

Laboratory Equipments

Leather

Footwear

Textile

Gloves

Automotive

etc.

The logo for HILAB is displayed vertically in a white rectangular box. It features the word "HILAB" in a bold, black, sans-serif font. The letter "I" is replaced by a red triangle pointing downwards. Above the text, there are two horizontal black lines of equal length, positioned side-by-side.

HILAB



ABOUT

The present list contains a wide range of testing equipments with applications in several sectors such as Leather, Footwear, Textile, Plastic, Rubber, Automotive and others.

As we are always developing new equipments, if you can't find the equipment that you are looking for, please contact with us. We will be pleased to offer the better solution for your purpose.

SEARCHING AN EQUIPMENT

To find easily an equipment in the list, please insert standard number or a word related with name of test or equipment, in searching field that could be accessed pressing "CTRL + F" on your PC keyboard, ex: flexometer; chainsaw; permeability; ISO 17694 or just 17694.

After located the desired equipment, the correspondent datasheet can be accessed through the link inserted in "Model" field, ex: **H050**

EQUIPMENT CALIBRATION

All equipments are developed and produced strictly according to all relevant test standards and also are internally verified and calibrated and than a "Workshop Calibration Certificate" is issued.

On request, an external calibration which is made by an accredited and internationally recognized body could be provided.

MODEL	EQUIPMENT
H010/12	"Vamp" flexometer with 12 stations Standards: EN ISO 22288; ISO 4643; ISO 5423; SATRA TM25 Purpose: Determine the propensity of upper materials to crack
H010C/12	"Vamp" flexometer with 12 stations in cold chamber Standards: EN ISO 22288; ISO 4643; ISO 5423; SATRA TM25 Purpose: Determine the propensity of upper materials to crack.
<u>H011</u>	"BENNEWART" flexometer Standards: ISO 17707; EN ISO 20344:8.4 ; DIN 53 543; SATRA TM161 Purpose: Determine the resistance of whole footwear soles to cut growth during repeated flexing. It is also suitable to assess the effect of surface patterns.
H011C	"BENNEWART" flexometer in cold chamber Standards: ISO 17707; EN ISO 20344:8.4 ; DIN 53 543; SATRA TM161 Purpose: Determine the resistance of whole footwear soles to cut growth during repeated flexing. It is also suitable to assess the effect of surface patterns.
H012	Rigidity tester for soles Standards: ISO 17707; EN ISO 20344:8.4 ; SATRA TM161 Purpose: Assess the rigidity of the complete footwear, to determine if it should be subjected to the "Bennewart" flexing test
H013	"BELT" flexometer Standards: ISO 16177; SATRA TM133 Purpose: Determine the resistance of soles or material to crack initiation and growth due to repeated flexing.
H014	"ROSS" flexometer Standards: ISO 4643; ISO 5423; ASTM D1052; BS 5131-2.1 SATRA TM60 Purpose: Determine the resistance of polymeric materials to cut growth during repeated flexing.
H014C	"ROSS" flexometer in cold chamber Standards: ISO 4643; ISO 5423; ASTM D1052; BS 5131-2.1; SATRA TM60 Purpose: Determine the resistance of polymeric materials to cut growth during repeated flexing.
H015	Whole shoe flexometer in water Standards: SATRA TM 230 Purpose: Assess the resistance to water penetration of complete footwear, during flexing.
H016	Whole footwear water resistance tester (brush method) Standards : EN 20344:5.15 Purpose: Assess the resistance of whole footwear to water penetration by dynamic method
H017	Elastics repeated extension tester Standards : EN ISO 10768; SATRA TM103 Purpose: Assess the resistance of elastics to repeated stretching to the limit of its useful extension.
H018	Velcro closing tester Standards: EN ISO 22776; SATRA TM 123 Purpose: Press the two parts of the touch and close fastener together, under controlled conditions, before peel and shear strength test.

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H019	<p>Velcro fatigue tester Standards: EN ISO 22776; SATRA TM123 Purpose: Simulate the use of the velcros by repeated closing and opening, before perform other physical tests.</p>
H020	<p>Electronic Lastometer Standards: EN ISO 3379; EN ISO 17693; IUP 9; SATRA TM24 Purpose: Determine the lastability of uppers or complete upper assembly irrespective of the material in order to assess the suitability for the end use.</p>
H021	<p>Zipper fatigue tester Standards : BS 3084; SATRA TM50 Purpose: Assess the resistance of slide fasteners to repeated opening and closing, under load.</p>
H022/6	<p>“Bally” flexometer with 6 stations Standards: ISO 17694; EN ISO 5402; EN 13512; IUP 20; SATRA TM55 Purpose: Determining the wet or dry flex resistance of leather and finishes applied to leather. It is applicable to all types of leather below 3,0 mm in thickness.</p>
H022/12	<p>“Bally” flexometer with 12 stations Standards: ISO 17694; EN ISO 5402; EN 13512; IUP 20; SATRA TM55 Purpose: Determining the wet or dry flex resistance of leather and finishes applied to leather. It is applicable to all types of leather below 3,0 mm in thickness.</p>
H022C/12	<p>“Bally” flexometer with 12 stations in cold chamber Standards: ISO 17694; EN ISO 5402; EN 13512; IUP 20; SATRA TM55 Purpose: Determining the wet or dry flex resistance of leather and finishes applied to leather. It is applicable to all types of leather below 3,0 mm in thickness.</p>
H023	<p>Fibreboard flexometer Standards: BS 5131; SATRA TM3/TM4/TM6/TM15/TM16 Purpose: Assess the resistance of fibreboard material to repeated flexing</p>
H024	<p>Midsole flexometer Standards: EN ISO 20344:5.9; EN 12568; Z195 Purpose: Assess the resistance of midsole materials to repeated flexing</p>
H025	<p>Shanks and insole back parts flexometer Standards: ISO 18895 Purpose: Assess the fatigue resistance of shanks and back parts to repeated flexing</p>
H026	<p>Thermal conductivity tester Standards: ISO 17705; SATRA TM 146 Purpose: Assess the thermal conductivity of sheet materials</p>
H027	<p>Heat resistance tester Standards: EN ISO 20344:8.7 Purpose: Assess the ability of the finish of shoemaking materials to withstand the heat involved in various shoemaking operations.</p>
H028	<p>Heat insulation tester Standards: EN ISO 20344:5.12 Purpose: Assess the heat insulating properties of the sole complex of protective footwear.</p>

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H029	Cold resistance tester Standards: EN ISO 20344:5.13; ISO 20877 Purpose: Assess the cold insulating properties of the sole complex of protective footwear.
H030	Longitudinal/torsional stiffness of insole back parts and shanks Standards: EN 12959; ISO 18896; SATRA TM58/TM59/TM88 Purpose: Assess longitudinal and torsional stiffness of shanks and insole back parts.
H031	Longitudinal/torsional stiffness of complete footwear Standards: SATRA TM194/TM256 Purpose: Assess longitudinal and torsional stiffness of complete footwear
H032/4	“MAESER” waterprofness tester with 4 stations Standards: ASTM D-2099; EN ISO 5403-2; SATRA TM34 Purpose: Determining the resistance of a material to water penetration on flexing.
H033/4	“Bally” penetrometer with 4 stations Standards: EN ISO 5403-1; EN ISO 20344:6.13; IUP 10; SATRA TM171 Purpose: Determining the dynamic water resistance of leather.
H033/6	“Bally” penetrometer with 6 stations Standards: EN ISO 5403-1; EN ISO 20344:6.13; IUP 10; SATRA TM171 Purpose: Determining the dynamic water resistance of leather.
H033S	Stiffness tester for leathers Standards: EN ISO 5403-1; EN ISO 20344; IUP 10; SATRA TM171 Purpose: Determining the stiffness of leathers as preparation to “Bally” test.
H034	Shock absorption tester Standards: SATRA TM142 Purpose: Evaluate the shock absorption properties of materials or assemblies of footwear bottom.
H035	Dynamic compression tester Standards: SATRA TM159 Purpose: Evaluate the changes in dimensions of a material after a prolonged period of dynamic compression.
H038	Wetting spray tester Standards: EN ISO 4920; EN 14340 Purpose: Determining the repellency of leather or any fabric to water penetration.
H040	Perspiration tester Standards: ISO 105-E04 Purpose: Determine the resistance of the colour of the leathers to the human sweat.
H041	Multi-light chamber Standards: ISO 3668; ASTM D1729; EN 50081-2; EN 60204-1 Purpose: Provide controlled viewing conditions for the assessment and comparison of colour variations.
H042	Operating support for durometers Standards: ISO 868 Purpose: Ensure that durometer surface is pressed parallel to the material under test, with standard known force

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H042T	Operating support for durometers with timer Standards: ISO 868 Purpose: Ensure that durometer surface is pressed parallel to the material under test, with standard known force, during a suitable time.
H043	Milling machine Standards: ISO 4044; IUC 3 Purpose: Milling materials to be used in chemical tests
H044	Shaking machine with 8 containers Standards: ISO 4045; ISO 4098; TM329 Purpose: Agitate up materials in chemical solutions
H045	Laboratory press Standards: SATRA TM402 Purpose: press sample assemblies during bonding process
H046	Thickness measuring gauge for leather and soles material Standards: ISO 2589; ISO 2286-3 Purpose: Determining thickness of the leather and sole materials
H047	Creep cabinet Standards: EN 1392; DIN 53273; FEICA A4; SATRA TM3 Purpose: Determine the resistance of an adhesive bond, stored at an elevated temperature, to peeling by a constant force.
H048	Radiant heat tester Standards: EN ISO 6942 Purpose: Assess the resistance of personal protective equipments against a radiant heat source.
H049	Liquid column for volume measurement Standards: None Purpose: Measurement of the volume of soles
H050	Water vapour permeability tester Standards: EN ISO 20344; EN ISO 14268; EN 13515; IUP 15; SATRA TM172 Purpose: Determining the “breathability” of the leather and non-leather upper materials.
H051	Leather permeability / absorption tester Standards: UNE 59-035-94; SATRA TM47 Purpose: Determining the amount of water vapour on an assembly or a single material will absorb and transmit through its structure in specified time.
H052/6	Water vapour absorption tester Standards: EN ISO 17229; EN 13515; EN ISO 20344; SATRA TM172 Purpose: Determining the coefficient of water vapour on leather and non-leather upper materials
H053/6	Water vapour absorption tester for gloves Standards: EN 420 Purpose: Determining the coefficient of water vapour on leather and non-leather used on gloves.
H054	Dynamic water-resistance tester for sole leather Standards: EN ISO 20344:7.2; IUP 11; EN 12746; EN ISO 5404; SATRA TM220 Purpose: Determining the dynamic water-resistance of sole leather, insole and insock.

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H055	Leakproofness tester Standards: EN ISO 20344:5.7 Purpose: Assess the leakproofness of whole footwear and gloves
H057	Reactivator Standards: None Purpose: Used in specimens bonding process.
H062/4	“Martindale” abrasion machine Standards: EN ISO 20344; EN 13520; EN ISO 17704; ISO 12947; SATRA TM31 Purpose: Determining the resistance of uppers, linings and insocks irrespective of the material, to wet and dry abrasion.
H064	“Veslic” rub fastness tester Standards: EN ISO 20344:7.3; EN ISO 11640; IUF 450; EN 12747; EN ISO 17700; SATRA TM173 Purpose: Determining the behavior of the surface of a leather on rubbing with a felt
H064H	“Veslic” rub fastness tester with ironing element Standards: EN ISO 20344:7.3; EN ISO 11640; IUF 450; EN 12747; EN ISO 17700; SATRA TM173 Purpose: Determining the behavior of the surface of a leather on rubbing with a felt and a ironing element.
H065	Rotating rub fastness tester Standards: EN ISO 17700; EN ISO 20868; SATRA TM8/TM14 Purpose: Assess the degree of damage (marring) and transfer of a material ‘surface colour during mild dry or wet abrasion.
H066	Crockmeter tester (hand driven) Standards: ISO 105-X12; ATTCC 8; SATRA TM167 Purpose: Determine colour fastness to wet and dry rubbing.
H066M	Crockmeter tester (motor driven) Standards: ISO 105-X12; ATTCC 8; SATRA TM167 Purpose: Determine colour fastness to wet and dry rubbing.
H067/1	Lace to lace abrasion tester with 1 station Standards: EN ISO 22774; SATRA TM154 Purpose: Determine the abrasion resistance of a lace to repeated rubbing against a similar lace, a eyelet or a lace carrier.
H067/6	Lace to lace abrasion tester with 6 stations Standards: EN ISO 22774; SATRA TM154 Purpose: Determine the abrasion resistance of a lace to repeated rubbing against a similar lace, a eyelet or a lace carrier.
H068/6	Lace abrasion tester with 6 stations Standards: BS 5131:3.6; SATRA TM93 Purpose: Determine the abrasion resistance of a lace to repeated rubbing against a standard eyelet. Could be also assessed the abrasive action of a lace over the eyelet.
H069	Lace abrasion tester with 6 stations Standards: NF G62-020 Purpose: Determine the abrasion resistance of a lace to repeated rubbing against a standard eyelet.

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	Could be also assessed the abrasive action of a lace over the eyelet.
H070	Chainsaw cutting tester Standards: EN 381 Purpose: Assess the resistance to cutting by chainsaw of personal protective devices
<u>H071</u>	Blade cutting resistance tester Standards: EN ISO 20344:6.14 Purpose: Assess the resistance of upper and glove materials to be cut by blade
<u>H072</u>	Sole abrasion tester Standards: EN 12770; ISO 4649; DIN 53516; SATRA TM174 Purpose: Assess the abrasion resistance of a polymeric material normally used in sole footwear.
<u>H072R</u>	Sole abrasion tester with rotating sample holder Standards: EN 12770; ISO 4649; DIN 53516; ASTM D5963:A/D; SATRA TM174 Purpose: Assess the abrasion resistance of a polymeric material normally used in sole footwear. Test could be performed with rotating or fixed sample holder
<u>H074</u>	Sole abrasion tester according PFI test method Standards: PFI Purpose: Determining the abrasion resistance of footwear soling materials.
H076	Bottom leather grain crack tester Standards: ISO 3378; IUP 12; SATRA TM48 Purpose: Determine the propensity of the grain leather to crack during bending
H077	Electrical conductivity tester Standards: EN ISO 20344:5.10 Purpose: Measure of electrical resistance of conductive footwear.
H078	Electrical insulation tester Standards: EN ISO 20344:5.11; EN 50321 Purpose: Measure of electrical insulation of protective footwear.
H079	Electrical resistance tester (ESD) Standards: IEC 61340-4-3 Purpose: Measure the electrical resistance of footwear used in control of electrostatic potential on people.
<u>H080</u>	Slip resistance tester Standards: EN ISO 13287; SATRA TM144 Purpose: Determining the coefficient of friction between footwear outsoles and flooring surfaces.
<u>H081</u>	Toe caps impact tester Standards: EN ISO 20344:5.4; EN 12568; ASTM F2412; CAN/CSA Z195 Purpose: Assess impact resistance of toes caps for safety and protective footwear
H081/1	Thickness measuring gauge for modeling clay cylinders Standards: EN ISO 20344:5.4.1.4 Purpose: Measure modeling clay cylinders before and after impact or compression test
H081/2	Vacuum equipment Standards: EN ISO 20344:5.16 Purpose: Prepare the wax test forms for metatarsal test

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H081/3	Metatarsal specimen device Standards: EN ISO 20344:5.16 Purpose: Perform metatarsal impact test
H082	Ankle shock absorption tester Standards: EN ISO 20344:5.17 Purpose: Assess shock absorption properties of ankle protective materials and assemblies.
H083	Toe compression machine Standards: EN ISO 20344:5.5; EN 12568 Purpose: Assess compression resistance of toes caps for safety and protective footwear NOTE: With suitable accessory, this machine can also perform insole perforation EN 12568
H084	Heel fatigue tester Standards: EN ISO 19956; SATRA TM21 Purpose: Assess the ability of ladies heels shoes to withstand the repeated small impacts of normal walking.
H085	Heel impact tester Standards: EN ISO 19953; SATRA TM20 Purpose: Assess the resistance of ladies heels shoes to occasional heavy impacts during wear.
H087	Constant stress compression tester Standards: SATRA TM64 Purpose: Determine the compression set of a material, measuring the shape retention and elastic properties.
H090	Combustion chamber Standards: ISO 3795 Purpose: Determination of horizontal rate of flame spread of materials and components used in interiors of cars, trucks and other vehicles.
HILAB 10	Electronic dynamometer with 10KN capacity
HILAB 20	Electronic dynamometer with 20KN capacity

NOTE – As standardization is a living process, all standards references should be confirmed.

Remark:

This equipment list is always being increased with other equipments. So, if the equipment that you are looking for it is not mentioned in this list, please contact us.