QUALITY ASSURANCE DEPARTMENT

OPERATIONAL QUALIFICATION PROTOCOL CUM REPORT FOR DEDUSTING TUNNEL

OPERATIONAL QUALIFICATION PROTOCOL CUM REPORT FOR DEDUSTING TUNNEL

EQUIPMENT ID. No.	
LOCATION	Raw Material Receiving Bay
DATE OF QUALIFICATION	
SUPERSEDES PROTOCOL No.	



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1.0 PRE – APPROVAL:

INITIATED BY:

DESIGNATION	NAME	SIGNATURE	DATE
OFFICER/EXECUTIVE (QUALITY ASSURANCE)			

REVIEWED BY:

DESIGNATION	NAME	SIGNATURE	DATE
OPERATING MANAGER (QUALITY ASSURANCE)			
HEAD (ENGINEERING)			
HEAD (WAREHOUSE)			

APPROVED BY:

DESIGNATION	NAME	SIGNATURE	DATE
HEAD (QUALITY ASSURANCE)			



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2.0 OBJECTIVE:

- To verify that the equipment operates in accordance with the design and user requirements as defined by set acceptance criteria and complies with relevant cGMP Requirements.
- To verify the Operational features of Dedusting Tunnel and to ensure that it produces desired
 Quality & rated output according to manufactures specifications.
- To verify all the Operational features from user point of view of the Equipment, Cleaning Procedure, Start up & Shut down Procedure and Safety Features.

3.0 SCOPE:

- The scope of this Operational qualification protocol cum report is limited to qualification of **Dedusting Tunnel (Make:)** to be installed in the Raw Material Receiving Bay.
- This Protocol will define the methods and documentation used to perform OQ activity of
 Dedusting Tunnel successful, completion of this Protocol will verify that Dedusting Tunnel meet
 all acceptance criteria and ready for warehouse use.



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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 overall compliance of this Protocol cum Report:

DEPARTMENTS	RESPONSIBILITIES
Quality Assurance	Preparation, Approval and Compilation of the Operational Qualification Protocol cum Report.
	 Co-ordination with Warehouse and Engineering to carryout Operational Qualification.
	Monitoring of Operational Qualification Activity.
	Post approval of Operational Qualification Protocol Cum Report.
Warehouse	Review & Pre Approval of Protocol cum Report.
	To Co-ordinate and support for Execution of Qualification study as per
	Protocol.
	Post Approval of Qualification Protocol Cum Report.
Engineering	Review & Pre Approval of Protocol cum Report.
	Co-ordination, Execution and technical support in Dedusting Tunnel
	Operational Qualification Activity.
	Calibration of Process Instruments.
	Responsible for Trouble Shooting (if occurs during execution).
	Post Approval of Qualification Protocol Cum Report.



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5.0 EQUIPMENT DETAILS:

Equipment Name	Dedusting Tunnel
Equipment	
Manufacturer's Name	
Model	
Serial Number	
Supplier's Name	
Location of Installation	Raw Material Receiving Bay

6.0 SYSTEM DESCRIPTION:

De-dusting Tunnel is used for de-dusting the material containers at material receiving bay, the filtered air is delivered by the adjustable nozzles positioned on both sides and on the ceiling of the unit. The high velocity air jets remove most of the contamination dust from the outer surface of containers.

De-dusting tunnel is made of AISI 304 stainless steel casing. It is constructed by cutting, hemming, bending, spot welding and bolt junctioning where necessary. The welded pieces arte strengthened by subsequent silicon sealing.

The electric control panel is placed outside the box and it is easy to reachable.

The filtered air is delivered by the adjustable nozzles positioned on both wall sides and on the ceiling of the unit. The high velocity air jets remove most of the contamination dust from the pallet that is positioned inside the box.

The air is drawn through the Pre & Fine-filter. The air flow rate and the nozzles position have been designed in order to assure that the pallet is completely invested by air jets.



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7.0 PRE – QUALIFICATION REQUIREMENTS:

7.1 Verification of Documents:

- DQ Protocol Cum Report
- IQ Protocol cum Report
- SOP for operation & Cleaning of Dedusting Tunnel
- SOP for Preventive Maintenance of Dedusting Tunnel

7.1 Verification of documents:

The results of any tests should meet the limits and acceptance criteria specified in the test documents. Any deviations or issues should be rectified and documented prior to OQ commencing.

S. No.	Document Name	Document/SOP No.	Completed (Yes/No)	Checked By (Engineering) Sign/Date
1.	DQ Protocol Cum Report			
2.	IQ Protocol Cum Report			
3.	SOP for operation & Cleaning of Dedusting Tunnel.			
4.	SOP for Preventive Maintenance of Dedusting Tunnel			

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



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8.0 CRITICAL VARIABLES TO BE MET:

8.1 Operational and Functional Checks:

Operate the Dedusting Tunnel as per Manufacturer's Manual/SOP and Check for the following functions of the equipment. The Equipment should function as desired.

S. No	Operation	Acceptance Criteria	Observation	Remark
1.	Start the motor of the fan after switching "ON"	The motor should start		
2.	Switch "OFF" the fan motor	The motor should start		
3.	Check the air flow velocity	The velocity should be NLT 2000 FPM		
4.	Check the working pressure in Magnehelic gauge	The Magnehelic gauge should indicate 4-10 mm of water		
5.	Verify all the curtains are properly fixed	All the curtains should be properly fixed		
6.	Verify all the nozzles are working properly	All the nozzles should be working properly		
7.	Verify the door is properly fixed	The door should be properly fixed		
8.	No abnormal sound is found under working condition	No abnormal sound		
9.	Door should open and close as per requirement	Door should open and close as per requirement		
10.	Movement of roller belt	Reverse & Forward movement of roller belt		



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OPERATIONAL QUALIFICATION PROTOCOL CUM REPORT FOR DEDUSTING TUNNEL **8.1.1** Air Velocity Measurement **Test instrument details: Instrument Name** Make/ Model / Type **Calibration Date Calibration Due Date** Nozzle 3 5 6 8 9 **Air Velocity** in (Ft/min) 10 11 12 13 14 15 16 17 18 Nozzle **Air Velocity** in (Ft/min) 19 20 22 23 24 25 Nozzle 21 26 27 **Air Velocity** in (Ft/min) 28 29 30 Nozzle 31 32 **Air Velocity** in (Ft/min) Acceptance criteria: Average Air Velocity NLT 200 feet/minute **Checked By** Verified By (Warehouse) (Quality Assurance) **Sign/Date:** **Sign/Date:** **Inference:**

Reviewed By (Manager QA)

Sign/Date:



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8.2 Power Failure Verification:

Item	Acceptance Criteria	Observation	Observed By (Engineering) Sign/Date
Main Power shut down	Equipment stops in safe and secure condition		
Main Power Restored	Equipment can be restarted with no problems or adverse conditions.		

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



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9.0 REFERENCES:

The Principle Reference is the following:

- Validation Master Plan.
- Schedule-M "Good Manufacturing Practices and Requirements of Premises, Plant and Equipment for Pharmaceutical Products."
- EU Guide to Good Manufacturing Practice, Part 4, 30 March 2015.

10.0 DOCUMENTS TO BE ATTACHED:

• Any Other Relevant Documents

11.0	DEVIATION FROM PREDEFINED SPECIFICATION IF, ANY:
12.0	CHANGE CONTROL, IF ANY:
13.0	REVIEW (INCLUSIVE OF FOLLOW UP ACTION, IF ANY):



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14.0	CONCLUSION:
15.0	RECOMMENDATION:

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16.0 ABBREVIATIONS:

WHO : World Health Organization

FDA : Food and Drug Administration

CFR : Code of Federal Regulations

cGMP : Current Good Manufacturing Practices

EU : European Union

QA : Quality Assurance

IQ : Installation Qualification

OQ : Operational Qualification

EQ : Equipment

DDT : Dedusting Tunnel

CFM : Cubic feet per minute

SOP : Standard Operating Procedure



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17.0 POST APPROVAL:

DESIGNATION	NAME	SIGNATURE	DATE
OFFICER/EXECUTIVE (QUALITY ASSURANCE)			

DESIGNATION	NAME	SIGNATURE	DATE
OPERATING MANAGER (QUALITY ASSURANCE)			
HEAD (ENGINEERING)			
HEAD (WAREHOUSE)			

DESIGNATION	NAME	SIGNATURE	DATE
HEAD (QUALITY ASSURANCE)			