

Laboratory of Mechanical Testing

(performance of mechanical testing of compact metallic materials, powder metallurgy materials and advanced ceramics)

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Elektromechanical universal testing machine Instron 5985 (250 kN power capacity, 1930 mm vertical testing area, Bluehill 3 Materials Testing Software, temperature chamber from -150°C to +350°C, dynamic extensometer: direct measurement of elongation and feedback machine control (tensile, compression and fatigue tests), temperature chamber is furnished with window for measurements using optical and video-extensometer)



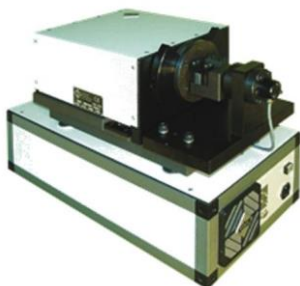
Macro hardness tester Vickers 432SVD (hardness tester for hardness measurements by Vickers & Knoop methods, loading: 0,3 - 0,5 - 1 - 3 - 5 - 10 - 20 - 30 kgf, with LCD visualization, on-line statistics, accuracy according to EN-ISO 6507, ASTM E384 and E92, and JIS, manual image processing and automatic indent evaluation)



WILSON-WOLPERT hardness tester Tukon 1102 (hardness tester for hardness measurements by Vickers & Knoop methods, loading: - 10, 25, 50, 100, 200, 300, 500, 1000 (2000) (gf); standards: EN-ISO 6507, ASTM E384 & E92, and JIS; automatic measurement cycle (loading/ dwell/unloading); conversion to Brinell, Vickers, Rockwell and tensile strength according to ASTM E140, ISO 18625 and GB Vickers & Knoop)

Universal hardness tester with max. loading 250kg model UH250

(hardness tester for hardness measurements by methods - Brinell, Vickers, Rockwell, Superficial Rockwell, Knoop and Brinell Depth; measurements according to standards: ISO 6506, ISO 6507, ISO 6508, ISO 4545, ASTM E18, ASTM E92, ASTM E10 and JIS; automatic measurement cycle; loading - 1, 3, 5, 10, 15, 15.625, 20, 30, 31.25, 50, 60, 62.5, 100, 125, 150, 187.5, 250 kgf; Vickers method - HV 1, 2, 3, 5, 10, 20, 30, 50, 100; Rockwell method -A, B, C, D, E, F, G, H, K, L, M, P, R, S, V, Bm, Fm, 15N, 30N, 45N, 15T, 30T, 45T, 15W, 30W, 45W, 15X, 30X, 45X, 15Y, 30Y, 45Y, 30 TM, HMR 5/25; Brinell method: 1, 2.5, 5, 10, 30; HB2.5: 6.25, 15.625, 31.25, 62.5, 187.5; HB5: 25, 62.5, 125, 250; HB10: 100, 250).



Resonance fatigue testing machine Cracktronic

(table model for dynamic flexural loading, frequency range: 40 – 300 Hz. applications: fatigue tests / S/N-diagrams; growth of fatigue cracks / da / dN-krivky; preparation of fatigue crack on fracture mechanics samples also in «hot cells»; controlling the products quality according to customer requirements)