



COMMITTED TO THE  
CUSTOMER SINCE - 1996

# Vaidyanatheshwara INSTRUMENTS

## CERTIFICATE OF CALIBRATION



No. 301/A, 9th Main Road, 3rd Cross, Rajiv Gandhi Nagar, J.B. Kaval, Nandhini Layout Post, Bangalore - 560 096.  
Ph : 080-23377266, Mob : 9986586789 / 9632221171 / 9964308118 | Email : info@viplgroup.com Web : www.viplgroup.com

NABL Accredited Calibration Lab as per ISO/IEC 17025 : 2017 With vide Certificate No: CC-2473

Date Of Issue: 17-03-2023

Sheet : 1 of 1

Format No. : VI-FRM-ME-007		ULR No : CC247323100010361F		Report No: VI/22-23/8525-03			
Customer Name and Address:	M/S. MAG ENGINEERING UNIT A (A Unit of Sandhar Technologies Ltd.) No. 46A, 3rd Main, 2nd Phase, Peenya, Bangalore, Karnataka - 560 058.						
Customer Ref. No. & Date	DC No.: SIA/RGP21-22/0365 & 13-03-2023	Received Condition	Satisfactory				
SRF. No.	8525	Date of Receipt	14-03-2023				
<b>CALIBRATED INSTRUMENT / EQUIPMENT DETAILS</b>							
Nomenclature	Vernier Caliper	Make	Mitutoyo				
Range / Resolution	0-300 mm 0.02 mm	Sl. No. / ID.No.	13131689 / MS-03				
Calibration Done At	VI Mechanical Lab	Temperature / Humidity	20.3-20.6°C	52-54 %RH			
Calibrated on	17-03-2023	Calibration due on	16-03-2024				
Discipline	Mechanical (Dimensional)						
<b>MASTER EQUIPMENT TRACEABILITY DETAILS</b>							
Sl.No.	Nomenclature	Make / Model	Sl. No.	Traceable Cert. No.	Traceable To	Validity	
1	Caliper Checker	KCP / CC-1000	3095	VI/22-23/INT-ME-135	VI-Bangalore	11-05-2023	
2	Tung Carb Gauge Block Set	KCP / M112	10021	VI/22-23/INT-ME-126	VI-Bangalore	21-07-2023	
The master equipments used are traceable to National Standards			Ref. Doc. IS 16491(Part I) 2016 and SOP-16-05				
<b>CALIBRATION RESULTS</b>							
All values are in mm							
Std. Values	External Jaws		Internal Jaws		Depth Bar		Permissible Error(±)
	Actual Values	Error	Actual Values	Error	Actual Values	Error	
0	0.00	0.00	0.00	0.00	0.00	0.00	0.02
20.00	19.98	-0.02	20.02	+0.02	20.00	0.00	0.03
50.00	49.98	-0.02	50.02	+0.02	50.00	0.00	0.03
75.00	74.98	-0.02	75.02	+0.02	75.00	0.00	0.03
100.00	99.98	-0.02	100.02	+0.02	100.00	0.00	0.03
150.00	149.98	-0.02	150.02	+0.02	150.00	0.00	0.03
200.00	199.98	-0.02	200.02	+0.02	200.00	0.00	0.03
250.00	249.98	-0.02	250.02	+0.02	250.00	0.00	0.03
300.00	299.96	-0.04	300.02	+0.02	300.00	0.00	0.04
Parallelism		Permissible Error		Measured Value			
External Jaws		0.020		0.007			
Internal Jaws		0.020		0.006			

### Note :

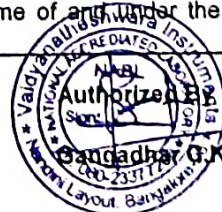
• Determination of various sizes and parallelism of measuring faces (External / Internal measurement) from respective reference faces were measured by direct measurement against slip gauges.

### Conclusion :

• Uncertainty of calibration at 95.45 % Confidence level and Coverage Factor K = 2 :  $\pm 10.2\mu\text{m}$   
• The Reported Results are valid only for the conditions of the received Instruments /gauges at the time of and under the stated conditions of the calibration.

Calibrated By  
  
Hemanth Kumara G  
(Calibration Engineer)

Checked By  
  
P. Santhosh Kumar  
(Lab In Charge)



This report refers only to the item/gauge submitted and may not be reproduced except in full without written permission from Vaidyanatheshwara Instruments Bangalore - 560096.