



NABL

**National Accreditation Board for
Testing and Calibration Laboratories**

Department of Science & Technology, India

CERTIFICATE OF ACCREDITATION

ALFATEK SERVICES

has been assessed and accredited in accordance with the standard

ISO/IEC 17025:2005

"General Requirements for the Competence of Testing & Calibration Laboratories"

for its facilities at

TRIVANDRUM

in the field of

MECHANICAL CALIBRATION

Certificate Number C -0361

Issue Date 23/12/2008


Valid Until 28/09/2010

This certificate remains valid for the Scope of Accreditation as specified in the annexure subject to continued satisfactory compliance to the above standard & the additional requirements of NABL.

Signed for and on behalf of NABL


Bibin Philip
Convenor


Dr B. Hari Gopal
Director


Dr T. Ramasami
Chairman



NABL

Department of Science & Technology, India

SCOPE OF ACCREDITATION

Laboratory Alfatek Services, Trivandrum

Accreditation Standard ISO/IEC 17025: 2005

Field Mechanical Calibration Issue Date 23.12.2008

Certificate Number C-0361 Valid Until 28.09.2010

Last Amended on - Page 1 of 3

Quantity Measured / Instrument	Range	* Best Measurement Capability (\pm)	Remarks
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AT LABORATORY

1. MASS CALIBRATION OF ELECTRONIC BALANCE OF DENSIMETER	0 to 200g	0.02g	Using Certified Weights
2. VERIFICATION OF RAPID PLASTIMETER FOR LVDT (LENGTH)	0.25mm 0.30mm 0.35mm 0.40mm 0.45mm 0.5mm 0.75mm 1mm	6 μ m	Using Slip Gauges
3. VERIFICATION OF SHORE-A DUROMETER FOR SPRING FORCE & INDENTER EXTENSION	0 to 100 Shore-A	1.14 Shore-A	Using Shore-A Durocalibrator & Dimensional instruments
4. VERIFICATION OF PLASTIMETER TIME INDICATOR	0 to 15 sec	0.36 sec	Using Digital Stopwatch
5. VERIFICATION OF PRI AGEING CHAMBER TIME	30 minutes	0.38 sec	Using Digital Stopwatch

ON SITE

6. MASS CALIBRATION OF ELECTRONIC BALANCE OF DENSIMETER	0 to 200g	0.02g	Using Certified Weights
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SCOPE OF ACCREDITATION

Laboratory: Alfatek Services, Trivandrum
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Quantity Measured / Instrument	Range	* Best Measurement Capability (\pm)	Remarks
7. TORQUE VERIFICATION OF MOONEY VISCOMETER BY KNOWN TORQUE	100 Mooney Units (8.3 Nm)	0.28 Mooney units	Using Certified Weights, Dimensional instruments
8. VERIFICATION OF OSCILLATING DISC RHEOMETER BY KNOWN TORQUE	2 Specific torques, 15.36 dN-m @ 1°Arc & 45.9dN-@3°Arc	0.35 dNm @ 3°arc of oscillation	Using ODR torque standard
9. VERIFICATION OF MOVING DIE RHEOMETER BY KNOWN TORQUE	Specific Torque of 23.86 dNm @0.5°arc of oscillation	0.28dNm @0.5°arc of oscillation	Using MDR Torque standard
10. HARDNESS OF VERIFICATION OF IRHD MICRO HARDNESS TESTER (METHOD M)	30IRHD to 90 IRHD	0.58 IRHD	Using Dimensional instruments, Stop Watch, Balance
11. VERIFICATION OF STANDARD IRHD HARDNESS TESTER (TYPE S2)	30 to 90 IRHD	0.66 IRHD	Using Dimensional instruments, stop watch, Balance
12. VERIFICATION OF RAPID PLASTIMETER FOR LVDT (LENGTH)	0.25mm 0.30mm 0.35mm 0.40mm 0.45mm 0.5mm 0.75mm 1mm	6 μ m	Using Slip Gauges

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Quantity Measured / Instrument	Range	* Best Measurement Capability (\pm)	Remarks
13. VERIFICATION OF PLASTIMETER TIME INDICATOR	0 to 15 sec	0.36 sec	Using Digital Stop watch
14. VERIFICATION OF PRI AGEING CHAMBER TIME	30 minutes	0.38 sec	Using Digital Stopwatch

* Measurement Capability is expressed as an uncertainty (\pm) at a confidence probability of 95%

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