

alicon

CALIBRATION & VERIFICATION SERVICE CERTIFICATE

IF  **EDGEMASTER**

SERIAL NUMBER: 056013311712

DATE OF CALIBRATION: 07.11.2024

ENGINEER

Frederico Drago
Service Technician

CALIBRATION OVERVIEW

Calibration	Objective	Reference	Actual	Deviation	Tolerated Deviation	Last Calibration	State
Vertical	10x	1002.43µm	1003.197µm	0.767µm	1.0µm	07.11.2024	OK
Lateral	10x	49.999µm	50.002µm	0.003µm	0.015µm	07.11.2024	OK

LATERAL CALIBRATION

To prove the quality of the measurement device, the following measurements were performed using the IF-CalibrationTool:

Calibration Results

Objective	Description	Value	Uncertainty/State
10x	Alicona	49.999µm	0.2µm
	Alicona	50.002µm	0.5µm
	Deviation	0.003µm	OK
	Tolerated Deviation	0.015µm	

TRACEABILITY OF THE CALIBRATION TOOL TO THE NATIONAL STANDARD

The lateral part of this calibration was calibrated with an IFM system with the serial number 075215506515

The aforementioned IFM system was calibrated with an Alicona Calibration Tool with the serial number 002030004914

The lateral part of the calibration tool with the serial number 002030004914 and the calibration mark 019ALICONA19 was calibrated by the DAkkS calibration laboratory D-K-18737-01-00 with the calibration label 2322 D-K-18737-01-00 2019-03.

The DAkkS calibration laboratory D-K-18737-01-00 uses a position measurement system LMS IPRO4.

The position measurement system LMS IPRO4 is calibrated with a two-dimensional position standard.

VERTICAL CALIBRATION

To prove the quality of the measurement device, the following measurements were performed using the IF-CalibrationTool:

Calibration Results

Description	Value	Uncertainty/State
Kolb & Baumann	1002.43µm	0.15µm
Alicona	1003.197µm	1.0µm
Deviation	0.767µm	OK
Tolerated Deviation	1.0µm	

TRACEABILITY OF THE CALIBRATION TOOL TO THE NATIONAL STANDARD

The vertical part of this calibration tool with the serial number 002001307519 and the calibration mark 003ALICONA20 was calibrated by the DAkkS calibration laboratory D-K-15077-01-00 with the calibration label 13982 D-K-15077-01-00- 2019-09.

The traceability to national standards is guaranteed by measurement against comparison with DAkkS-calibrated gauge blocks of Calibration Certificate N° 12255 D-K-15077-01-00 2017-07.

MEASUREMENT SETTINGS

Objective	10x
Vertical Resolution	1.0µm
Lateral Resolution	3.9µm
Polarizer	Off

MEASUREMENT UNCERTAINTY

All stated uncertainties are expanded measurement uncertainties obtained by multiplying the standard measurement uncertainties by the coverage factor $k=2$. They have been determined in accordance with the "Guide to the Expression of Uncertainty in Measurement (GUM)". The measurand values lie, with a probability of approximately 95%, within the coverage interval given by the expanded uncertainties.

USED SOFTWARE

The Softwareversion which was used for all adjustments and calibrations is the ServiceSoftware 6.5.3.

USED CALIBRATION TOOLS

The measurement device was calibrated with standardized, tested and certified calibration tools. This guarantees the accurate, efficient and first class use of the device.

IF-CalibrationTool

Calibration Mark:	003ALICONA20
Date of Last Calibration:	22.01.2020 (lateral part)
	26.09.2019 (vertical part)