



**INSTALLATION QUALIFICATION PROTOCOL CUM REPORT
FOR
BOTTLE TORQUE TESTER**

**INSTALLATION QUALIFICATION
PROTOCOL CUM REPORT
FOR
BOTTLE TORQUE TESTER**

| | |
|------------------------------|---------------------------------------|
| INSTRUMENT ID. No. | |
| LOCATION | Packing Area, Three Piece Line |
| DATE OF QUALIFICATION | |
| SUPERSEDES No. | NIL |



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PHARMA DEVILS
QUALITY ASSURANCE DEPARTMENT

**INSTALLATION QUALIFICATION PROTOCOL CUM REPORT
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1.0 PROTOCOL PRE – APPROVAL:

PREPARED BY:

| DESIGNATION | NAME | SIGNATURE | DATE |
|--|------|-----------|------|
| OFFICER/EXECUTIVE (QUALITY ASSURANCE) | | | |

REVIEWED BY:

| DESIGNATION | NAME | SIGNATURE | DATE |
|--|------|-----------|------|
| OPERATING MANAGER (QUALITY ASSURANCE) | | | |
| HEAD (ENGINEERING) | | | |

APPROVED BY:

| DESIGNATION | NAME | SIGNATURE | DATE |
|----------------------|------|-----------|------|
| HEAD (PRODUCTION) | | | |



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2.0 OBJECTIVE:

- To provide documented evidence for the Installation Qualification of Bottle Torque Tester Devices.
- To confirm that the equipment and its components are installed as per the Specifications mentioned in the design qualification document and other requirements given by supplier.

3.0 SCOPE:

The scope of this installation qualification protocol cum report is limited to qualification of Bottle Torque Tester Devices to be installed in Packing Area First Floor, Three Piece Line.

- This document provides all the relevant information related to specification, installation checks and acceptance criteria to be required to perform installation qualification activity of Bottle Torque Tester.



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4.0 RESPONSIBILITY:

The Validation Group, comprising of a representative from each of the following departments, shall be responsible for the overall compliance of this Protocol cum Report:

| DEPARTMENTS | RESPONSIBILITIES |
|--------------------------|--|
| Quality Assurance | <ul style="list-style-type: none">• Preparation, Review Authorization and Compilation of the Installation Qualification Protocol cum Report.• Co-ordination with Production and Engineering to carryout Installation Qualification.• Monitoring of Installation Qualification Activity.• Post Approval of Installation Qualification Protocol cum Report after Execution. |
| Production | <ul style="list-style-type: none">• Review & Pre Approval of Installation Qualification Protocol cum Report.• To Co-ordinate and support for Execution of Qualification study as per Protocol.• Post Approval of Installation Qualification Protocol cum Report after Execution. |
| Engineering | <ul style="list-style-type: none">• Review & Pre Approval of Installation Qualification Protocol cum Report.• Co-ordination, Execution and technical support in Bottle Torque Tester Installation Qualification Activity.• Responsible for Trouble Shooting (if occurs during execution).• Post Approval of Installation Qualification Protocol cum Report after Execution. |



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5.0 EQUIPMENT DETAILS:

| | |
|---------------------------------|--------------------------------|
| Instrument Name | Bottle Torque Tester |
| Equipment | |
| Manufacturer's Name | Vinsyst Technologies. |
| Supplier Name | Vinsyst Technologies. |
| Serial No. | |
| Model | VBT-20 |
| Location of Installation | Packing Area, Three Piece Line |

6.0 SYSTEM DESCRIPTION:

Bottle Torque Tester is Torque Measuring Device Specially designed to Work on Bottle Caps .the Exact Determination. Especially of the opening Torque ,is a Quality –Defining Factor and Provides Reliable Assurance and Documentation that Bottle Caps Have been Closed with Appropriate amount of Torque . Even child Resistant Caps requiring downward force during the opening Operation cab be tested.

Torque Tester Machine Consist of Following Components.

- LCD
- Indicating Lamp
- Function Keys
- Special Fixture
- Printer
- USB Interface
- Charging Socket
- Power Socket



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7.0 PRE – QUALIFICATION REQUIREMENTS:

7.1 Verification of Documents:

- Executed and approved design qualification document
- Technical specification of equipment

7.1.1 Procedure:

- Verify the above mentioned documents for availability, completeness and approval status
- If any deviation is observed the same has to be recorded giving reasons for deviation and approved. Deviation should be approved by Authorized person.
- Approved Drawings and supporting documents would form a part of the IQ Protocol cum report.

7.1.2 Acceptance Criteria:

- All the documents should be available, complete and approved by respective authorities.



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8.0 CRITICAL VARIABLES TO BE MET:

8.1 General Checks and Location Suitability:

| INSTALLATION CHECKS | ACCEPTANCE CRITERIA | OBSERVATION | OBSERVED BY (ENGINEERING) SIGN/DATE |
|------------------------------------|---|-------------|-------------------------------------|
| Leveling | Should be properly balanced and leveled | | |
| Edges of parts | Metal parts should be properly grind without any sharp edges | | |
| Welding of Joints | Welding of joints should be without any welding burrs | | |
| Place of Installation | Three Piece Line Packing Line 'I' Block | | |
| Room Condition | General working condition | | |
| Illumination in area | NLT 300 Lux | | |
| Working space around the equipment | Should be sufficient for easy operation, cleaning, sanitation and maintenance | | |

Checked By
Production
Sign/Date:

Verified By
Quality Assurance
Sign/Date:

Inference:

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Reviewed By
Manager QA
Sign/Date:



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8.2 EQUIPMENT VERIFICATION:

8.2.1 TECHNICAL SPECIFICATIONS:

| CRITICAL VARIABLES | ACCEPTANCE CRITERIA | OBSERVATION | OBSERVED BY (ENGINEERING) (SIGN/DATE) |
|----------------------------|---|--------------------|--|
| Make | Vinsyst Technology VBT Series | | |
| Serial Number | 340080877 | | |
| Model | VBT-20 | | |
| Capacity | 20 N.m | | |
| Net Weight | 12 kg | | |
| Safe over Torque | 120 % of Rated Capacity | | |
| Fatigue Rating | 1 millions Cycle | | |
| Accuracy | Better than ± 0.5 % of full Scale | | |
| Non- Linearity | ± 0.15 % of Full Scale | | |
| Hysteresis | ± 0.05 % of Full Scale | | |
| Non – Repeatability | $\pm 0.1\%$ of Full Scale | | |
| Input Resistance | 400 omh Nominal | | |
| Sensitivity | 2 m V/V, ± 10 % | | |
| Calibration Unit | 3 (Nm,lb in ,Kg cm) | | |
| Display | 12 mm High bright LED | | |
| Calibration | Factory Calibrated to National Standard | | |
| Peak Hold | yes | | |



PHARMA DEVILS

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| CRITICAL VARIABLES | ACCEPTANCE CRITERIA | OBSERVATION | OBSERVED BY (ENGINEERING) (SIGN/DATE) |
|-------------------------------------|---|-------------|---------------------------------------|
| Temperature Range | 5 to 55°C | | |
| Clock wise / Anti Clock wise Torque | Indicated by (+) and (-) Sign | | |
| Range | 26 – 62.5 mm | | |
| Sensor Type | Sensor Inside | | |
| Power | 8.4 V 1.2 V x 7 Ni –MH Battery Group | | |
| Power Adapter | Input : AC 220 V 50 Hz Output DC 10 V 300 mA | | |
| Charging Time | 4-6 Hours | | |
| Battery Life | 300 Times | | |
| Size | 400 x 200 x200 mm | | |

Checked By
Production
Sign/Date:

Verified By
Quality Assurance
Sign/Date:

Inference:

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Reviewed By
Manager QA
Sign/Date:



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8.3 Safety:

| CHECKS | ACCEPTANCE CRITERIA | OBSERVATION | OBSERVED BY ENGINEERING (SIGN/DATE) |
|----------------------------------|---|-------------|---|
| No Sharp Edges | Rounded Corners | | |
| Electrical & Electronic Guard | Safely enclosed control box and display unit. | | |
| External Components | All external material used are of stainless steel 304 and Food grade | | |

Checked By
Production
Sign/Date:

Verified By
Quality Assurance
Sign/Date:

Inference:

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Reviewed By
Manager QA
Sign/Date:



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8.4 UTILITIES PROVIDED:

| PARAMETERS | ACCEPTANCE CRITERIA | OBSERVATION | OBSERVED By (ENGINEERING) (SIGN/DATE) |
|-------------|---|-------------|---|
| Electricity | Voltage: Single phase AC220V (+10% / -15%), Frequency: 50Hz | | |

Checked By
Production
Sign/Date:

Verified By
Quality Assurance
Sign/Date:

Inference:

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Reviewed By
Manager QA
Sign/Date:



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9.0 REFERENCES:

- Validation Master Plan
- Schedule-M – “Good Manufacturing Practices and Requirements of Premises, Plant and Equipment for Pharmaceutical Products.”
- WHO Essential Drugs and Medicines Policy, QA of Pharmaceuticals, Vol-2 – Good Manufacturing Practices and Inspection.
- Party Documents

10.0 DOCUMENTS TO BE ATTACHED:

- Instruction Manual
- Dimension Drawing

11.0 DEVIATION FROM PRE-DEFINED SPECIFICATION IF, ANY:

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12.0 CHANGE CONTROL, IF ANY:

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13.0 REVIEW (INCLUSIVE OF FOLLOW UP ACTION, IF ANY):

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14.0 CONCLUSION:

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15.0 RECOMMENDATION:

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16.0 ABBREVIATIONS:

| | | |
|------|---|-------------------------------------|
| AC | : | Alternative Current |
| cGMP | : | Current Good Manufacturing Practice |
| BTT | : | Bottle torque Tester |
| DC | : | Direct Current |
| DQ | : | Design Qualification |
| IQ | : | Installation Qualification |
| Hz | : | Hertz |
| Ltd. | : | Limited |
| mm | : | Millimeter |
| No. | : | Number |
| QA | : | Quality Assurance |
| V | : | Volt |



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17.0 PROTOCOL POST -APPROVAL:

PREPARED BY:

| DESIGNATION | NAME | SIGNATURE | DATE |
|--|------|-----------|------|
| OFFICER/EXECUTIVE (QUALITY ASSURANCE) | | | |

REVIEWED BY:

| DESIGNATION | NAME | SIGNATURE | DATE |
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| OPERATING MANAGER (QUALITY ASSURANCE) | | | |
| HEAD (ENGINEERING) | | | |

APPROVED BY:

| DESIGNATION | NAME | SIGNATURE | DATE |
|----------------------|------|-----------|------|
| HEAD (PRODUCTION) | | | |