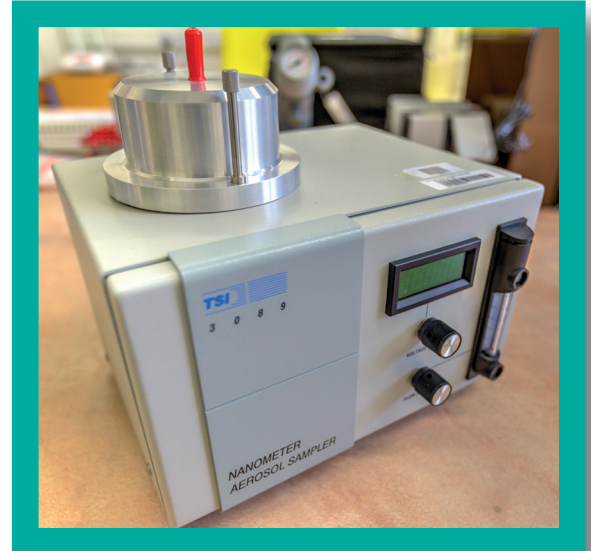


Nanometer Aerosol Sampler

SPECIFICATIONS

The nanometer aerosol sampler model 3089 (NAS) consists of grounded cylindrical sampling chamber with an electrode at its bottom where a potential up to 10 000 V can be set. The sampler operates at a constant flow and voltage, the sampling substrate is collected on a TEM grid attached to the electrode. The instrument is only used to collect particles for further analysis.



MEASURING METHODS

E.g. ČSN 01 5110 (015110) Sampling of materials. Basic provisions; Analytical handbook (1980), Sampling and sample treatment section. The capture time depends on the settling velocity of particles on the substrate and the method of subsequent analysis. In general, smaller particles require longer capture time.

OVERVIEW OF MEASURABLE PARAMETERS / OUTPUT INFORMATION

Output is samples of aerosol particles for electron microscopy (SEM/TEM); samples for scanning microscopy (AFM/STM); samples for assessment characterization of nanomaterials; sampling of air pollutants.

TYPES OF SAMPLES SUITABLE FOR ANALYSIS / MEASUREMENT CONDITIONS

Air samples whose particles need to be analysed to identify aerosol particles. Aerosol particles are conditioned and positively charged and then are evenly captured on a substrate (TEM grid) for subsequent analysis.