Materials characterization includes all the necessary laboratory analysis in order to establish thw identity of an alloy. The analyses include

Chemical analysis in order to define the chemical composition of the alloy

Metallography in order to define the microstructure (grain size, phase identification and distribution)

Scanning Electron Microscopy (SEM) in order to identify microstructural features in high magnification and conduct local chemical analysis by EDAX (energy-dispersive analysis with X-rays)

Atomic Force Microscopy (AFM) for high magnification characterization of surfaces

Hardness and microhardness testing in order to define the hardness of materials, from the hardness of a heat treated tool steel to the hardness profile of a nitrided mold used in the Aluminum extrusion industries.

For a quotation contact:

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