

ANEMOMETER CALIBRATION

The cup anemometer is the most crucial instrument in wind turbine testing and measurement. Its calibration (the definition of the relation connecting anemometer output with the actual wind speed) is a prerequisite for valid results.

The Laboratory for Wind Turbine Testing (LWTT) performs anemometer calibration in CRES-owned new open-loop wind tunnel facility located in its premises. The direct and continuous access to the wind tunnel ensures immediate response to calibration requests by our customers at a reasonable price (discounts offered for large orders).

MEASNET-compliant calibration certificates are provided based on a reference wind speed range of 4m/s to 16 m/s. The upper limit of the measuring range can be extended if requested. The total calibration uncertainty is below 1% at a reference speed of 10 m/s. LWTT coordinates and participates in the regular interlaboratory comparisons organised within the MEASNET network in order to assure the reliability of the anemometer calibration results.

More than 300 anemometer calibration tests are performed every year for customers from Europe and USA (wind energy developers, utilities, research institutions etc). The capacity exists for calibrating more than 1200 items annually.

The Laboratory for Wind Turbine Testing of CRES is **accredited** by the DAP (Deutsches Akkreditierungssystem Prufwesen) as a Testing Laboratory according to the **DIN-EN ISO/IEC 17025:2000**. The accreditation scope of the Laboratory includes anemometer calibration tests.

