEKNİK TEST TİCARET LİMİTED ŞİRKETİ	
	Accreditation Nr : AB-1669-T Revision Nr: 03 Date: 25.12.2025	
Testing Laboratory		
Address : ÜNİVERSİTE MAH. HASTANE CAD. TRABZON TEKNOKENT No:19 B/2104 ORTAHISAR/TRABZON Trabzon / Türkiye		Phone : +90 850 850 5886 Fax : - Email : info@kttm.com Website : www.kttm.com

Personal Protective Equipments		
Tested Materials / Products	Name of Test	Testing Method (National, International Standards, In-house Methods)
Personal Protective Equipment-Footwear	Determination of Upper/Outsole and Sole Interlayer Bond Strength	TS EN ISO 20344 Clause 5.2 TS EN ISO 20344:2012 Clause 5.2 (Withdrawn on 02.12.2021, but was included in the scope of accreditation temporarily based on the request of the CAB.)
Personal Protective Equipment-Footwear	Determination of Internal Metallic Toecap Length	TS EN ISO 20344 Clause 5.3.2.1 TS EN ISO 22568-1 Clause 5.2.1 TS EN ISO 20344:2012 Clause 5.3 (Withdrawn on 02.12.2021, but was included in the scope of accreditation temporarily based on the request of the CAB.)
Personal Protective Equipment-Footwear	Determination of Impact Resistance	TS EN ISO 20344 Clause 5.4 TS EN ISO 20344:2012 Clause 5.4 (Withdrawn on 02.12.2021, but was included in the scope of accreditation temporarily based on the request of the CAB.)
Personal Protective Equipment-Footwear	Determination of Compression Resistance	TS EN ISO 20344 Clause 5.5 TS EN ISO 20344:2012 Clause 5.5 (Withdrawn on 02.12.2021, but was included in the scope of accreditation temporarily based on the request of the CAB.)
Personal Protective Equipment-Footwear	Behaviour of Metallic Toecaps (Thermal and Chemical)	TS EN ISO 20344 Clause 5.6 TS EN ISO 22568-1 Clause 5.5 TS EN ISO 20344:2012 Clause 5.6.2 (Withdrawn on 02.12.2021, but was included in the scope of accreditation temporarily based on the request of the CAB.)
Personal Protective Equipment-Footwear	Behaviour of Perforation Resistant Metallic Inserts (Thermal and Chemical)	TS EN ISO 20344 Clause 5.11 TS EN ISO 22568-3 Clause 5.3 TS EN ISO 20344:2012 Clause 5.6.3 (Withdrawn on 02.12.2021, but was included in the scope of accreditation temporarily based on the request of the CAB.)
Personal Protective Equipment-Footwear	Determination of Leak Proofness	TS EN ISO 20344 Clause 5.7 TS EN ISO 20344:2012 Clause 5.7 (Withdrawn on 02.12.2021, but was included in the scope of accreditation temporarily based on the request of the CAB.)
Personal Protective Equipment-Footwear	Dimensions of Perforation Resistant Inserts	TS EN ISO 20344 Clause 5.8 TS EN ISO 20344:2012 Clause 5.8.1 (Withdrawn on 02.12.2021, but was included in the scope of accreditation temporarily based on the request of the CAB.)
Personal Protective Equipment-Footwear	Determination of the Perforation Resistance of Footwear with a Metallic Perforation Resistant Insert	TS EN ISO 20344 Clause 5.9 TS EN ISO 20344:2012 Clause 5.8.2 (Withdrawn on 02.12.2021, but was included in the scope of accreditation temporarily based on the request of the CAB.)
Personal Protective Equipment-Footwear	Determination of the Perforation Resistance of Footwear with a Non-Metallic Perforation Resistant Insert	TS EN ISO 20344 Clause 5.10 (Method PL & Method PS) TS EN ISO 20344:2012 Clause 5.8.3 (Withdrawn on 02.12.2021, but was included in the scope of accreditation temporarily based on the request of the CAB.)
Personal Protective Equipment-Footwear	Determination of the Flex Resistance of Penetration-Resistant Metallic Inserts	TS EN ISO 20344 Clause 5.12 TS EN ISO 22568-3 Clause 5.2 TS EN ISO 20344:2012 Clause 5.9 (Withdrawn on 02.12.2021, but was included in the scope of accreditation temporarily based on the request of the CAB.)
Personal Protective Equipment-Footwear	Determination of Slip Resistance	TS EN ISO 20344 Clause 5.14 TS EN ISO 13287 TS EN ISO 20344:2012 Clause 5.11 (Withdrawn on 02.12.2021, but was included in the scope of accreditation temporarily based on the request of the CAB.)
Personal Protective Equipment-Footwear	Determination of Slip Resistance	TS EN ISO 13287
Personal Protective Equipment-Footwear	Determination of Insulation Against Heat	TS EN ISO 20344 Clause 5.15 TS EN ISO 20344:2012 Clause 5.12 (Withdrawn on 02.12.2021, but was included in the scope of accreditation temporarily based on the request of the CAB.)
Personal Protective Equipment-Footwear	Determination of Insulation Against Cold	TS EN ISO 20344 Clause 5.16 TS EN ISO 20344:2012 Clause 5.13 (Withdrawn on 02.12.2021, but was included in the scope of accreditation temporarily based on the request of the CAB.)

Accreditation Scope

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Personal Protective Equipment-Footwear	Determination of Energy Absorption of the Seat Region	TS EN ISO 20344 Clause 5.17 TS EN ISO 20344:2012 Clause 5.14 (Withdrawn on 02.12.2021, but was included in the scope of accreditation temporarily based on the request of the CAB.)
Personal Protective Equipment-Footwear	Determination of Resistance to Water for Whole Footwear: Dynamic Test	TS EN ISO 20344 Clause 5.19 TS EN ISO 20344:2012 Clause 5.15.2 (Withdrawn on 02.12.2021, but was included in the scope of accreditation temporarily based on the request of the CAB.)
Personal Protective Equipment-Footwear	Measurement of the Height of the Upper	TS EN ISO 20344 Clause 6.2 TS EN ISO 20344:2012 Clause 6.2 (Withdrawn on 02.12.2021, but was included in the scope of accreditation temporarily based on the request of the CAB.)
Personal Protective Equipment-Footwear	Determination of Tensile Properties of the Rubber Upper Material	TS EN ISO 20344 Clause 6.4 TS EN ISO 20344 Clause 6.4.2.2 TS EN ISO 20344:2012 Clause 6.4.2 (Withdrawn on 02.12.2021, but was included in the scope of accreditation temporarily based on the request of the CAB.)
Personal Protective Equipment-Footwear	Determination of Water Vapour Permeability (WVP)	TS EN ISO 20344 Clause 6.6 TS EN ISO 20344:2012 Clause 6.6 (Withdrawn on 02.12.2021, but was included in the scope of accreditation temporarily based on the request of the CAB.)
Personal Protective Equipment-Footwear	Determination of Water Vapour Absorption (WVA)	TS EN ISO 20344 Clause 6.7 TS EN ISO 20344:2012 Clause 6.7 (Withdrawn on 02.12.2021, but was included in the scope of accreditation temporarily based on the request of the CAB.)
Personal Protective Equipment-Footwear	Determination of Water Vapour Coefficient (Water Vapor Permeability (WVP) + Water Vapor Absorption (WVA) is Determined)	TS EN ISO 20344 Clause 6.8 TS EN ISO 20344:2012 Clause 6.8 (Withdrawn on 02.12.2021, but was included in the scope of accreditation temporarily based on the request of the CAB.)
Personal Protective Equipment-Footwear	Determination of Abrasion Resistance of Lining and Insock	TS EN ISO 20344 Clause 6.12 TS EN ISO 20344:2012 Clause 6.12 (Withdrawn on 02.12.2021, but was included in the scope of accreditation temporarily based on the request of the CAB.)
Personal Protective Equipment-Footwear	Determination of Water Penetration and Water Absorption for Upper	TS EN ISO 20344 Clause 6.13 TS EN ISO 20344:2012 Clause 6.13 (Withdrawn on 02.12.2021, but was included in the scope of accreditation temporarily based on the request of the CAB.)
Personal Protective Equipment-Footwear	Determination of Water Absorption and Desorption of Insole and Insock	TS EN ISO 20344 Clause 7.2 TS EN ISO 20344:2012 Clause 7.2 (Withdrawn on 02.12.2021, but was included in the scope of accreditation temporarily based on the request of the CAB.)
Foot and Leg Protectors-Footwear	Determination of Tear Strength of Outsole	TS EN ISO 20344 Clause 8.3 TS ISO 34-1 Method A TS EN ISO 20344:2012 Clause 8.2 (Withdrawn on 02.12.2021, but was included in the scope of accreditation temporarily based on the request of the CAB.)
Personal Protective Equipment-Footwear	Determination of Flexing Resistance of Outsole	TS EN ISO 20344 Clause 8.6 TS EN ISO 20344:2012 Clause 8.4 (Withdrawn on 02.12.2021, but was included in the scope of accreditation temporarily based on the request of the CAB.)
Personal Protective Equipment-Footwear	Determination of Resistance to Hydrolysis of Outsole	TS EN ISO 20344 Clause 8.7 TS ISO 5423 Annex-C & Annex-E TS EN ISO 20344:2012 Clause 8.5 (Withdrawn on 02.12.2021, but was included in the scope of accreditation temporarily based on the request of the CAB.)
Personal Protective Equipment-Footwear	Determination of Resistance to Fuel Oil	TS EN ISO 20344 Clause 8.8 TS ISO 1817 Clause 8.3 TS EN ISO 20344:2012 Clause 8.6 (Withdrawn on 02.12.2021, but was included in the scope of accreditation temporarily based on the request of the CAB.)
Personal Protective Equipment-Footwear	Determination of Resistance to Hot Contact	TS EN ISO 20344 Clause 8.9 TS EN ISO 20344:2012 Clause 8.7 (Withdrawn on 02.12.2021, but was included in the scope of accreditation temporarily based on the request of the CAB.)
Foot and Leg Protectors- Metallic Toecaps	Determination of Impact Resistance	TS EN ISO 22568-1 Clause 5.3
Foot and Leg Protectors- Metallic Toecaps	Determination of Compression Resistance	TS EN ISO 22568-1 Clause 5.4

Accreditation Scope

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Foot and Leg Protectors- Metallic Toecaps	Determination of Corrosion Resistance	TS EN ISO 22568-1 Clause 5.5
Foot and Leg Protectors- Non-Metallic Toecaps	Determination of Impact Resistance	TS EN ISO 22568-2 Clause 5.3
Foot and Leg Protectors- Non-Metallic Toecaps	Determination of Compression Resistance	TS EN ISO 22568-2 Clause 5.4
Foot and Leg Protectors- Non-Metallic Toecaps	Determination of Impact Resistance After Environmental Processes	TS EN ISO 22568-2 Clause 5.5
Foot and Leg Protectors- Metallic Perforation Resistant Inserts	Determination of Perforation Resistance	TS EN ISO 22568-3 Clause 5.1
Foot and Leg Protectors- Metallic Perforation Resistant Inserts	Determination of Flexing Resistance	TS EN ISO 22568-3 Clause 5.2
Foot and Leg Protectors- Metallic Perforation Resistant Inserts	Determination of Corrosion Resistance	TS EN ISO 22568-3 Clause 5.3
Personal Protective Equipment- Footwear	Determination of Outsole Abrasion Resistance	TS EN ISO 20344 Clause 8.4 TS ISO 4649 Method A
Foot and Leg Protectors- Non-Metallic Perforation Resistant Inserts	Determination of Flexing Resistance	TS EN ISO 22568-4 Clause 5.2
Foot and Leg Protectors- Non-Metallic Perforation Resistant Inserts	Test Methods for The Assessment Non-Metallic Perforation Resistant Inserts in Critical Environment	TS EN ISO 22568-4 Clause 5.3
Footwear	Standard Test Methods for Specific Applications (ESD)	TS EN IEC 61340-4-3
Personal Protective Equipment-Footwear	Specific Ergonomic Features	TS EN ISO 20344 Clause 5.1
Personal Protective Equipment-Footwear	Determination of Flange Width of Metallic Toecaps	TS EN ISO 20344 Clause 5.3.2.2 TS EN ISO 22568-1 Clause 5.2.2
Foot and Leg Protectors- Metallic Toecaps	Determination of Flange Width	TS EN ISO 22568-1 Clause 5.2.2
Foot and Leg Protectors- Non-Metallic Toecaps	Determination of Flange Width	TS EN ISO 22568-2 Clause 5.2.2
Personal Protective Equipment-Footwear	Determination of Electrical Resistance	TS EN ISO 20344 Clause 5.13

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Personal Protective Equipment- Footwear	Determination of Polymeric Upper Flexing Resistance	TS EN ISO 20344 Clause 6.5 ISO 4643 Annex B
Personal Protective Equipment- Footwear	Determination of Resistance to Hydrolysis of Upper	TS EN ISO 20344 Clause 6.10 ISO 5423 Annex B
Personal Protective Equipment-Footwear	Determination of Outsole Thickness and Cleat Height	TS EN ISO 20344 Clause 8.2.3
Foot and Leg Protectors- Non-Metallic Perforation Resistant Inserts	Determination of Perforation Resistance	TS EN ISO 22568-4 Clause 5.1 (Method PL & Method PS)
Personal Protective Equipment-Footwear	Determination of Tear Strength of Laether Upper, Lining and/or Tongue	TS EN ISO 20344 Clause 6.3 TS EN ISO 3377-2
Personal Protective Equipment-Footwear	Determination of Thickness of Upper	TS EN ISO 20344 Clause 6.1
Personal Protective Equipment-Footwear	Determination of Insole and Insock Thickness	TS EN ISO 20344 Clause 7.1
Personal Protective Equipment-Footwear	Determination of Abrasion Resistance of Insole	TS EN ISO 20344 Clause 7.3
Foot and Leg Protectors- Metallic Toecaps	Determination of Internal Metallic Toecap Length	TS EN ISO 22568-1 Clause 5.2.1
Foot and Leg Protectors - Non-Metallic Toecaps	Determination of Internal Non-Metallic Toecap Length	TS EN ISO 22568-2 Clause 5.2.1
Personal Protective Equipment-Footwear	Determination of the Cleated Area	TS EN ISO 20344 Clause 8.2.2
Personal Protective Equipment-Footwear	Determination of Internal Non Metallic Toecap Length	TS EN ISO 20344 Clause 5.3.2.1 TS EN ISO 22568-2 Clause 5.2.1 TS EN ISO 20344:2012 Clause 5.3 (Withdrawn on 02.12.2021, but was included in the scope of accreditation temporarily based on the request of the CAB.)
Personal Protective Equipment-Footwear	Behaviour of Non Metallic Toecaps and Inserts (Thermal and Chemical)	TS EN ISO 20344 Clause 5.6 TS EN ISO 22568-2 Clause 5.5 TS EN ISO 20344:2012 Clause 5.6.2 (Withdrawn on 02.12.2021, but was included in the scope of accreditation temporarily based on the request of the CAB.)
Personal Protective Equipment-Footwear	Behaviour of Perforation Resistant Non Metallic Inserts (Thermal and Chemical)	TS EN ISO 20344 Clause 5.11 TS EN ISO 22568-4 Clause 5.3 TS EN ISO 20344:2012 Clause 5.6.3 (Withdrawn on 02.12.2021, but was included in the scope of accreditation temporarily based on the request of the CAB.)
Personal Protective Equipment-Footwear	Determination of the Flex Resistance of Penetration-Resistant Non Metallic Inserts	TS EN ISO 20344 Clause 5.12 TS EN ISO 22568-4 Clause 5.2 TS EN ISO 20344:2012 Clause 5.9 (Withdrawn on 02.12.2021, but was included in the scope of accreditation temporarily based on the request of the CAB.)
Personal Protective Equipment-Footwear	Determination of Flange Width of Non Metallic Toecaps	TS EN ISO 20344 Clause 5.3.2.2 TS EN ISO 22568-2 Clause 5.2.2
Personal Protective Equipment-Footwear	Determination of Tensile Properties of the Leather Upper Material	TS EN ISO 20344 Clause 6.4 TS EN ISO 3376 TS EN ISO 20344:2012 Clause 6.4.2 (Withdrawn on 02.12.2021, but was included in the scope of accreditation temporarily based on the request of the CAB.)

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Personal Protective Equipment-Footwear	Determination of Tensile Properties of Polymeric Upper Material	TS EN ISO 20344 Clause 6.4 TS ISO 4643 TS EN ISO 20344:2012 Clause 6.4.2 (Withdrawn on 02.12.2021, but was included in the scope of accreditation temporarily based on the request of the CAB.)
Personal Protective Equipment-Footwear	Determination of Tear Strength of Coated Fabric and Textile Upper, Lining and/or Tongue	TS EN ISO 20344 Clause 6.3 TS EN ISO 4674-1 Method B
Personal Protective Equipment-Footwear	Abrasion Resistance of the Scuff Caps	TS EN ISO 20344 Clause 5.24
Personal Protective Equipment - Footwear	Determination of Cleat Design in the Waist Area	TS EN ISO 20344 Clause 8.2.4

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Textile and Leather Products		
Tested Materials / Products	Name of Test	Testing Method (National, International Standards, In-house Methods)
Leather	Determination of Tensile Strength and Percentage Extension	TS EN ISO 3376
Leather	Determination of Tear Load Single Edge Tear	TS EN ISO 3377-1
Leather	Determination of Tear Load Double Edge Tear	TS EN ISO 3377-2
Leather	Determination of pH (Using pH Meter)	TS EN ISO 4045 TS EN ISO 20344 Clause 6.9
Leather	Chemical Determination of Chromium VI (Cr ⁶⁺) Content Colorimetric Method (Using UV-VIS Spectrophotometer)	TS EN ISO 17075-1 TS EN ISO 20344 Clause 6.11
Leather	Determination of Thickness	TS EN ISO 2589
Leather	Determination of Volatile Matter	TS EN ISO 4684
Rubber or Plastics-coated Fabrics	Determination of Tear Resistance Constant Rate of Tear Methods	TS EN ISO 4674-1 Method B
Footwear-Uppers, Lining and Insocks	Determination of Tear Strength	TS EN ISO 17696
Footwear- Uppers and Linings	Water Vapour Permeability and Absorption	ISO 17699
Footwear-Uppers	Determination of Water Resistance	TS EN ISO 17702
Footwear-Uppers, Linings and Insocks	Abrasion Resistance	ISO 17704
Footwear-Uppers	Tensile Strength and Elongation	TS EN ISO 17706
Footwear - Outsoles	Flex Resistance	TS EN ISO 17707
Footwear	Upper Sole Adhesion	TS EN ISO 17708
Footwear-Outsoles	Abrasion Resistance	TS EN 12770
Footwear-Outsoles	Tear Strength	TS EN 12771
Leather	Determination of Water Vapour Permeability	TS EN ISO 14268

Accreditation Scope



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Footwear-Outsoles	Tensile Strength and Elongation	TS EN 12803
Leather	Determination of Water Resistance of Flexible Leather Repeated Linear Compression (Penetrometer)	TS EN ISO 5403-1
Footwear-Outsoles	Compression Energy	TS EN 12743
Footwear	Walking Test for Whole Footwear	In House Method "LS-AY-023, Rev.04" (Modified on TS EN ISO 20344 Clause 5.19)

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Plastic and Rubber Products

Tested Materials / Products	Name of Test	Testing Method (National, International Standards, In-house Methods)
Rubber or Thermoplastic	Determination of Tear Strength	TS ISO 34-1 Method A
Rubber or Thermoplastic	Determination of Abrasion Resistance (Using a Rotating Cylindrical Drum Device)	TS ISO 4649 Method A
Rubber or Thermoplastic	Determination of Density	TS ISO 2781 Method A
Plastic, Rubber, Rubber Materials and Related Products	Determination of Tensile Stress-Elongation Properties	TS ISO 37
Plastic, Rubber, Rubber Materials and Related Products	Determination of Indentation Hardness by Means of a Durometer (Shore Hardness)	TS EN ISO 868 (Type A, Type D)

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