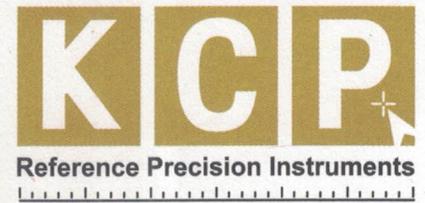




NABL ACCREDITATION
CERTIFICATE No.: CC-2323



www.kcpindia.com

CALIBRATION CERTIFICATE OF GAUGE BLOCK	CALIBRATION CERTIFICATE NO. KCP/02/19~20/0195.	
	ULR NO: CC2323 19 0 00004581 F	
DATE OF CALIBRATION: 10-04-2019	PAGE: 1 of 3	NO. OF PAGES: 3

NAME & ADDRESS OF THE CUSTOMER : **M/s. S EXPERT ENGINEERS**
C-144, MIDC, Waluj,
AURANGABAD - 431 136.

CUSTOMER'S REFERENCE : Internal requisition
DATE OF RECEIPT : 10-04-2019
ITEM FOR CALIBRATION : Steel Long Gauge Block Set, Type: M-2, Grade: '0'
Sr No: 2931, Make: KCP
CONDITION OF ITEM : OK
LAB WORK ORDER NO. : 19-20/017
CALIBRATION PROCEDURE : Determination of center deviation & parallelism
of gauge block by comparison method as per
procedure No.KCP/PCD/07-02 & as per IS 2984:2003
EQUIPMENTS / REFERENCE CALIBRATION STANDARDS : Used standards are traceable to National standards
(direct/thro' NABL accredited Lab.)

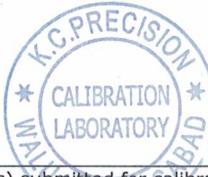
Sr.No.	Type of Master equipments	I.D. No.	Calibration Report No.	Valid Up to
1.	Gauge Block set, M8, Gr. 'K'	180	17031350/D1.02/C-057	16.05.2019
2.	Electronic Lever Probe with Transfer Stand	KCP/LVDT/01	KCP/29/18~19/6416	29-12-2020

ENVIRONMENTAL CONDITION : 20° ± 1° C
UNCERTAINTY OF MEASUREMENT ± 2.1 µm up to 300 mm
± 2.5 µm Over 300 up to 600 mm

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:

- 'ln' = Nominal length, 'lc' = Central length
- α = Coefficient of Thermal Expansion.

<p>CALIBRATED BY</p>  <p>S.S.KONDEKAR (Inspector)</p>		<p>AUTHORIZED SIGNATORY</p>  <p>T.V.JAMKHEDKAR (Technical Manager)</p>
<ul style="list-style-type: none"> • This certificate refers only to the particular item(s) submitted for calibration. • The calibration results reported in this certificate are valid at the time of & under the stated condition of measurement. • This certificate shall not be reproduced except in full, unless written permission of Quality Manager (Calibration Lab) 		



NABL ACCREDITATION
CERTIFICATE No.: CC-2323



www.kcpindia.com

CALIBRATION CERTIFICATE OF GAUGE BLOCK		CALIBRATION CERTIFICATE NO. KCP/02/19~20/0195.	
DATE OF CALIBRATION: 10-04-2019	PAGE: 2 of 3	NO. OF PAGES: 3	

CALIBRATION RESULTS

ITEM FOR CALIBRATION: Steel Long Gauge Block Set

TYPE: M-2

SR NO: 2931

LAB WORK ORDER NO: 19-20/017

MAKE: KCP

Nominal Length (ln) 'mm'	Dev. of central Length from Nominal Length (lc-ln) 'µm'	Extreme Deviation from central length 'µm'	
		fo (+ve)	fu (- ve)
200.0	-0.06	0.06	0.03
200.0 A	-0.25	0.10	0.01

<p>CALIBRATED BY</p>  <p>S.S.KONDEKAR (Inspector)</p>		<p>AUTHORIZED SIGNATORY</p>  <p>T.V.JAMKHEDKAR (Technical Manager)</p>
<ul style="list-style-type: none"> This certificate refers only to the particular item(s) submitted for calibration. The calibration results reported in this certificate are valid at the time of & under the stated condition of measurement. This certificate shall not be reproduced except in full, unless written permission of Quality Manager (Calibration Lab) 		

CALIBRATION CERTIFICATE OF GAUGE BLOCK		CALIBRATION CERTIFICATE NO. KCP/02/19~20/0195.	
DATE OF CALIBRATION: 10-04-2019	PAGE: 3 of 3	No Of Pages: 03	

Specifications as per IS 2984 (2003) and ISO 3650 (1998):-

Nominal length l_n mm	Calibration Grade K		Grade 0		Grade 1		Grade 2	
	limit deviation of length at any point from nominal length $\pm t_e$ μm	tolerance for the variation in length t_v μm	limit deviation of length at any point from nominal length $\pm t_e$ μm	tolerance for the variation in length t_v μm	limit deviation of length at any point from nominal length $\pm t_e$ μm	tolerance for the variation in length t_v μm	limit deviation of length at any point from nominal length $\pm t_e$ μm	tolerance for the variation in length t_v μm
$0.5 \leq l_n \leq 10$	0.2	0.05	0.12	0.1	0.2	0.16	0.45	0.3
$10 < l_n \leq 25$	0.3	0.05	0.14	0.1	0.3	0.16	0.6	0.3
$25 < l_n \leq 50$	0.4	0.06	0.2	0.1	0.4	0.18	0.8	0.3
$50 < l_n \leq 75$	0.5	0.06	0.25	0.12	0.5	0.18	1	0.35
$75 < l_n \leq 100$	0.6	0.07	0.3	0.12	0.6	0.2	1.2	0.35
$100 < l_n \leq 150$	0.8	0.08	0.4	0.14	0.8	0.2	1.6	0.4
$150 < l_n \leq 200$	1	0.09	0.5	0.16	1	0.25	2	0.4
$200 < l_n \leq 250$	1.2	0.1	0.6	0.16	1.2	0.25	2.4	0.45
$250 < l_n \leq 300$	1.4	0.1	0.7	0.18	1.4	0.25	2.8	0.5
$300 < l_n \leq 400$	1.8	0.12	0.9	0.2	1.8	0.3	3.6	0.5
$400 < l_n \leq 500$	2.2	0.14	1.1	0.25	2.2	0.35	4.4	0.6
$500 < l_n \leq 600$	2.6	0.16	1.3	0.25	2.6	0.4	5	0.7
$600 < l_n \leq 700$	3	0.18	1.5	0.3	3	0.45	6	0.7
$700 < l_n \leq 800$	3.4	0.2	1.7	0.3	3.4	0.5	6.5	0.8
$800 < l_n \leq 900$	3.8	0.2	1.9	0.35	3.8	0.5	7.5	0.9
$900 < l_n \leq 1000$	4.2	0.25	2	0.4	4.2	0.6	8	1

CALIBRATED BY

S.S.KONDEKAR
(Quality Inspector)



AUTHORISED SIGNATORY

T.V.JAMKHEDKAR
(Technical Manager)

- This certificate refers only to the particular item(s) submitted for calibration.
- The calibration results reported in this certificate are valid at the time of & under the stated condition of measurement.
- This certificate shall not be reproduced except in full, unless written permission of Quality Manager (Calibration Lab)