

WK320	Göttinger free jet wind tunnel
Reference	Laser-Doppler-Anemometer (LDA)
Calibration range	0.1 m/s to 70 m/s
Calibration medium	air at atmospheric conditions

WK180	Free jet wind tunnel
Reference	differential pressure system with DAkkS-calibrated transfer measurement standards
Calibration range	0.1 m/s to 70 m/s
Calibration medium	air at atmospheric conditions

NWK	Low velocity wind tunnel with closed test section
Reference	DAkkS-calibrated transfer measurement standards
Calibration range	0.25 m/s to 5.0 m/s
Calibration medium	air at atmospheric conditions

HTP	High temperature flow test bench in closed construction 'University of Stuttgart'
Reference	LDA-calibrated transfer measurement standards
Calibration range	0.5 m/s to 70 m/s
Temperature range	+20 °C to 400 °C
Calibration medium	air

High temperature flow test bench HTP in closed construction 'University of Stuttgart'

NWK

AVP	Atmospheric flow rate test bench
Reference	PTB-calibrated transfer measurement standards
Calibration range	1.5 m ³ /h to 5500 m ³ /h
Calibration medium	air at atmospheric conditions

DVP	Nozzle flow rate test bench
Reference	critical venturi nozzles / laval nozzles, DAkkS-calibrated
Calibration range	0.022 m ³ /h to 58 m ³ /h (0.367 l/min to 964.5 l/min)
Calibration medium	air at atmospheric conditions

HDVP	High pressure flow rate test bench in closed construction
Reference	PTB-calibrated transfer measurement standards
Calibration range	0.2 m ³ /h to 4000 m ³ /h (0.02 Norm-m/s to 350 Norm-m/s)*
Pressure range	1000 hPa to 10000 hPa
Temperature range	+20 °C to +45 °C
Calibration medium	air at atmospheric conditions

* calculated from flow rate and average flow velocity with the respective profile factor in DN200 pipe

RVP	Real gas flow rate test bench
Reference	DAkkS-calibrated transfer measurement standards
Calibration range	0.06 m ³ /h to 100 m ³ /h (0.08 Norm-m/s to 150 Norm-m/s)*
Calibration medium	various gases

* calculated from flow rate and average flow velocity in DN16 pipe

WVP	Water flow rate test bench
Reference	electromagnetic flow rate meter
Calibration range	0.5 m ³ /h to 100 m ³ /h (0.02 m/s to 3.5 m/s)*
Calibration medium	water

*calculated from flow rate and average flow velocity in DN100 pipe

Calibration / Measurement uncertainty / Recalibration

Höntzsch calibration is able to carry out an optimally tailored calibration for every type of operation. As close an approximation as possible to the real conditions is achieved using a variation of pressure, temperature and type of calibration medium.

This ideal choice of calibration conditions means that measurement uncertainties in practical applications are reduced to a minimum. Höntzsch calibration certificates document the set value and actual value and provide the user with proof and reliability that faultless and accurate measuring equipment is in use for solving measuring problems.

The measurement uncertainties shown on the calibration certificate are determined according to the "GUIDE OF EXPRESSION OF UNCERTAINTY IN MEASUREMENT". The expanded measurement uncertainties result from the standard measurement uncertainties being multiplied with the coverage factor $k = 2$. The value of the measurable variable lies as a rule with a probability of approx. 95 % within the respective value interval.

It must be pointed out that additional measurement uncertainties can arise from modified application conditions. Influencing factors are, for example, pressure, temperature, flow profile and the degree of turbulence of the flow to be measured. Details regarding measurement uncertainty of each measuring system can be found in the relevant data specification.

It is the responsibility of the user to determine the recalibration interval. The intervals should be chosen so that the re-calibration takes place before a significant change in the medium for the measurement problem. Please take into account the specific application conditions, environmental influences and the extent of potential secondary damage caused by values outside the specified tolerance.

Standards, directives or legal requirements can also determine the right time for a recalibration.