

CERTIFICATE OF CALIBRATION

ISSUED BY :

ACCURATE ENGINEERING CO. PVT. LTD.

67, Hadapsar Industrial Estate, Hadapsar, Pune-411 013.

Phone No. 020-268270158 / 159, Direct : 020-66069505 / 9503, Email : calpun@accurate.co.in



ULR - CC208219000009113F
MECHANICAL CALIBRATION - DIMENSION

Certificate No. : P/09/190047

Date of Issue : 03/10/2019

Date of Calibration:	Page	No. of Pages
01/10/2019	1	2

NAME & ADDRESS OF CUSTOMER

: M/s. NATIONAL CENTRE FOR QUALITY CALIBRATION
HOUSE NO. 4, ABHISHREE CORPORATE PARK, NR. SWAGAT
BUNGLOW BRTS, ISKCON AMBLI, AHMEDABAD-380 058

CUSTOMER'S PO.NO.

: -

WORK ORDER NO.

: PU/CAL/1920/0743

GAUGE FOR CALIBRATION

: **INTERNAL MICRO CHECKER.**

RANGE - 0-300mm MAKE - ADITYA SR. NO. - IMC 0500

CODE NO. - NCQC/M-06

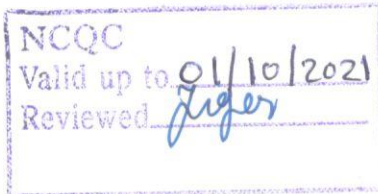
ACCURATE ID.NO.- PU/CAL/1920/0743/1

CONDITION OF ITEM & DATE OF RECEIPT

: O.K.
27/09/2019

CALIBRATION PROCEDURE

: Determination of Actual step sizes and parallelism of measuring faces from zero reference face was measured by 3 co-ordinate metrology. All steps sizes were measured with a single probe point giving a shortest distance from aligned reference face. As per CP No. 09
Central length deviation was determined by the method of comparison by contact against Ref. Master of the same nominal size as per IS 2984. Gauge blocks were supported vertically. There was an adequate period of temperature stabilisation before the measurements were carried out. As per CP No. 01.



EQUIPMENT & MASTERS USED FOR CALIBRATION

1. UNIVERSAL MEASURING M/C.
SIP MU 214B. (Inhouse Calibrated) valid upto 26th Nov 2019
2. Gauge block calibration tester Make - Mahr
Type - 826 E. Sr.No. - 09505 Lab ID. NO. - E 03 (Inhouse Calibrated) valid upto 23th May 2020.
3. Grade 'K' Slip Gauge Box Code No.- R1-02 (Make- Aditya)
Sr.No.872 (Inhouse Calibrated) valid upto 13th Nov.2020.

TRACEABILITY

1. Traceable to National Standards through NABL Lab.No CC-2082 vide Cer.No. -P/98/1812 calibrated on 26th Nov. 2018
2. Traceable to National Standards through NABL Lab.No.CC-2082 vide Cer No. P/98/1901 calibrated on 23rd May 2019.
3. Traceable to National Standards through NABL Lab.No.C-0052 vide Cer. No.P/97/1818 calibrated on 13th Nov. 2018

ENVIRONMENTAL CONDITION

: 20.4° C.

UNCERTAINTY OF MEASUREMENT : ± 0.0035mm

± 0.10µm For Slip Gauges upto & including 25mm

The uncertainty stated is the expanded uncertainty of measurement obtained by multiplying the standard uncertainty by the coverage factor k=2 corresponds to confidence level of 95.45%.

NOTE : Calibration Results are enclosed on Page No. 2 onwards.

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Note : The certificate is issued subject to conditions stated overleaf.

Calibrated By

Rahul Pawar
Tech.Lab Assistant



Approved By

Ashok Patil
Manager Calibration Lab

CERTIFICATE OF CALIBRATION

ISSUED BY : ACCURATE ENGINEERING CO. PVT. LTD.
NABL ACCREDITED CALIBRATION LABORATORY NO.: CC-2082

Continuation of
Certificate No.:
P/09/190047
Dt. -01/10/2019
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ULR - CC208219000009113F
MECHANICAL CALIBRATION - DIMENSION
CALIBRATION RESULTS

1. INTERNAL MICRO CHECKER :

RANGE - 0-300 mm
CODE NO.- NCQC/M-06

MAKE - ADITYA
ACCURATE ID.NO.-PU/CAL/1920/0743/1

SR. NO.- IMC 0500

A. SETTING SLIPS :

Nominal Size (mm) (SR. NO.)	Deviation from Nominal size (μm)
10.00 (2918)	+0.03
10.00 (2919)	+0.01

B. INSTRUMENTAL ERROR:

Nominal Size of Step (mm)	Observed Size (mm)
0.00	0.00 Set
45	45.0008
70	69.9999
95	94.9999
120	120.0001
145	145.0003
170	169.9998
195	194.9999
220	219.9993
245	244.9987
270	269.9987
295	294.9989

NOTE : Zero set on one reference gauge block face. The step sizes 45-300mm was measured with same zero ref. on direct steps of Internal Micro Checker.

C. PARALLELISM OF MEASURING FACES :

WITHIN 0.0012mm

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Calibrated by

CLR 45-S



Approved by