LVDT / Blank calibration measurement record

PLANNING TEMPLATE - no measured results, calibration certificate, accreditation or approval is supplied

Record identities and the agreed method before collecting data. All fields are blank. The responsible laboratory or engineering team must define a suitable procedure and acceptance criteria.

Sensor, core and conditioner models / serials

Cable, topology, excitation amplitude / frequency and output

Reference instrument, serial and calibration record / validity

Working range, units, null and datum / alignment

Temperature, warm-up, humidity and operating conditions

Method / revision, point sequence, directions and repeat count

Acquisition, filtering, sampling and output-to-displacement conversion

Acceptance limits and agreed linearity / repeatability method

Reference chain and uncertainty must support the actual result. A traceability statement for an instrument does not automatically certify measurements made with the complete assembled chain.

Background: NIST metrological traceability policy

LVDT / Blank reference and indication data

BLANK DATA SPACE - agree range, points, repeats and directions; these rows are not a mandatory test protocol

Record converted displacement in a common unit. Keep raw electrical readings separately with the conversion method. Indication error = indicated displacement minus reference displacement. Keep before/after-adjustment data distinct.

Record ID / sensor identity / units / before-or-after adjustment

Row	Reference	Up indication	Down indication	Error up	Error down
1					
2					
3					
4					
5					
6					
7					

Additional repeats / return-to-null / repeatability calculation and result

Adjustment, residuals, anomalies and links to additional raw data

At a common reference position, directional difference may be evaluated from up/down indications under the agreed method. Record the calculation, units and limits; no result is prefilled here.

LVDT / Blank uncertainty and disposition record

PLANNING TEMPLATE - a completed worksheet is not evidence of accreditation or metrological traceability by itself

List relevant uncertainty contributions, their evaluation and units, and any sensitivity coefficients or correlations. Agree how contributions and coverage are combined; no default uncertainty, coverage factor or pass/fail threshold is supplied.

Reference calibration / resolution contribution and evaluation

Alignment / datum / fixture contribution and evaluation

Temperature / drift / warm-up contribution and evaluation

Repeatability / electrical noise / acquisition contribution

Other contributions, correlations and calculation method

Combined / expanded uncertainty, units, coverage and basis

Reported result, acceptance comparison and limitations

Responsible reviewer, actual review date and record references

No generated certificate number, measured curve, issued result or approval signature is included. Retain the reference records, raw readings and approved method with the actual report. Test organization, traceability and fitness for purpose require their own evidence.