



USER REQUIREMENT

SPECIFICATION

FOR

SHRINK WRAP MACHINE

THREE PIECE LINE
NIL



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1.0 APPROVAL:

INITIATED BY:

DESIGNATION	NAME	SIGNATURE	DATE
OFFICER/EXECUTIVE (QUALITY ASSURANCE)			

REVIEWED BY:

DESIGNATION	NAME	SIGNATURE	DATE
HEAD (USER DEPARTMENT)			
HEAD (ENGINEERING)			

APPROVED BY:

DESIGNATION	NAME	SIGNATURE	DATE
HEAD (QUALITY ASSURANCE)			



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 Equipments, Cleaning/Proper Maintenance, cGMP, Safety and Regulatory Requirements necessary to construct and fabricate a shrink wrap 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 shrink wrap 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 the Site, will become a Contractual Agreement between Vendor and the Site.
- This URS will 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 shrink wrap machine. at the Site.
- The URS shall be used as a reference document for considering all aspects of Current Good Manufacturing Practices (cGMP) and Safety.



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 URS.

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



5.0 GMP/REGULATORY REQUIREMENTS:

- The purpose of Shrink Wrapping Machine is to seal monocartons of filled Vials, prevent them from getting damp and protected against knocks.
- > Shrink wrap machine should comply with the "Current Good Manufacturing Practices".
- > WHO GMP- "Good Manufacturing for Pharmaceutical Products".
- Schedule–M "Good Manufacturing Practices and Requirements of Premises, Plant & Equipments for Pharmaceuticals Products".



6.0 SYSTEM OVERVIEW:

Shrink wrap packing machine adopts shrink film to product or being packed articles and then to heat the shrink packing material & tightening product. Shrink packing machine adopts frequency control motor, whose speed can be adjusted within wide range, and the maximum load bearing.

6.1 TECHNICAL SPECIFICATION:

	Equipment	SS304	Shrink Wrapping Machine
2.	Overall Dimensions		As per your specification
3.	Tunnel Dimensions		As per your specification
4.]	Main Motor		As per your specifications and as appropriate for the complete system design.
5.	Start / Stop Button		Green/ Red
Γ	Make		ISO Certified.
]	Гуре		Push.
6.	Control Switch		As per your specifications and as appropriate for the complete system design.
7.	Indicators		For Conveyer, Heater & Blower
8.	Conveyer Motor		As per your specifications and as appropriate for the complete system design
9.	Conveyer Speed		Speed : (Adjustable)
10.]	Films packing,		Shrinking packing of all kinds of PVC, Shrinking films
11.	MMI for Temperature Controller		Temperature Range: 1-150 °C
12.	Heating Rods		As per your specifications and as appropriate for the complete system design
13.	Gear box		As per your specifications and as appropriate for the complete system design
14.]	Main Tunnel Hood	MS	Process Requirement
15.	Machine Frame	MS	Process Requirement



S.No.	Critical Variables	MOC	Acceptance Criteria
16.	Covers	MS	Process Requirement
17.	Castor Wheel	Polyurethane	GMP Requirement
18.	Leveling		GMP Requirement
19.	Edges of Parts		Metal edges should be properly rounded off without any sharp edges



PHARMA DEVILS

7.0 OTHER REQUIREMENTS AND CONSTRAINTS:

7.1 FUNCTIONAL REQUIREMENTS:

• Shrink wrap 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 LIFE CYCLE:

8.1 **DEVELOPMENT**

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

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, procedure and Operator training.
- Supplier shall provide support during Installation, Operation.

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 other qualification documents (DQ, IQ, OQ) in Soft as well as Hard Copy.
- Operating Manual.



9 DOCUMENTS TO BE PROVIDED :

- All MOC Certificates, Manual for Bought out items
- Design Qualification protocol.
- Installation Qualification protocol.
- Operational Qualification protocol.
- 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 REVIEW COMMENTS:

- The supplier should make/design the shrink wrap machine as per technical specification mentioned in the URS.
- For any changes in the design/make of the shrink wrap 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 ABBREVIATIONS:

URS	:	User Requirement Specification
cGMP	:	Current Good Manufacturing Practices
ISPE	:	International Society of Pharmaceutical Engineering
cGEP	:	Current Good Engineering Practices
DQ	:	Design Qualification
IQ	:	Installation Qualification
OQ	:	Operational Qualification
MOC	:	Material of Construction
WHO GMP	:	World Health Organization Good Manufacturing Practices
PVC	:	Polyvinyl Chloride
ISO	:	Indian standard organization
SWM	:	Shrink wrap machine
MS	:	Moulded steel
QA	:	Quality Assurance
GA	:	General arrangement
GMP	:	Good Manufacturing Practices
Sr.	:	Senior
SS	:	Stainless steel
SWM	:	Shrink wrap machine