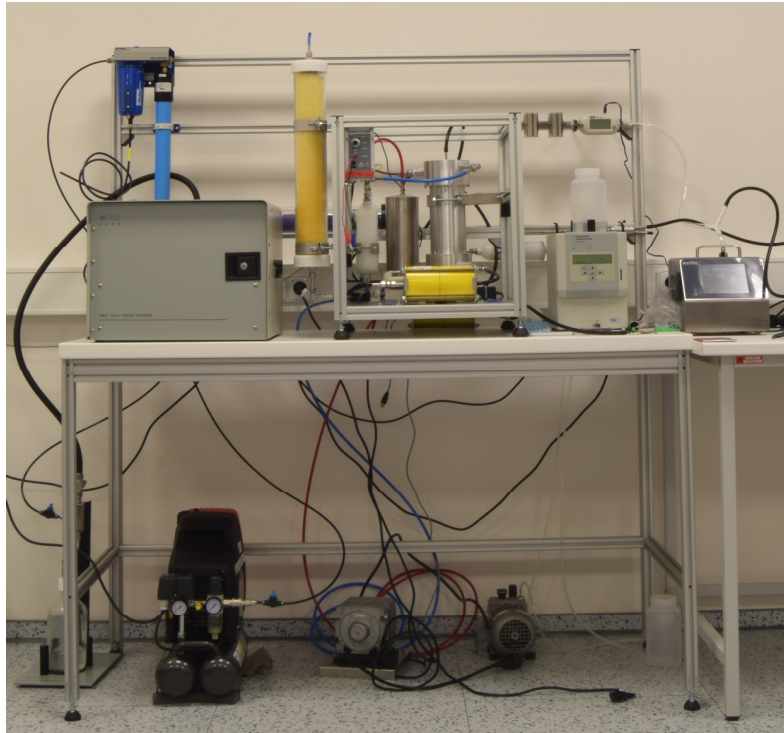


Measurement facility for calibration of particle counters

CMI regional branch Brno (see www.cmi.cz) has launched a new calibration service in January 2016 – a calibration of particle counters for a cleanroom certification. For this purpose a newly constructed facility for particle counting is used. With this device we can calibrate all the optical particle counters (OPC) and condensation particle counters (CPC) available in the field covering all commonly used ranges.

Parameters for the calibration of counters:

- types of reference particles - PSL spheres ranging from 20 nm up to 25 μm in diameter;
- calibrations by means of at least 3 dimensions of the reference particles;
- measurement ranges - OPC: 0.3 μm up to 25 μm , CPC: 20 nm up to 3 μm ,
- flowrate: uncertainty better than $\pm 5\%$,
- counting efficiency: 50% \pm 20% out of the dimension of the smallest particles, 100% \pm 10% out of the dimension which is 1.5 up to 2 multiple of the smallest measured dimension of the particles.



A global view of the facility

Application

All standard types of the OPC and CPC particle counters currently used in the field can be calibrated by this new measurement facility.

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