

PROTOCOL No.:

INSTALLATION QUALIFICATION PROTOCOL CUM REPORT FOR STICKER LABELLING MACHINE

EQUIPMENT ID. No.	
LOCATION	Packing Hall
DATE OF QUALIFICATION	
SUPERSEDE PROTOCOL No.	NIL



PROTOCOL No.:

PROTOCOL CONTENTS

S.No.	TITLE	PAGE No.		
1.0	Protocol pre-approval	3		
2.0	Objective			
3.0	Scope	4		
4.0	Responsibility	5		
5.0	Equipment details	6		
6.0	System description	6		
7.0	Pre-qualification requirements	7		
8.0	Critical variables to be met	8-14		
9.0	References			
10.0	0 Documents to be attached			
11.0	1.0 Deviation from pre-defined specification, if any			
12.0	2.0 Change control, if any			
13.0	.0 Review (inclusive of follow up action, if any)			
14.0	4.0 Conclusion			
15.0	0 Recommendation			
16.0	Abbreviations			
17.0	Protocol post approval	17		



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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)			



STICKER LABELLING MACHINE

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2.0 OBJECTIVE:

- To provide documented evidence for the Installation Qualification of Sticker Labeling machine Liquid Line.
- 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 Sticker Labeling machine to be installed in packing hall, Liquid 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 Sticker Labeling machine



STICKER LABELLING MACHINE

PROTOCOL No.:

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	 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	 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	 Review & Pre Approval of Installation Qualification Protocol cum Report. Co-ordination, Execution and technical support in 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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STICKER LABELLING MACHINE

5.0 EQUIPMENT DETAILS:

Equipment Name	Sticker Labeling machine
Equipment ID.	
Manufacturer's Name	
Machine No.	
Model No.	
Capacity	60-80 bottle per Minute
Supplier's Name	Harikrushna machinery Pvt. Ltd.
Location of Installation	Packing Hall

6.0 SYSTEM DESCRIPTION:

Automatic Sticker Labeling Machine Model: HMPL/SSVL is used for Precise Labeling on round shaped pet/glass bottles. The machine Operates at the Speed off 60 to 80 Bottles per Minute. Specific Shape and Size of Containers can be accommodated on the same machine with /without the help of change Parts.

Main Assembly:

- 1. Dispenser assembly.
- 2. Conveyer with side guide.
- 3. Wrapping assembly.
- 4. Dispenser Unit.
- 5. Main Electrical Panel with SMPS, VFD, and Operating panel HMI, Emergency Switch & PLCs.
- 6. HSA jet Micron Printer.

7.0 PRE – QUALIFICATION REQUIREMENTS:

7.1 Verification of Documents:

- Executed and approved design qualification document.
- Technical specification of equipment.
- MOC Certificate of components.

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.



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7.1.2 Acceptance Criteria:

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

8.0 CRITICAL VARIABLES TO BE MET:

8.1 Installation Qualification Checklist:

INSTALLATION CHECKS	ACCEPTANCE CRITERIA	OBSERVATION	OBSERVED BY (ENGINEERING) SIGN/DATE
Grouting and	Should be properly grouted		
Mounting	and mounted.		
Leveling	Should be properly balanced		
	and leveled.		
Edges of parts	Metal parts should be		
	properly ground without any		
	sharp edges.		
Welding of Joints	Welding of joints should be		
	without any welding burrs.		
Place of Installation	Packing Hall Liquid Line		
Room Condition	General Room Conditions.		
Illumination	NLT 300 Lux		
Working space	Should be sufficient for easy		
around the	operation, cleaning,		
Equipment.	sanitation and maintenance.		

Checked By Production Sign/Date:	Verified By Quality Assurance Sign/Date:
Inference:	
	Reviewed By Manager QA Sign/Date:



STICKER LABELLING MACHINE

PROTOCOL No.:

8.2 Technical Specification:

Critical variables	Acceptance criteria	Observation	Checked By Engineering Sign / Date
Make	Harikrushna Machinary Pvt. Ltd.		
Model	HMPL/SSVL		
S.No.			
Dimensions	1537 x 1060 x 1000 mm		
Label Speed	60-80 Bottle per Minute		
Design	Left → Right		
Labal Diagram	Make : Harikrushna		
Label Dispenser	Model: DSP-115RH		
Label Dispensing	02- 60 Mtr / Min		
Speed			
PLC system	Make : Harikrushna		
	Model : HMPL/STND		
	SR. No.: 2017-2018/010417		
Stepper Motor	Make : Harikrushna		
	Model: HMPL/STND/SM-6		
Product Sensor	Make : Leuze Electronics.		
	Model: D-73277 & LV461.1/P2		
Label gap Sensor	Make : Leuze Electronics.		
	Model: GS61/6		
	Make : Harikrushna		
Wrapping Belt	Model: HMPL/WB73510006		
	Size : 735*100*10		
	Make : Harikrushna		
Wrapping pad	Model: HMPL/WP32510010		
	Size : 325*100*10		
	Make : Harikrushna		
Separator Pad	Model: HMPL/WP1802510		
	Size : 180*25*10		



PROTOCOL No.:

STICKER LABELLING MACHINE

Critical variables	Acceptance criteria	Observation	Checked By Engineering Sign / Date
	Make : Delta		
	Model: VFD002L21A		
VFD	Kw/HP: 0.18/0.25		
VID	Sr. No.: 004L21A6W16380356		
	004L21A6W16380285		
	Qty. : 02 Nos.		
	Make : Rotomotive		
Cananatan Matan	Type : 3 ph induction motor		
Separator Motor	RPM : 1380		
	Sr. No.: M08164133		
	Make : Rotomotive		
	Type : Box 030		
Separator Gear Box	PAM : 63B5		
	Sr. No.: G01171267		
	Make : Rotomotive		
Conveyer motor	Type : 3 ph induction motor		
Conveyer motor	RPM : 1380		
	Sr. No.: M11164352		
	Make : Rotomotive		
Conveyer Gear Box	Type : Box 030		
Conveyer Gear Box	PAM : 63B5		
	Sr. No. : G02172558		
Wrapping Gear	Spur Gear: 20 teeth-1 nos.		
Wrapping Ocai	Spur Gear: 28 teeth-1 nos.		
Printing Unit	Make : HSAJET micron Unit		
Finding Ond	I/P : 1 P,230 V AC , 50 Hz		
	Make : Metronix		
Encoder	Model: MS50-82500-5-30F-3		
Elicodel	mtr.		
	Sr. No. : 2016121505		



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STICKER LABELLING MACHINE

Critical variables	Acceptance criteria	Observation	Checked By Engineering Sign / Date
	Make : Delta		
HMI	Model: TP02G-AS1		
	Sr. No. : TP02GAS1W16370121		
	Make : Schneider		
MCB	Model: C6		
	Rating.: 6 Amps.		
Main ON/OFF	Make : L & T		
switch	Rating.: 6 Amps.		
Emergency Switch	Make : Schneider		

Production Sign/Date:	Verified By Quality Assurance Sign/Date:
Inference:	
	Reviewed By
	Manager QA
	Sign/Date:



PROTOCOL No.:

STICKER LABELLING MACHINE

8.3 MATERIAL OF CONSTRUCTION:

S.No.	PARTS NAME	MATERIAL OF CONSTRUCTION	OBSERVATION	CHECKED BY ENGINEERING SIGN/DATE
Main B	ody & Product Co	onveyor		
1.	Main Body & Top plate	SS304		
2.	Conveyer Side Chanell	SS304 Matt Sheet Finished		
3.	Top plate	SS304		
4.	Door & Cover	SS304 Matt Sheet Finished		
5.	Conveyor slide chain	SS304		
6.	Sprockets	EN 24 Duly Hardened		
7.	Fixing Space	SS304		
8.	General Nut & Bolt	SS/MS, Duly Chrome Pleated		
9.	Guide Bracket	SS304/ Aluminum /Nylon		
Dispens	er Assy			
10.	Dispenser Body	Aluminum Die Cast		
11.	Traction Roller	Aluminum Duly Coated of 115 mm Ht.		
12.	Pressure Roller	Aluminum Rubber coated with SS shaft		
13.	Rewinding Roller	Aluminum		
14.	Label Guide Roller	SS304		
15.	Label Web Guide Ring	Nylon		
16.	Label Pressing Spring Patti	SS Spring Steel		
17.	Dispenser other part	Aluminum		
18.	Dancing Roll Assy	SS Shaft Roller & Aluminum Coated Disk		
19.	Modular Rail	Aluminum or MS duly Powder Coated		
20.	Rail Bracket	CI duly Chrome Plated		



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S.No.	PARTS NAME	MATERIAL OF CONSTRUCTION	OBSERVATION	CHECKED BY ENGINEERING SIGN/DATE
21.	Sensor	SS Duly Powder Coated		
	Holding			
	Clamp			
22.	Label Release	SS304		
	Plate			
Product	Separating Devic	e		
23.	Space Creator	Aluminum Coated		
Label Pr	essing System			
24.	Wrap- Around	Sponge Rubber Belt		
	Massage Belt			
25.	Top & Bottom	Aluminum with SS Sheet		
	Plate	cover		
26.	Label Pressing	Aluminum lined with		
	plate	Sponge rubber &		
		Covered with SS Sheet		

Checked By	Verified By
Production	Quality Assurance
Sign/Date:	Sign/Date:
Inference:	
	Reviewed By
	Manager QA
	Sign/Date:



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8.4 Safety Feature:

CRITICAL VARIABLES	ACCEPTANCE CRITERIA	OBSERVATION	OBSERVED BY (ENGINEERING) SIGN/DATE
Joints	Welding of joints without any		
	welding burrs.		
Metal Parts	All the metal parts should be properly		
	grounded without any sharp		
	Edges.		
Leveling and	Equipment should be properly		
Balancing	balanced & leveled.		
Earthing	Proper Earthing should be provided.		
Sensor	Sticker Sensor senses the presence of		
	container for labeling.		
	Label Sensor sense the presence of		
	upcoming label for labeling.		
Emergency Switch	For Immediately Stop the machine		
Rotating Parts	Covered with SS cover		

Checked By Production Sign/Date:	Verified By Quality Assurance Sign/Date:
Inference:	
	Reviewed By (Manager QA) Sign/Date:
	(Manager QA)



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STICKER LABELLING MACHINE

9.0 REFERENCES:

- Validation Master Plan
- Design Qualification Documents
- P & ID, Utility, and GA Drawing
- WHO Essential Drugs and Medicines Policy, QA of Pharmaceuticals, Vol-2-Good Manufacturing Practices and Inspection.

10.0 DOCUMENTS TO BE ATTACHED:

- Certificate of MOC.
- Any other Relevant Document

11.0	DEVIATION FROM PRE-DEFINED SPECIFICATION, IF ANY:
12.0	CHANGE CONTROL, IF ANY:
13.0	REVIEW (INCLUSIVE OF FOLLOW UP ACTION, IF ANY):
14.0	CONCLUSION:



PROTOCOL No.:

STICKER LABELLING MACHINE

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15.0	RECOMME	NDATI	ION:	
16.0	ABBREVIA	FIONS :	:	
	cGMP	:	Current Good Manufacturing Practice	
	CI.	:	Cast Iron	
	HP	:	Horse Power	
	Hr	:	Hour	
	Hz	:	Hertz	
	IQ	:	Installation Qualification	
	Kg	:	Kilogram	
	KW	:	Kilo Watt	
	mm	:	Millimeter	
	MMI	:	Man Machine Interface	
	MOC	:	Material of Construction	
	MS	:	Mild Steel	
	No	:	Number	
	RPM	:	Revolution per minute	
	SS	:	Stainless steel	
	VFD	:	Variable Frequency Drive	
	WHO	:	World Health Organization	



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STICKER LABELLING MACHINE

17.0 PROTOCOL POST -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)			