

QUALITY CONTROL DEPARTMENT

STANDARD OPERATING PROCEDURE		
Department: Quality Control SOP No.:		
Title: Instrument Qualification	Effective Date:	
Supersedes: Nil	Review Date:	
Issue Date: Page No.:		

1.0 OBJECTIVE:

To lay down procedure for Qualifications of Instruments.

2.0 SCOPE:

This SOP is applicable to Chemical lab Quality Control laboratory.

3.0 RESPONSIBILITY – Execution – Executive QC. Checked by – Assistant Manager QC

- **4.0 ACCOUNTABILITY** Manager Quality Control
- **5.0 PROCEDURE:**
- **5.1** General procedure:
- 5.1.1 Check the physical condition of instrument at the time of receiving.
- 5.1.2 Check the description of instrument against purchase order/packing list.
- 5.1.3 Designated personal shall carry out instrument qualifications with the help of manufacturer's instrument engineer.
- 5.1.4 Ensure that the location, space requirement, environmental conditions and electrical power supply is suitable.
- 5.1.5 Perform the IQ, OQand PQ before regular use.
- 5.1.6 IQ/OQ/PQ shall be done of critical instruments only like HPLC,GC, UV etc...
- 5.1.7 Installation qualification shall be done by vendor /qualified personal, using vendor qualified or in-house approved protocol.
- 5.1.8 The qualification protocol should contain details steps to performed for installation, operation and performance qualification. Also should contain required supporting equipment details for the qualification.
- 5.1.9 Read the supplier instruction for installation and safety instructions before starting the installation qualification.
- 5.1.10 Give the identification number (instrument code no.) to the instrument.
- 5.2 Installation Qualification
- 5.2.1 Check the received equipment, software, accessories and spare parts as applicable with purchase order/packing list.
- 5.2.2 Check the receipt of operating manuals, maintenance manuals, operating procedure for testing and safety.
- 5.2.3 Check the receipt of tools if received and document the details of received items along the instrument



QUALITY CONTROL DEPARTMENT

STANDARD OPERATING PROCEDURE		
Department: Quality Control SOP No.:		
Title: Instrument Qualification	Effective Date:	
Supersedes: Nil	Review Date:	
Issue Date: Page No.:		

- 5.2.4 Check the equipment for any damage, if so mentions in the qualification report and intimate to vendor.
- 5.2.5 Final install hard ware by following the manufacturers instructions.
- 5.2.6 Switch on the instrument and check instrument for what is described in the instruction manual (Operation manual) and record the observations.
- 5.2.7 Install software (if required) on computer by following the manufacturer instructions.
- 5.2.8 Connect all peripherals like printers and equipment modules.
- 5.2.9 Record the date received, date placed and current location.
- 5.2.10 Record the condition when received e.g., new, used, reconditioned in history record.
- 5.2.11 Check the hardware and software that is connected properly or not, by switching the instrument and check for any error message.
- 5.2.12 Record all required details in the qualification protocol. Also mention any deviation from the protocol.
- 5.2.13 Prepare the summary report of IQ as per Annexure -I

5.3 Operation qualification

- 5.3.1 Operational qualification shall be done after completion of installation qualification.
- 5.3.2 Operational qualification shall carry out as per protocol with predefined specifications.
- 5.3.3 Check the required operational parameters of the instrument and verify against the specification.
- 5.3.4 Record all required details in the qualification protocol. Also mention any deviation from the protocol.
- 5.3.5 Prepare the summary report of OQ as per Annexure -I

5.4 Performance Qualification.

- 5.4.1 Performance Qualification shall be done after completion of operation qualification.
- 5.4.2 Performance Qualification shall carry out as per protocol with pre defined specifications.
- 5.4.3 Check the mentioned performance parameters of the instrument and verify against the specifications.
- 5.4.4 Record all required details in the qualification protocol. Also mention any deviation from the protocol.
- 5.4.5 After completion of instrument qualification and data recording, get it approved by the concerned authority.



QUALITY CONTROL DEPARTMENT

STANDARD OPERATING PROCEDURE		
Department: Quality Control	SOP No.:	
Title: Instrument Qualification	Effective Date:	
Supersedes: Nil	Review Date:	
Issue Date:	Page No.:	

- 5.4.6 Prepare SOP based on the qualification study for the regular usage and performance check.
- 5.4.7 Allot the usage book for the instrument and also prepare the instrument history card.
- 5.4.8 Update the calibration schedule for the performance check of the instrument.
- 5.4.9 Prepare the summary report of Qualification as per Annexure -II
- 5.5 Re Qualification
- 5.5.1 When the instrument is shifted from one laboratory (Change in premise) to another laboratory, re qualification (IQ/OQ/PQ) is required.
- 5.5.2 When the instrument is shifted within the laboratory premises (one room to another room), re qualification (PQ) is required.
- 5.5.3 When the instrument is upgraded or after having a major repairing, qualification (OQ/PQ) is required.
- 6.0 SAFETY & PRECAUTIONS:

Not Applicable.

7.0 REVISION HISTORY:

Revision No.	Reason for Revision	Superseded from & Date

8.0 DISTRIBUTION:

Сору	Issuance Record			Withdrawal Record		Destruction Record		
No.	Date Dept. Name / Issued By Name / Signature of receiver Name / Signature		Ву	Sign/ Date	Ву	Sign/ Date		

9.0 REFERENCES:

Not Applicable.

10.0 ABBREVIATIONS & ANNEXURES:

SOP : Standard Operating Procedure



QUALITY CONTROL DEPARTMENT

STANDARD OPERATING PROCEDURE		
Department: Quality Control	SOP No.:	
Title: Instrument Qualification	Effective Date:	
Supersedes: Nil	Review Date:	
Issue Date:	Page No.:	

QC : Quality Control

IQ : Installation QualificationOQ : Operation QualificationPQ : Performance Qualification

Annexure I : Summary Report For Performance Qualification

Annexure II: Summary Report.



QUALITY CONTROL DEPARTMENT

STANDARD OPERATING PROCEDURE		
Department: Quality Control	SOP No.:	
Title: Instrument Qualification	Effective Date:	
Supersedes: Nil	Review Date:	
Issue Date:	Page No.:	

ANNEXURE - I SUMMARY REPORT FOR PERFORMANCE QUALIFICATION

SUMMARY F	REPORT FOR		
Name of Instrument:		Make:	
ID No. :		Model:	
Date of Report :		S.No.:	
IQ: Date of IQ :	<u></u>		
Performed by:			
Remarks :			
OQ: Date of OQ :			
Performed by:			
Remarks :			
PQ: 1) The instrument is successful	lly completed the _		as per laid down requirements.
2) The instrument is released for	or		
Prepared By	Checked By		Approved By
Date:	Date:		Date:



QUALITY CONTROL DEPARTMENT

STANDARD OPERATING PROCEDURE		
Department: Quality Control	SOP No.:	
Title: Instrument Qualification	Effective Date:	
Supersedes: Nil	Review Date:	
Issue Date:	Page No.:	

ANNEXURE-II SUMMARY REPORT

SUMMARY REPORT FOR				
Name of Instrument :		Make:		
ID No. :		Model:		
Date of Report :		S.No.:		
The instrument is successfully co The instrument is released for	-	as per laid down requirements.		
Prepared By	Checked By	Approved By		
Date:	Date:	Date:		