

<b>Control of Monitoring and Measuring Equipment</b>
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**1.0 Purpose**

The purpose of this procedure is to define a system to ensure calibration of monitoring and measuring equipments used in the construction process and also in testing devices to assess its continuing suitability, adequacy and effectiveness.

**1.1 Application**

This procedure is applicable to the measuring devices / equipments used for inspection / measurement of works apart from testing devices / equipments used for ascertaining the suitability of construction materials generally used for construction in all the projects of KSPH&IDCL.

**2.0 Responsibility**

As the measuring devices / equipments used for measurement of works are brought by Contractors hence it is the overall responsibility of the Contractors to get the same calibrated. Ensuring calibration of monitoring and measuring equipments used in the construction process and to assess its continuing suitability, adequacy and effectiveness rests with the concerned Assistant Executive Engineers. However the quality control division shall ensure the testing equipments used in their laboratory for testing of various construction materials are calibrated to ensure its adequacy and effectiveness.

**3.0 Terms and definitions**

NIL

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**4.0 Procedures**

Sl. No	Product parameter	Details required	Responsibility to provide details	Frequency
1	Identification of measuring / testing devices	a) Measuring / testing devices needed for carrying out the necessary measuring / quality checks shall be identified. b) It shall be decided as to : I) Instruments, which shall be made available by the corporation. II) Instruments which should be provided by the contractors. III) List of outside labs, which can under take calibration of equipments.	EE / EE(QC)   EE  EE  EE	Yearly
2	List of instruments owned by corporation	a) Lists of instruments maintained at division, sub – division and sections shall be maintained and the adequacy / accuracy and correctness of these shall be ensured. b) Each instrument shall be marked with a distinct code. The code shall be suitably marked on the instrument. c) Frequency of calibration of each type of instrument shall be decided based on its criticality and usage. d) Agency / Agencies for calibration of instruments shall be identified	EE / EE(QC)   EE   EE  EE	Yearly  Yearly  Yearly  Yearly
3	Instruments to be maintained by contractors	a) instruments maintained by contractors shall be got calibrated by them at the stipulated frequency and the same shall be ensured by the concerned project Engineers.	EE	Yearly

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Sl. No	Product parameter	Details required	Responsibility to provide details	Frequency
4	Identification of outside labs for calibrations	Outside labs shall be identified for carrying out calibrations. The criteria for selection of these labs shall include availability of required instruments having calibration tractability to national standards with them.	EE	Yearly
5	Calibration, maintenance and use of instruments	<p>a) It shall be ensured that all instruments used (Owned by the corporation itself / Owned by contractors) are periodically calibrated as per their laid down calibration frequency. Records of all such calibrations shall be maintained in calibration register (Sub- Division wise). For instruments owned by contractors, such records shall be maintained by the contractors and verified / counter signed by AE / AEE</p> <p>Proper storage, handling and use of these instruments shall be ensured so that their calibration does not get disturbed due to weather factors, etc.</p>	AEE/ AE	Yearly
			JE/AE /AEE	Yearly

### 5.0 Records

The concerned JE/AE/AEE shall record and maintain the details in the prescribed format

Sl. No	Name of the Record	Authorizing Personnel	Custodian of record	Retention Time
1	Measuring / testing devices Identified	AEE	JE/AE	3 years
2	List of instruments owned by corporation	AEE	JE/AE	3 years

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Sl. No	Name of the Record	Authorizing Personnel	Custodian of record	Retention Time
3	Instruments to be maintained by contractors	AEE	JE/AE	3 years
4	Outside labs for calibrations	EE	AEE/AE/JE	3 years
5	Calibration, maintenance and use of instruments records	AEE	JE/AE	3 years

### 6.0 Reference

- a) ISO 9001: 2008 Clause Number 7.6
- b) IMS Manual Clause Number 7.6

<b>Approved by : Managing Director</b>
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