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# USER REQUIREMENT SPECIFICATION FOR DRY POWDER FILLING & RUBBER STOPPERING MACHINE

LOCATION	Dry powder line
SUPERSEDES URS No.	NIL



URS No.:

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### 1.0 APPROVAL:

### **INITIATED BY:**

DESIGNATION	NAME	SIGNATURE	DATE
OFFICER/EXECUTIVE (QUALITY ASSURANCE)			

### **REVIEWED BY:**

DESIGNATION	NAME	SIGNATURE	DATE
HEAD (PRODUCTION)			
HEAD (ENGINEERING)			

### **APPROVED BY:**

DESIGNATION	NAME	SIGNATURE	DATE
HEAD (QUALITY ASSURANCE)			



**URS No.:** 

#### **2.0 OBJECTIVE:**

- The User Requirements Specification (URS) is provided to aid the user through the critical aspects of Fabrication, Facility for Installation of Required Instruments, Cleaning / Proper Maintenance, cGMP, Safety and Regulatory Requirements necessary to construct and fabricate a functional dry powder filling Machine that meets the user's needs in the most cost-effective method possible.
- The URS is then provided to Vendor to submit a Price Quote for procurement of Dry powder filling machine
- The URS shall help Vendor in understanding the end user requirement in details. This document shall help vendor for developing the Design Specification, which on approval will become a Contractual Agreement between Vendor and the Site.
- This URS Shall be recognized as an integral part of the procurement agreement with the vendor. The vendor will abide by the information and conditions set forth by this document as well as the Standard Purchase Terms and Conditions of the Site.

#### 3.0 SCOPE:

- The scope of this document is limited to the User Requirement Specification (URS) of Dry powder filling machine of the Site.
- The URS shall be used as a reference document for Design Qualification considering all aspects of Current Good Manufacturing Practices (cGMP) and Safety.



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### 4.0 **RESPONSIBILITY:**

The Team, comprising of a representative from each of the following departments shall be responsible for the overall compliance of this URS.

DEPARTMENTS	RESPONSIBILITIES	
Quality Assurance	<ul> <li>Initiation and Approval of User Requirement Specification.</li> <li>Co-ordination with User Department to prepare User Requirement Specification.</li> <li>To check the completeness and Technical Accuracy of the URS.</li> </ul>	
User Department	Review of User Requirement Specification for compliance with the Product Requirement.	
Engineering	<ul> <li>Review of User Requirement Specification.</li> <li>Assist in preparation of User Requirement Specification.</li> </ul>	



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5.0 GMP/REGULATORY REQUIREM	ENTS:	•
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The Purpose of procuring Dry powder filling machine is to perform filling of dry powder in injection Block of the Site.

- > Dry powder filling machine should complies with the "Current Good Manufacturing Practices".
- Schedule–M "Good Laboratory Practices and Requirements of Premises, Plant & Equipments for Pharmaceuticals Products".



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### **6.0 SYSTEM OVERVIEW:**

Dry powder filling machine which consists of Orientator, Filling, Dropper Fixing and Screw Capping on a single frame.

### **6.1 TECHNICAL SPECIFICATION:**

S.No.	Name of the Component	MOC	Technical Specification
1.0	Equipment Name		Dry powder filling machine
2.0	Modal /Type		As per your specification
3.0	Overall Size of the Machine		As per your specification
4.0	Top & bottom frame	SS 316 L	As per cGMP Requirement
5.0	Filing Heads		
	No. of head filling	SS 304 L	1 Head
	Conveyor belt		1 Nos.
	Powder Hopper	S.S. 316 L	S.S. 316 L
	Port Wheel	S.S. 316 L	S.S. 316 L
	Vial separator assembly or Carriage		As per your specifications and as appropriate for
	assembly		the complete system design
	Rubber stopper bowl	S.S. 316 L	S.S. 316 L
	Vibrator assembly	S.S. 316 L	S.S. 316 L
	Indicating Lamp		As per your specifications and as appropriate for
			the complete system design
	Sensor		As per your specifications and as appropriate for
			the complete system design
	Vibrator Card		As per your specifications and as appropriate for
			the complete system design
6.0	Speed		120 vial/min
7.0	Motor		As per your specification & suits for equipment design
	Vibrator Controllers		As per your specification & suits for equipment design
	Gear Box		As per your specification & suits for equipment design



URS No.:

S.No.	Name of the Component	MOC	Technical Specification		
8.0	Emergency Switch		Push Button		
9.0	Safety Features		<ul> <li>Emergency push button shall be provided.</li> <li>Machine shall not be started without safe earthing.</li> <li>All moving parts to be protected with safety guards.</li> <li>All upper guards provided with interlocks.</li> <li>Noise pollution shall be kept below 85 db.</li> </ul>		
10.0	Limit Switch / Inter Locking System		Alarm should be provided  As per your specification		
11.0	To Blooding Louis		A		
11.0	Indicating lamp		As per your specification		
12.0	Safety Guard		As per your specification		
13.0	Earthing		Whole body Earthing		
14.0	Utilities				
	Electrical Configuration & Cabling				
	Power Supply		As per your specification and Finalized Purchase order.		
	Power cable				
	Power / Inverter		Should be Provided as per your specification and Finalized Purchase order.		
15.0	Special feature		As per Purchase order.		



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### 7.0 OTHER REQUIREMENTS AND CONSTRAINTS:

### 7.1 FUNCTIONAL REQUIREMENTS:

• Dry powder filling & rubber stoppering machine shall comply as per ISPE, cGMP, cGEP Guidelines.

### 7.2 RELIABILITY AND AVAILABILITY:

- The system shall be available for continuous operation.
- The electrical and other material of construction used shall be suitable for the intended service so as to withstand the working stress without frequent break down.

#### 7.3 MAINTENANCE:

- The system shall allow for maintenance by trained site personnel with supplier recommended tools and practices.
- Recommended spare parts list shall be provided.
- The supplier shall replace the parts found to be damaged/ broken during installation.
- The supplier shall be available at the site when asked in case of major breakdown.

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### 8.0 LIFE CYCLE:

### **8.1 DEVELOPMENT:**

• The supplier shall follow cGMP in design, development, construction and Installation of the Machine.

#### 8.2 TESTING:

- The system shall be Factory tested by the supplier with approval witness.
- The system shall be commissioned and qualified at site for Installation and Operation by the supplier with approval witness.

#### 8.3 SUPPORT:

- Supplier shall provide support for Preventive maintenance plan development, Operation & cleaning procedure for Dry powder filling & rubber stoppering Operator training.
- Supplier shall provide Safety Manuals during Installation, Operation & Calibration at the site.

### 8.4 **DELIVERY:**

- All parts of the system shall be sourced, delivered and installed by the Supplier.
- The supplier shall provide Functional design specification (MOC & Calibration Certificates) and Operation Manual in Soft as well as Hard Copy.



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### 9.0 DOCUMENTS TO BE PROVIDED:

- All MOC Certificates, Manual for Bought out items
- Design Qualification protocol.
- Installation Qualification protocol.
- Operational Qualification protocol.
- Schematic Diagram of machine showing Overall Dimensions.
- Instrument list with manufacturer's calibration certificate.
- G.A Drawing.
- Operating & Service Manual
- Spare Part List.
- Warranty Certificate of machine

**Note:** The whole URS is a tentative document. Manufacturer or Vendor will be solely responsible for performance of machine specified in the catalogue or during discussion at the time of finalization of purchase order. Specifications and details mentioned in the DQ, duly signed by Vendor/ Manufacturer and duly signed by Head QA will be treated as final specifications of the machine.

The said DQ will be treated as an integral part of purchase order.



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#### **10.0 REVIEW COMMENTS:**

- For any changes in the design/make of the dry powder Filling Machine if not as per the URS, prior intimation/approval should be taken by the supplier from the Site.
- All parts should have MOC certificates, test certificates, Calibration certificates for traceability and authenticity.

Approved By:\_\_\_\_\_(Head QA)
(Sign./Date)

#### 11.0 ABBREVIATIONS:

URS : User Requirement Specification

MOC : Material of Construction

cGMP : Current Good Manufacturing Practices

GA : General arrangement

QA : Quality Assurance

NO. : Number PVT. : Private

LTD. : Limited

GMP : Good Manufacturing Practices

Sr. : Senior

SS : Stainless steel

ISPE : International Society of Pharmaceutical Engineering

cGEP : Current Good Engineering Practices

Min : Minute