



**PHARMA DEVILS**

**PERFORMANCE QUALIFICATION REPORT  
FOR  
SS JACKETED MANUFACTURING VESSEL (2000 LITER)**

**PROTOCOL No.:**

**PERFORMANCE QUALIFICATION  
REPORT  
FOR  
MANUFACTURING VESSEL  
CAPACITY: 2000 LITER  
(FFS LINE)**

<b>EQUIPMENT ID. No.</b>	
<b>LOCATION</b>	<b>MANUFACTURING AREA, FFS LINE</b>
<b>DATE OF QUALIFICATION</b>	
<b>SUPERSEDES REPORT No.</b>	<b>NIL</b>



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**1.0 REPORT PRE – APPROVAL:**

**INITIATED BY:**

<b>DESIGNATION</b>	<b>NAME</b>	<b>SIGNATURE</b>	<b>DATE</b>
<b>OFFICER/EXECUTIVE (QUALITY ASSURANCE)</b>			

**REVIEWED BY:**

<b>DESIGNATION</b>	<b>NAME</b>	<b>SIGNATURE</b>	<b>DATE</b>
<b>HEAD (PRODUCTION)</b>			
<b>HEAD (ENGINEERING)</b>			

**APPROVED BY:**

<b>DESIGNATION</b>	<b>NAME</b>	<b>SIGNATURE</b>	<b>DATE</b>
<b>HEAD (QUALITY ASSURANCE)</b>			



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**2.0 OBJECTIVE:**

- To provide documented evidence that the Equipment is performing consistently, repeatedly and reproducibly within its established operating range and the results of all the test parameters meet the pre-defined acceptance criteria.
- To confirm the suitability of the Standard Operating Procedures for all routine activities associated with the system.

**3.0 SCOPE:**

- The scope of this report is limited for qualification of manufacturing vessel 2000 Ltr. (Make: Pharmatech Process Equipment) Installed in FFS Line.
- This report provides all the relevant information of the performance qualification activity, In-process observations and analytical data of testing of collected samples.



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**4.0 RESPONSIBILITY:**

The Validation Group, comprising of a representative from each of the following departments, shall be responsible for the execution of Performance Qualification Report.

<b>DEPARTMENTS</b>	<b>RESPONSIBILITIES</b>
<b>Quality Assurance</b>	<ul style="list-style-type: none"><li>• Preparation, Approval and Compilation of the Performance Qualification Report.</li><li>• Co-ordination with Quality Control, Production and Engineering to carryout Performance Qualification Activity.</li><li>• Monitoring of Performance Qualification Activity.</li><li>• Post Approval of Performance Qualification Report after Execution.</li></ul>
<b>Production</b>	<ul style="list-style-type: none"><li>• Review of Performance Qualification Report.</li><li>• To co-ordinate and support Performance Qualification Activity.</li><li>• Post Approval of Performance Qualification Report after Execution.</li></ul>
<b>Quality Control</b>	<ul style="list-style-type: none"><li>• Analytical Support (Microbial Testing/ chemical Analysis).</li></ul>
<b>Engineering</b>	<ul style="list-style-type: none"><li>• Reviewing of qualification report for correctness, completeness and technical excellence</li><li>• Responsible for trouble shooting (if occurred during execution).</li><li>• Maintenance &amp; preventive maintenance as per schedule.</li><li>• Post Approval of Performance Qualification Report after Execution.</li></ul>



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**5.0 EQUIPMENT DETAILS:**

<b>Equipment Name</b>	SS Jacketed Manufacturing vessel
<b>ID.Number</b>	
<b>Capacity</b>	2000 lt.
<b>Gross Capacity</b>	2400 lt.
<b>Manufacturer's Name</b>	Pharmatech Process Equipment
<b>S.No.</b>	
<b>Model</b>	cGMP Model.
<b>Supplier's Name</b>	Pharmatech Process Equipment
<b>Location of Installation</b>	Manufacturing Area, FFS Line



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**6.0 PRE – QUALIFICATION REQUIREMENTS:**

**6.1 Training Record of Validation Team:**

All the persons involved in the execution of qualification activity must be trained in all aspects of the qualification activity including the test methodology, acceptance criteria and safety precautions to be followed during working..

**6.2 Verification of Documents:**

Verify that the DQ/IQ/OQ of manufacturing vessel has been executed and approved.

Verify that SOP for Operating, Cleaning and Preventive Maintenance of the manufacturing vessel has been prepared.

S. NO.	DOCUMENT NAME	COMPLETED (YES/NO)	VERIFIED BY (QA) SIGN/DATE
1.	Executed and approved DQ Protocol Cum Report		
2.	Executed and approved IQ Protocol Cum Report		
3.	Executed and approved OQ Protocol Cum Report		
4.	Approved PQ Protocol		
5.	SOP for Operating, Cleaning of the manufacturing vessel		
6.	SOP for Preventive Maintenance of the manufacturing vessel		

**Inference:**

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**Reviewed By  
(Manager QA)  
Sign/Date: .....**



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**7.0 TESTS AND CHECKS :**

**7.1 Equipment Volumetric Capacity (In Liters) Test:**

<b>NAME OF EQUIPMENT</b>		<b>CAPACITY OF VESSEL</b>	
<b>MAKE</b>		<b>EQUIPMENT ID No.</b>	

<b>DATE OF TEST</b>	<b>TRIAL NO.</b>	<b>ACCEPTANCE CRITERIA</b>	<b>OBSERVATION</b>
		Total volume to be 2000 liters	
		Working volume to be 2000 liters	
		Total volume to be 2000 liters	
		Working volume to be 2000 liters	
		Total volume to be 2000 liters	
		Working volume to be 2000 liters	

**Checked By  
(Production)  
Sign/Date: .....**

**Verified By  
(Quality Assurance)  
Sign/Date.....**

**Inference:**

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**Reviewed By  
(Manager QA)  
Sign/Date: .....**





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**PROTOCOL No.:**

**7.2 Equipment Volumetric Capacity (In Liters) Test by chemical assay method**

<b>NAME OF EQUIPMENT</b>		<b>CAPACITY OF VESSEL</b>	<b>2000 Ltr.</b>
<b>MAKE</b>		<b>EQUIPMENT ID No.</b>	
<b>B.No. OF NACL</b>		<b>CONCENTRATION USED</b>	

<b>DATE OF TEST</b>	<b>VOLUME OF TANK</b>	<b>WEIGHT OF NACL</b>	<b>TEST PERFORMED</b>	<b>ACCEPTANCE CRITERIA</b>	<b>OBSERVATION</b>
	<b>200 Ltr.</b>			Assay of NaCl should be between 0.882% W/V – 0.912% W/V	
	<b>400 Ltr.</b>				
	<b>800 Ltr.</b>				
	<b>1200 Ltr.</b>				
	<b>1600 Ltr.</b>				
	<b>2000 Ltr.</b>				

**Checked By  
(Production)**

**Sign/Date:** .....

**Verified By**

**(Quality Assurance)**

**Sign/Date:**.....

**Inference:**

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**Reviewed By**

**(Manager QA)**

**Sign/Date:** .....



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**7.3 Test for Verification of Uniformity of Mixing**

<b>DATE OF TEST</b>		<b>CAPACITY OF VESSEL</b>	
<b>NAME OF EQUIPMENT</b>		<b>EQUIPMENT ID No.</b>	
<b>WEIGHT OF SODIUM CHLORIDE</b>		<b>TRIAL No.</b>	<b>01</b>

<b>SAMPLE INTERVAL (MINUTE)</b>	<b>SAMPLE LOCATION</b>	<b>CRITICAL VARIABLES</b>	<b>ACCEPTANCE CRITERIA</b>	<b>OBSERVATION</b>
After 05	Top	Description	Lump free solution	
	Bottom	Description	Lump free solution	
After 10	Top	Description	Lump free solution	
		pH	5.0-7.0	
		Assay	Assay (0.882 % w/v - 0.912 %. w/v)	
	Bottom	Description	Lump free solution	
		pH	5.0-7.0	
		Assay	Assay (0.882 % w/v - 0.912 %. w/v)	
	% RSD of Assay			≤ 2%
After 30	Top	Description	Lump free solution	
		pH	5.0-7.0	
		Assay	Assay (0.882 % w/v - 0.912 %. w/v)	
	Bottom	Description	Lump free solution	
		pH	5.0-7.0	
		Assay	Assay (0.882 % w/v - 0.912 %. w/v)	
	% RSD of Assay			≤ 2%



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**PROTOCOL No.:**

<b>DATE OF TEST</b>		<b>CAPACITY OF VESSEL</b>	
<b>NAME OF EQUIPMENT</b>		<b>EQUIPMENT ID NO.</b>	
<b>WEIGHT OF SODIUM CHLORIDE</b>		<b>TRIAL NO.</b>	<b>02</b>

<b>SAMPLE INTERVAL (MINUTE)</b>	<b>SAMPLE LOCATION</b>	<b>CRITICAL VARIABLES</b>	<b>ACCEPTANCE CRITERIA</b>	<b>OBSERVATION</b>
After 05	Top	Description	Lump free solution	
	Bottom	Description	Lump free solution	
After 10	Top	Description	Lump free solution	
		pH	5.0-7.0	
		Assay	Assay (0.882 % w/v - 0.912 %. w/v)	
	Bottom	Description	Lump free solution	
		pH	5.0-7.0	
		Assay	Assay (0.882 % w/v - 0.912 %. w/v)	
	% RSD of Assay			≤ 2%
After 30	Top	Description	Lump free solution	
		pH	5.0-7.0	
		Assay	Assay (0.882 % w/v - 0.912 %. w/v)	
	Bottom	Description	Lump free solution	
		pH	5.0-7.0	
		Assay	Assay (0.882 % w/v - 0.912 %. w/v)	
	% RSD of Assay			≤ 2%



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**PROTOCOL No.:**

<b>DATE OF TEST</b>		<b>CAPACITY OF VESSEL</b>	
<b>NAME OF EQUIPMENT</b>		<b>EQUIPMENT ID NO.</b>	
<b>WEIGHT OF SODIUM CHLORIDE</b>		<b>TRIAL NO.</b>	<b>03</b>

<b>SAMPLE INTERVAL (MINUTE)</b>	<b>SAMPLE LOCATION</b>	<b>CRITICAL VARIABLES</b>	<b>ACCEPTANCE CRITERIA</b>	<b>OBSERVATION</b>
After 05	Top	Description	Lump free solution	
	Bottom	Description	Lump free solution	
After 10	Top	Description	Lump free solution	
		pH	5.0-7.0	
		Assay	Assay (0.882 % w/v - 0.912 % w/v)	
	Bottom	Description	Lump free solution	
		pH	5.0-7.0	
		Assay	Assay (0.882 % w/v - 0.912 % w/v)	
	% RSD of Assay		≤ 2%	
After 30	Top	Description	Lump free solution	
		pH	5.0-7.0	
		Assay	Assay (0.882 % w/v - 0.912 % w/v)	
	Bottom	Description	Lump free solution	
		pH	5.0-7.0	
		Assay	Assay (0.882 % w/v - 0.912 % w/v)	
	% RSD of Assay		≤ 2%	

**Checked By  
(Production)**

**Sign/Date:** .....

**Verified By  
(Quality Assurance)**

**Sign/Date:** .....



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**Reviewed By  
(Manager QA)  
Sign/Date: .....**



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**8.0 CHECKLIST OF ALL TESTS AND CHECKS:**

TESTS OR CHECKS	EXECUTED [YES/NO]	REMARK
Equipment Volumetric Capacity (In Litres) Test		
Verification of Volume of Solution by assay of sodium chloride		
Test For Verification Of Uniformity Of Mixing		

**Checked By  
(Production)**

**Sign/Date:** .....

**Verified By**

**(Quality Assurance)**

**Sign/Date:**.....

**Inference:**

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**Reviewed By**

**(Manager QA)**

**Sign/Date:** .....



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**9.0 DOCUMENTS ATTACHED:**

- Test Report from QC lab
- Any other Relevant Documents.
- Calibration Certificate of test Instruments.

**10.0 NON COMPLIANCE:**

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**11.0 DEVIATION FROM PRE-DEFINED SPECIFICATION, IF ANY:**

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**12.0 CHANGE CONTROL, IF ANY:**

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**13.0 REVIEW (INCLUSIVE OF FOLLOW UP ACTION, IF ANY):**

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**14.0 CONCLUSION :**

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**15.0 RECOMMENDATION :**

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**16.0 ABBREVIATIONS:**

%	:	Percentage
cGMP	:	Current Good Manufacturing Practices
CQA	:	Corporate Quality Assurance
DQ	:	Design Qualification
FFS	:	Form Fill Seal
ID.	:	Identification
IQ	:	Installation Qualification
LTD.	:	Limited
MFT	:	Manufacturing vessel
Nacl	:	Sodium Chloride
No.	:	Number
OQ	:	Operational Qualification
PPQ	:	Performance Qualification Protocol
PVT	:	Private
RPQ	:	Report performance qualification
RSD	:	Relative standard deviation
SOP	:	Standard Operating Procedure



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**17.0 REPORT POST APPROVAL:**

**INITIATED BY:**

<b>DESIGNATION</b>	<b>NAME</b>	<b>SIGNATURE</b>	<b>DATE</b>
<b>OFFICER/EXECUTIVE (QUALITY ASSURANCE)</b>			

**REVIEWED BY:**

<b>DESIGNATION</b>	<b>NAME</b>	<b>SIGNATURE</b>	<b>DATE</b>
<b>HEAD (PRODUCTION)</b>			
<b>HEAD (ENGINEERING)</b>			

**APPROVED BY:**

<b>DESIGNATION</b>	<b>NAME</b>	<b>SIGNATURE</b>	<b>DATE</b>
<b>HEAD (QUALITY ASSURANCE)</b>			