

# PHARMA DEVILS

QUALITY ASSURANCE DEPARTMENT

#### OPERATIONAL QUALIFICATION FOR AUTOMATIC VERTICAL ROUND BOTTLE STICKER LABELING MACHINE

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#### **1.0 PROTOCOL APPROVAL:**

Signing of this approval page of Protocol indicates agreement with the qualification approach described in this document. If modification to the qualification approach becomes necessary, an addendum shall be prepared and approved .The protocol cannot be used for execution unless approved by the following authorities.

FUNCTION	NAME	DESIGNATION	DEPARTMENT	SIGNATURE	DATE
PREPARED BY			QUALITY ASSURANCE		
			QUALITY ASSURANCE		
REVIEWED BY			ENGINEERING		
			PRODUCTION		
APPROVED			HEAD OPERATION		
BY			QUALITY ASSURANCE		



#### OPERATIONAL QUALIFICATION FOR AUTOMATIC VERTICAL ROUND BOTTLE STICKER LABELING MACHINE

#### 2.0 **OVERVIEW:**

#### **2.1 OBJECTIVE:**

The objective of the operational qualification is to prove that each operation proceeds as per design specification and the tolerances prescribed there in the document are the same at utmost transparency.

The Qualification of Automatic Vertical Round Bottle Sticker Labeling Machine performed in view of Dry Syrup of manufacturing facility.

#### 2.2 PURPOSE:

The purpose of this protocol is to establish the documentary evidence to ensure that the installed Automatic Vertical Round Bottle Sticker Labeling Machine shall operate reproducibly and consistently within its full dynamic range of operation according to manufacturer's specification.

#### 2.3 SCOPE:

This protocol shall define the test procedures, documentation, references and acceptance criteria to establish that the Automatic Vertical Round Bottle Sticker Labeling Machine operates and performs as intended in accordance with the design qualification.

The Scope of this protocol is limited to the operational Qualification of Automatic Vertical Round Bottle Sticker Labeling Machine installed in Dry Syrup in Production Cepha Oral Block of manufacturing.

Once the operational qualification of Automatic Vertical Round Bottle Sticker Labeling Machine has been completed successfully, the equipment shall be preceded for the performance qualification procedure.

#### 2.4 **RESPONSIBILITY:**

In accordance with protocol, following functions shall be responsible for the qualification of system.

**Execution Team (Comprising members from Production, Engineering and Quality Assurance) and their responsibilities are following:** 

Prepares the qualification protocol.



- Ensures that the protocol is in compliance with current policies and procedures on system Qualification.
- > Distributes the finalized protocol for review and approval signatures.
- Execution of Qualification protocol.
- Review of protocol, the completed qualification data package, and the final report.
- The operational checks, calibration, SOP verification, verification of safety features, verification of utility supply shall be carried out by engineering persons and production person.
- The production operator / supervisor shall carry out the cleaning and operation of machine.

#### **Head – Production/ Engineering:**

- Review of protocol, the completed qualification data package, and the final report.
- > Assist in the resolution of validation deficiencies.

#### Head – Operation and Quality Assurance:

Review and approval of protocol, the completed qualification data package, and the final report.



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#### 2.5 EXECUTION TEAM:

The satisfactory operation of the Automatic Vertical Round Bottle Sticker Labeling Machine shall be verified by executing the qualification studies described in this protocol .The successfully executed protocol documents that the Automatic Vertical Round Bottle Sticker Labeling Machine is operational and is satisfactorily working.

Execution team is responsible for the execution of operation of Automatic Vertical Round Bottle Sticker Labeling Machine. All executors involved with this protocol shall sign within the prescribed format given below.

NAME	DESIGNATION	DEPARTMENT	SIGNATURE	DATE



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#### **3.0 ACCEPTANCE CRITERIA:**

- 3.1 The equipment shall be operational as per its specified operating instructions
- 3.2 All SOPs for the equipment to be verified and checked
- 3.3 Training shall be given to all the concerned personnel
- 3.4 All the functionality of equipment components to be checked

#### 4.0 **REQUALIFICATION CRITERIA:**

The machine shall be requalified if

- There are any major changes in system components which affect the performance of the system
- After major breakdown maintenance is carried out.
- As per revalidation date and schedule



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#### 5.0 OPERATIONAL QUALIFICATION PROCEDURE:

5.1	SYSTEM DESCRIPTION	ON:	
1	Equipment Name	:	Automatic Vertical Round Bottle Sticker Labeling Machine
2	Supplier/Manufacturer	:	Parth Engineers & Consultant
3	Model	:	
4	Serial no.	:	
5	Capacity	:	Up to 100-120 BPM
6	Dimension	:	1800 mm (L) X 550 mm (W) X 1332 mm (H)
7	Location	:	Dry Syrup

#### **5.1.1 MACHINE DESCRIPTION:**

Automatic Vertical Round Bottle Sticker Labeling Machine is used labeling on round bottle. It is capable for labeling 100 to 120 containers per minute depending on product & label size. The machine is equipped with belt space device resulting in a simple to "No change parts required".

- The drive unit is fitted with flange mounted Motor (1.07 A/ 0.37 kw/ 415 V/ 50 Hz/ 1370 RPM) on reduction gear box.
- This reduction gear box is having closed helical gear drive with oil bath.
- Separate AC frequency drive is fitted with machine for speed control of conveyor.
- This helical reduction is the major speed-reducing unit.
- Automatic product alignment system synchronized with top holding belt system.



### 5.2 INSTRUCTION FOR FILLING THE CHECKLIST

- 5.2.1 Write down the actual observation in observation column as per design specification
- 5.2.2 Observation functional parameter should be write actual function in specified column.
- 5.2.3 Give the detailed information in the summary and conclusion part of the Operational Qualification report.
- 5.2.4 Whichever column is blank or not used 'NA' shall be used.



#### 5.3 TEST INSTRUMENT DETAILS

This test is intended to describe the equipments/instruments and its complete details to have a traceability to the national standard which is to be used for the verification of the operation of the Automatic Vertical Round Bottle Sticker Labeling Machine.

S.No.	Name of Instrument	Inst. ID. Number	Calibration done on	Calibration Due date	Certificate Number

**Checked by Date:** 

Remark: -----



#### 5.4 Verification of Calibrated component :

This test is intended to describe the equipments /instruments and its complete details to have traceability to the national standard, which is to be used for the verification of the operation of the Automatic Vertical Round Bottle Sticker Labeling Machine.

S.No.	Name of Instrument	Inst. ID. Number	Calibration done on	Calibration valid up to	Certificate number

#### **Checked by Date:**

Remark: -----



#### OPERATIONAL QUALIFICATION FOR AUTOMATIC VERTICAL ROUND BOTTLE STICKER LABELING MACHINE

#### 5.5 VERIFICATION OF FUNCTIONAL CHECKS:

COMPONENT	SPECIFIED FUNCTION	OBSERVATION	VERIFIED BY (SIGN/DATE)
In feed Conveyer.	To carry the bottles from turntable to feed warm		
Feed Warm.	To create the equal spacing between the bottles and feed the label one by one to the striper plate		
Label Roll Holding Plate.	To load the label roll		
Label Striper Plate.	To dispense label one by one		
Printing Device.	Printing device Print all the details as input specified by the user on the label		
Pressing Device.	Applies the label firmly on to the bottle		
Bottle Sensor.	It senses the bottle on the conveyer.		
Label Sensor.	It senses the gap between two labels.		
Servo Motor.	Servo motor very precisely label one by one with the help of signal fro bottle and label sensor		
Label Pulling Rollers.	To pulls the label roll and dispenses the label one by one at the stripper plate		

Remark: -----

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**Reviewed by (Sign/Date)** 

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#### OPERATIONAL QUALIFICATION FOR AUTOMATIC VERTICAL ROUND BOTTLE STICKER LABELING MACHINE

#### 5.5.1 Verification of Functionality of Control Panel:

Procedure	Acceptance Criteria	Observation	Checked By Sign/Date
Main power ON/ OFF	To start & stop Conveyor		
	Green indication On/ Off		
Touch on Start Button on the HMI	The machine shall get		
screen	start		
Touch on Stop Button on the HMI	The machine shall get		
screen	stop		
Check the speed variation by	Speed of machine will get		
Potentiometer	varied		
Run Test:			I
Run the machine in empty	There should not be any		
	abnormal sound		
Power Failure & Restoration Test:			
Start the machine as per	The machine should not		
manufacturer's instruction. Trip the	start until & unless it is		
main incoming power supply. Wait	started manually.		
for sometime & switch ON the			
machine.			

Remark: -----



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#### OPERATIONAL QUALIFICATION FOR AUTOMATIC VERTICAL ROUND BOTTLE STICKER LABELING MACHINE

#### **VERIFICATION OF SAFETY FEATURES :** 5.6

Safety Features Description	Method Of Verification	Acceptance Criteria	Observation	Verified By Sign/Date
Earthing	Run machine and check with multimeter / clamp meter at the body cover of the machine.	No current should be sensed over whole body		
Emergency stop	Run machine and press the emergency stop button	The machine shall get stopped immediately		
Label sensor	Run machine and take out all the label	The machine shall get stopped		
Product sensor	Try to start the machine without bottle on conveyor	Servo for the sticker shall not be operated		

Remark: -----



#### OPERATIONAL QUALIFICATION FOR AUTOMATIC VERTICAL ROUND BOTTLE STICKER LABELING MACHINE

#### 5.7 VERIFICATION OF SUPPORTING UTILITIES:

S.No.	Utility	Method of Verification	Observation	Checked By Sign/Date
1.	<b>Electrical Power Supply:</b> 3 phase, 230- 400 V, 50Hz supply with neutral and proper earthing	Physically with clamp meter		

Remark: -----

#### Reviewed by (Sign/Date)

#### 5.8 VERIFICATION OF STANDARD OPERATING PROCEDURE (SOP):

The following Standard Operating Procedures were verified as important for effective performance of Automatic Vertical Round Bottle Sticker Labeling Machine operation.

S.No.	SOP TITLE	SOP NUMBER	VERIFIED BY	DATE

Remark: -----



#### OPERATIONAL QUALIFICATION FOR AUTOMATIC VERTICAL ROUND BOTTLE STICKER LABELING MACHINE

#### 5.9 TRAINING RECORD OF PERSONNEL (S):

S.No.	Name of Personnel	Designation	Sign & Date	Trained By	Remark

### Remark: -----

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#### OPERATIONAL QUALIFICATION FOR AUTOMATIC VERTICAL ROUND BOTTLE STICKER LABELING MACHINE

#### 5.10 DEFICIENCY AND CORRECTIVE ACTION (S) REPORT (S):

Following deficiency was verified and corrective actions taken in consultation with the Engineering Department.

**Description of deficiency:** 

**Corrective action(s) taken:** 

Deviation accepted by (Sign/Date)

Deviation Approved by (Sign/Date)

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#### QUALITY ASSURANCE DEPARTMENT

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#### 5.11 List of Annexure (S):

Annexure No.	nnexure No. Details of Annexure					
Remarks (if any):						

Done By & Date:

Verified By & Date:



#### OPERATIONAL QUALIFICATION FOR AUTOMATIC VERTICAL ROUND BOTTLE STICKER LABELING MACHINE

### 6.0 OPERATIONAL QUALIFICATION FINAL REPORT:

6.1 SUMMARY:

6.2 CONCLUSION:

Prepared By Sign/ Date Checked By Sign/ Date



#### 6.3 FINAL REPORT APPROVAL:

It has been verified that all tests required by this protocol are completed, reconciled and attached to this protocol or included in the qualification summary report. Verified that all amendments and discrepancies are documented, approved and attached to this protocol, If applicable. Signature in the block below indicates that all items in this qualification report of Automatic Vertical Round Bottle Sticker Labeling Machine have been reviewed and found to be acceptable and that all variations or discrepancies (If applicable) have been satisfactorily resolved. After the successful operational qualification of the Automatic Vertical Round Bottle Sticker Labeling Machine the equipment can be taken for performance qualification.

FUNCTION	NAME	DESIGNATION	DEPARTMENT	SIGNATURE	DATE
REVIEWED BY			QUALITY ASSURANCE		
			ENGINEERING		
			PRODUCTION		
APPROVED BY			HEAD OPERATION		
			QUALITY ASSURANCE		