



Code	Description
742EV2601	<p style="text-align: center;">AUTOMATIC MICRO-HARDNESS TESTER</p> <p style="text-align: center;">ISOSCAN HV1 OD</p> <p>Automatic optical-digital system for Vickers micro-hardness testing from HV0,01 to HV1 according to ISO 6507-2 Standards. Compliance with ASTM E384 available upon request. Determines Knoop hardness by using the relevant indenter.</p> <p>The system consists of:</p>
	<p style="text-align: center;">TECHNICAL FEATURES</p> <ul style="list-style-type: none"> • Handy-placed knob load selector, with following standard test loads: 10 – 25 – 50 – 100 – 200 – 300 – 500 - 1000 gf (0,09807 - 0,2452 - 0,4903 - 0,9807 - 1,961 - 2,942 - 4,903 - 9,807 N). • Microscope with light intensity adjustment • Motorized rotary turret with 5 positions adapting the indenter and two objectives (10X and 40X provided with the instrument) (other magnification objectives and Knoop indenters can be ordered separately) • 10X digital micrometric eyepiece featuring 0,01 µm resolution, calibrated for the use of both 10X and 40X objectives • Motorized load application device • Manual X-Y stage, travel range 25x25 mm, with micrometers 0.01 mm resolution • Manual work piece focusing • Automatic test cycle



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	<ul style="list-style-type: none">• Colour touch screen LCD provided with alphanumerical readout and practical, quick and ease-of-use graphics• Selectable load dwell time• Software guide to the correct configuration in the various scales• Possibility to save/retrieve test batches on external devices such as USB key and/or LAN company networks• Possibility to enter a nominal values and tolerances• Software for the calculation of statistical parameters, such as average value, standard deviation, max. and min. values and number of measurements with indication of out-of-tolerance values, date, time, work piece No., batch No., histogram of the effected tests, line chart with indication of the test trend• Data convertible into text or Excel formats• Automatic software updates via USB key• Automatic conversion of the values measured in the various hardness scales: Rockwell, Brinell, Vickers, Knoop, as well as tensile strength according to either "Galileo conversion tables", ISO 18265 or ASTM E140 standards• Automatic correction of measurements on the cylindrical and spherical work pieces as per ISO 6507 or ASTM standards• Manual load selection with electronic load control• Diagnosis and test menu• Language selection• Optical output for CCD or Camera (the adapter must be ordered separately)• Maximum work piece height 85 mm• Throat depth 110 mm• Dimensions of the instrument: 340 x 500 x 520 mm (L x w x H)• Weight 28 kg • Accessory box including:<ul style="list-style-type: none">– Instructions manual– Plastic cover– No. 2 HV1 test blocks



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	TRAINING AND ACCESSORIES FOR MODELS ISOSCAN, VICKERS and MICROSCAN
742042202	<p style="text-align: center;">TRAINING COURSE for AC models</p> <ul style="list-style-type: none"> • Training course at our premises providing instructions how to use the chosen instrument (file management, execution of test batches, programming and execution of hardness profiles). Duration of the course: 8 hours • Board and lodging near our location as well as travel expenses are not included in the a.m. price and can be quoted upon request.
742EV2590	Integrated PLUS optional system for microhardness testers models AC consisting of:
	<ul style="list-style-type: none"> • Electronic digital micrometer head featuring 0.001 mm resolution mounted on the X axis, provided with relevant connection cables to interface with the central unit (optional on Y axis) • Generation and handling of hardness profile (traverses) patterns as well as hardness arrays(1) • Synoptic control of the progress in the execution of hardness profiles and arrays (1) • Software to generate hardness profiles (traverses) on the basis of a pattern. Available profile (traverse) patterns: linear, zigzag, array (1) (hardness maps) on the basis of the coordinates acquired automatically by the digital micrometer head and the measured hardness values. • Graphic visualization (2D and 3D (1)) of the profile on the screen. The results and the profile can be automatically transferred to Microsoft WORD® Template. • Repetition of single indentations and / or single measurements • Automatic determination of a hardness value at a given distance from edge • Given a hardness value, calculation of the distance from edge • Given a hardness value, calculation of the effective case depth • Automatic calculation of the effective case depth
	NOTE (1) : Array functions can be carried out only if the digital micrometer head is mounted on the Y axis.
742EV2591	<p style="text-align: center;">MICROMETER HEAD for Y axis (available only for PLUS SYSTEM)</p> <ul style="list-style-type: none"> • Digital micrometer head featuring 0,001 mm resolution complete with electronic interface.
742EV2594	<p style="text-align: center;">MICROMETRIC eyepiece (Optional for new Micro hardness tester AC series)</p> <ul style="list-style-type: none"> • 10x magnification micrometric eyepiece to view indentations and work pieces



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	ACCESSORIES FOR ISOSCAN SERIES
742EV2592	<ul style="list-style-type: none"> Dual indenter kit (Optional, to be supplied only upon order of a new hardness testers mod. Isoscan) consisting of: One Knoop indenter, one 40x objective, software for automatic indentation reading and result handling
742EV7001	<ul style="list-style-type: none"> USB CCD B/W Camera, high resolution, sensitivity and speed
742EV7002	<ul style="list-style-type: none"> Photo-tube with C-mount (for CCD camera)
742EV7003	<ul style="list-style-type: none"> Universal tilting vice
742EV7004	<ul style="list-style-type: none"> Specimen holder for prepared work pieces Ø 25 mm
742EV7005	<ul style="list-style-type: none"> Specimen holder for prepared work pieces Ø 30mm
742EV7006	<ul style="list-style-type: none"> Specimen holder for prepared work pieces Ø 40mm
742EV7007	<ul style="list-style-type: none"> Specimen holder for prepared work pieces Ø 1.25"
742EV7008	<ul style="list-style-type: none"> Specimen holder for prepared work pieces Ø 1.5"
742EV7009	<ul style="list-style-type: none"> Specimen precision holder (Vertical type)
742EV7010	<ul style="list-style-type: none"> Specimen precision holder (Horizontal type)
742EV7011	<ul style="list-style-type: none"> Thin specimen holding device
742EV7012	<ul style="list-style-type: none"> Precision vise (jaw opening 50 mm)
742EV7013	<ul style="list-style-type: none"> Precision vise (jaw opening 80 mm)
742EV7014	<ul style="list-style-type: none"> 5x Objective
742EV7015	<ul style="list-style-type: none"> 10x Objective
742EV7016	<ul style="list-style-type: none"> 20x Objective
742EV7017	<ul style="list-style-type: none"> 40x Objective
742EV7018	<ul style="list-style-type: none"> 80x Objective
742EV7019	<ul style="list-style-type: none"> Additional built-in 5X objective complete with optical kit (supplied only upon order of a new hardness testers mod. Isoscan)
742EV7020	<ul style="list-style-type: none"> Additional built-in 10X objective complete with optical kit (supplied only upon order of a new hardness testers mod. Isoscan)
742EV7021	<ul style="list-style-type: none"> Additional built-in 20X objective complete with optical kit (supplied only upon order of a new hardness testers mod. Isoscan)
742EV7022	<ul style="list-style-type: none"> Additional built-in 40X objective complete with optical kit (supplied only upon order of a new hardness testers mod. Isoscan)
742EV7023	<ul style="list-style-type: none"> Additional built-in 80X objective complete with optical kit (supplied only upon order of a new hardness testers mod. Isoscan)
742EV7024	<ul style="list-style-type: none"> Flat Anvil ø 80 mm
742EV7025	<ul style="list-style-type: none"> Large Flat Anvil ø 180 mm
742EV7026	<ul style="list-style-type: none"> Large Flat Anvil ø 200 mm
742EV7027	<ul style="list-style-type: none"> Small V-Shape Anvil ø 80 mm
742EV7028	<ul style="list-style-type: none"> Deep V-Shape Anvil ø 80 mm
742EV7029	<ul style="list-style-type: none"> Vickers Diamond indenter for Isoscan series
742EV7030	<ul style="list-style-type: none"> Vickers Diamond indenter for ISOSCAN HV 50 hardness tester
742EV7031	<ul style="list-style-type: none"> Knoop diamond indenter for Isoscan series



Code	Description
742EV7033	• X-Y Manual stage for Isoscan series (110 x 110mm / Travel 25 x 25 mm)
742EV7034	• X-Y Manual stage for ISOSCAN HV 50 hardness tester (110 x 110mm / Travel 25 x 25 mm)
742EV7035	• X-Y Manual stage for Vickers hardness tester (110 x 110mm / Travel 50 x 50 mm)
742EV7036	• X-Y Manual stage for ISOSCAN HV 50 hardness tester (180 x 180mm / Travel 25 x 25 mm)
742EV7037	• X-Y Manual stage for ISOSCAN HV 50 hardness tester (180 x 180mm / Travel 50 x 50 mm)
742EV7038	• X-Y Manual stage for ISOSCAN HV 50 hardness tester (200 x 200mm / Travel 25 x 25 mm)
742EV7039	• X-Y Manual stage for ISOSCAN HV 50 hardness tester (200 x 200mm / Travel 50 x 50 mm)
742EV7041	• Calibration glass scale for microhardness testers
ACCESSORIES FOR MODELS MICROSCAN OD – AC	
742020100	• Test block 100-225 HV1 (*)
742020200	• Test block 300-600 HV1 (*)
742020300	• Test block 700-900 HV1 (*)
742022000	• Special "V shaped" vice for wires
742021000	• Revolving specimen holding vice
742032622	• Chuck vise
742032623	• Universal vise
742032624	• Thin specimen holding device
742023000	• KNOOP indenter with MPA certification
742024000	• Micro - Vickers indenter for Microscan model
742032285	• 12V 20W halogen bulb for microscope
742032616	• Test block for low hardness range HV 0,2 (*)
742032617	• Test block for medium hardness range HV 0,2 (*)
742032618	• Test block for high hardness range HV 0,2 (*)
742035000	• 2000 gf load for Microscan model
742036000	• 3000 gf load for Microscan model
742038000	• 5000 gf load for Microscan model
742039000	• 2500 gf load for Microscan model
742000288	• 20x Objective
742000289	• 5x Objective