**Mechanical Tests Laboratory**

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* Vickers Hardness Tester (Avery)
* Tensile – Compression - Bending Test Device (MFL 200 kN)
* Izod Impact Testing Device (Avery)
* Brinell Hardness Tester (Avery)
* Rockwell (A, B, C) Hardness Tester (Page Wilson)
* Rotating Bending Test Device
* Charpy Impact Testing Device (Instron – Wolpert PW 30 ( 150 J))
* Creep Testing Machine (MTS)
* Torsion Testing Machine (Instron - Wolpert)
* Universal Tensile – Compression - Bending Test Device (Instron 8503 (20kN))
* Universal Tensile – Compression - Bending Test Device (Instron 8503 (500kN))
* Vickers, Rockwell, Brinell Hardness Tester (Instron – Wolpert Dia-testor7551)
* Portable Hardness Tester (Instron – Wolpert (Hv 1kg))
* Mechanical Alloying Mill (Szegvari Type)

**Metallography Laboratory**

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* Automatic Polishing Device (Metkon Gripo 300-1V)
* Automatic Fluid Dispenser (Metkon Dispomat)
* Polishing Device (Struers Metapolan)
* Vibratory Polisher (Metapolan)
* Double Wheel Grinding and Polishing Machine (Metasinex)
* Ultrasonic Cleaning Device (Struers Metason-60)
* Abrasive Cutting Device (Metkon Servocut)
* Hot Mounting Device (Metkon DigiPress)
* Hot Mounting Device (Struers Press to Press)
* Specimen Dryer (Sinbo)
* Specimen Storage Cabinet
* Consumables Storage Cabinet

**Optical Microscopy Laboratory**



* Optical Microscope (Prior x50-x1000) – 15 pcs.
* Optical Microscope (Olympus x50-x1000) – 4. pcs.
* Inverted Microscope (Olympus x50-x1000)
* Optical Microscope Prior (x50-x1000, integrated with Panasonic digital camera)
* Optical Microscope Leica DM4000M (x25-x1000, integrated with Leica DFC320 digital camera)

**Heat Treatment Laboratory**



* Muffle Furnace (max. 1150 C, Hereaus)
* Vertical Tube Furnace (max. 1400 C, SFL SC 1206)
* Horizontal Tube Furnace (max 1400 C, SFL SC 1206)
* Box-type Heat Treatment Furnace (max. 1400C, SFL MFC 1197)
* Time-Temperature Datalogger (ABB Instrument)
* Digital Temperature Gauge – 3 pcs.
* Oil Bath (max. 500C, Alser Protherm)
* Salt Bath (max. 500C, Alser Protherm)

**Scanning Electron Microscope (SEM) Laboratory**



* Scanning Electron Microscope (JEOL JSM 6060 LV)
* EDS-Energy Dispersive X-Ray Spectrometer (IXRF Instruments)
* Specimen gold coating unit.
* Specimen carbon coating unit.

**3D Modeling Laboratory – Optical Emission Spectrometry**



* Spectral analyzer (Bruker)
* 3D Printer (Makerbot)
* Elemental Analysis Device (Leco)

**Welding Workshop**



* Guillotine Shears
* Press Brake
* Spot Welding Machine
* Pillar Drill
* Jig Saw
* Punch Press
* Combined Shears
* Gas Metal Arc Welding Machine – 6 pcs.
* Electric Arc Welding Machine – 4 pcs.
* Grinding Machine – 2 pcs.

**Basic Metal Processing Workshop**



* Bench Drill
* Jig Saw
* Hydraulic Saw
* Bandsaw
* Pillar Drill – 2pcs.
* Metal Clamping Machine with Arm
* Plate Bending Machine

**Powder Metallurgy Laboratory**



* Hydraulic Press
* Turbula Powder Mixer – 2 pcs.
* Microwave Oven
* Abrasive Analysis Device
* Horizontal Tube Furnace – 3 pcs.

**Metal Casting Laboratory**

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* Sand mixing device – 2 pcs.
* Electrical Metal Melting Furnace – 2 pcs.
* Injection Moulding Furnace – 2 pcs.
* Portable Furnace
* Bandsaw
* Small Size Turning Lathe
* Bench Drill
* Pillar Drill
* Die Casting Machine
* Vacuum Density Tester

**Metallurgy Laboratory**



* Sand Grain Size Analyzer
* Wet-dry Strength Analyzer
* Vacuum Casting Machine
* Bench Top Sand Mixing Device
* Wax Injector
* Drying Oven – 2 pcs.
* Fume Hood
* Gas permeability Analyzer

**X-Ray Diffraction Laboratory**

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* X-Ray Diffraction Device (XRD)
* Thermogravimetric Analyzer (TGA)
* Differential Scanning Calorimeter (DTA)
* Ultraviolet-Visible Spectrophotometer (UV-VIS)