URS No.:



#### USER REQUIREMENT SPECIFICATION FOR AMPOULE VERTICAL ULTRASONIC WASHING MACHINE

# USER REQUIREMENT SPECIFICATION FOR

# **AMPOULE FILLING MACHINE**

LOCATION	Ampoule 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)			



# ING

## 2.0 **OBJECTIVE** :

- This URS has been initiated by ..... and pertains to procurement of Ampoule Filling Machine.
- 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 Ampoule 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 Ampoule 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 by ...... will become a Contractual agreement between Vendor.
- 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 .....

#### **3.0 SCOPE:**

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



#### 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>		



#### 5.0 GMP/REGULATORY REQUIREMENTS:

The Purpose of procuring Ampoule Filling Machine is to perform filling of solution as well as sealing of ampoules.

- > Ampoule Filling Machine should complies with the "Current Good Manufacturing Practices".
- Schedule–M "Good Laboratory Practices and Requirements of Premises, Plant & Equipments for Pharmaceuticals Products".

#### 6.0 SYSTEM OVERVIEW:

Ampoule filling machine which consists of Filling and sealing Process.



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**TECHNICAL SPECIFICATION** 6.1

1.0       Equipment Name        Filling Machine suitable for 1, 2, 3, & 5 ml ampoule with Filling & Sealing machine.         2.0       Modal /Type        Should be in compliance with GMP.         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       Manifold       SS316 L       As per cGMP Requirement         6.0       Conveying belt       SS304       As per cGMP Requirement         6.0       Conveying belt       SS304       As per cGMP Requirement         7.0       Silicone pipe       Silicone rubber       As per cGMP Requirement         8.0       Star wheel, screw conveyor and barrier, etc.       POM       As per cGMP Requirement         8.0       Star wheel, screw conveyor and barrier, etc.       POM       As per cGMP Requirement         9.0       Filling nozzle       SS 316 L       12 Head         MOC of filling nozzle       SS 316 L       As per cGMP Requirement         Nitrogen Post Purging        12 Nos.         10.0       Turn Table       MOC       SS-304       As per cGMP Requirement         Qy.        As per your specifications and as appropriate for the complete sy	S.No.	Name of the Component	MOC	Technical Specification
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12.0   Panels   SS304   As per cGMP Requirement		Storage Capacity		
		No. of cutter		12
<b>13.0</b> Speed400 Ampoule/min in 1 ml ampoule	12.0	Panels	SS304	As per cGMP Requirement
	13.0	Speed		400 Ampoule/min in 1 ml ampoule



URS No.:

MOC To

S.No.	Name of the Component	MOC	Technical Specification	
14.0	Indexer		As per your specification	
15.0	Machine body	SS316L	Contact Parts	
		SS304	Non Contacts	
16.0	Motor		As per your specification & suits for equipment design	
	Vibrator Controllers		As per your specification & suits for equipment design	
	Gear Box		04 Nos.	
17.0	Drive		AC Variable drive	
18.0	Emergency Switch		Push Button	
19.0	Safety Features		Emergency push button shall be provided.	
			Machine shall not be started without safe earthing.	
			All moving parts to be protected with safety guards.	
			<ul><li>door provided with interlocks.</li></ul>	
			Noise pollution shall be kept below 85 db.	
			> Alarm should be provided	
20.0	Limit Switch / Inter Locking System		As per your specification	
21.0	Indicating lamp		As per your specification	
22.0	Safety Guard		As per your specification	
23.0	Earthing		Whole body Earthing	
24.0	Utilities			
	Electrical Configuration & Cabling			
	Power Supply		As per your specification and Finalized	
	Power cable		– Purchase order.	
	Power/Inverter		Should be Provided as per your specification and Finalized Purchase order.	
25.0	Special feature		As per Purchase order.	



### 7.0 OTHER REQUIREMENTS AND CONSTRAINTS:

#### 7.1 FUNCTIONAL REQUIREMENTS:

• Ampoule filling 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.



#### 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 Ampoule Filling Machine, Assembly and 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.



#### 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.



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

- For any changes in the design/make of the Ampoule Filling Machine if not as per the URS, prior • intimation/approval should be taken by the supplier from .....
- 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	
DQ	:	Design Qualification	
IQ	:	Installation Qualification	
OQ	:	Operational Qualification	
MOC	:	Material of Construction	
cGMP	:	Current Good Manufacturing Practices	
TFM	:	Ampoule Filling machine	
GA	:	General arrangement	
GMP	:	Good Manufacturing Practices	
Sr.	:	Senior	
SS	:	Stainless steel	
ISPE	:	International Society of Pharmaceutical Engineering	
cGEP	:	Current Good Engineering Practices	
Min	:	Minute	