

PERFORMANCE QUALIFICATION REPORT FOR BLOW FILL & SEAL MACHINE

PERFORMANCE QUALIFICATION REPORT FOR BLOW FILL & SEAL MACHINE-603

EQUIPMENT ID No.	
LOCATION	FILLING ROOM
DATE OF QUALIFICATION	
SUPER SEDES REPORT No.	NIL



PERFORMANCE QUALIFICATION REPORT FOR BLOW FILL & SEAL MACHINE

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PERFORMANCE QUALIFICATION REPORT FOR BLOW FILL & SEAL MACHINE

1.0 REPORT PRE APPROVAL:

PREPARED BY:

DESIGNATION	NAME	SIGNATURE	DATE
OFFICER / EXECUTIVE (QUALITY ASSURANCE)			

REVIEWED BY:

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

APPROVED BY:

DESIGNATION	NAME	SIGNATURE	DATE
HEAD (QUALITY ASSURANCE)			



PERFORMANCE QUALIFICATION REPORT FOR BLOW FILL & SEAL MACHINE

2.0 **OBJECTIVE:**

• To compile the Validation report carried out as per Protocol for BFS-603 Filling Machine installed in LVP Line used to provide the product consistently, within the specified acceptance limits, when operated as per the standard operating procedures.

3.0 SCOPE:

• The Report covers all aspects of Performance Qualification for the BFS 603 Filling Machine installed in the Filling Roomr.

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 Report:

DEPARTMENTS	RESPONSIBILITIES
	• Preparation of Reports and submission to Quality Assurance Department.
Quality Control	• To conduct Validation activity as per the Approved Protocol.
	• To provide analytical support for validation activity.
	• To compile and approval of report.
Quality Assurance	• To monitor all Validation Activities and ensure the Validation is carried out
Quanty Assurance	as per the Protocol.
	• To review Report for completeness and Technical Accuracy.
Production	Review of Performance Qualification Report.
Troduction	• To co-ordinate and support Performance qualification Activity.
	Review of Performance Qualification Report.
Engineering	• To co-ordinate and support Validation Activity.
	• Responsible for Trouble shooting during execution (If Occurs).



PERFORMANCE QUALIFICATION REPORT FOR BLOW FILL & SEAL MACHINE

5.0 EQUIPMENT DETAILS:

Equipment Name	Blow Fill & Seal Machine-603
Equipment ID No.	
Manufacturer's Name	M/s Weiler Engineering Inc.
Supplier's Name	M/s SteriMax Engineering Pvt. Ltd.
Place of Installation	Filling Room

6.0 PRE-QUALIFICATION REQUIREMENTS :

6.1 SYSTEM PRE-REQUISITES:

S.No.	DOCUMENT NAME	DOCUMENT/ SOP No.	COMPLETED (YES/NO)	VERIFIED BY (SIGN & DATE) QA

6.2 TEST EQUIPMENT CALIBRATION:

S.No.	EQUIPMENT/ INSTRUMENTS	EQUIPMENT/ INSTRUMENTS	CALIBRATION DONE ON	CALIBRATION DUE ON	VERIFIED BY (SIGN & DATE)
	NAME	I.D NO.			QA



PERFORMANCE QUALIFICATION REPORT FOR BLOW FILL & SEAL MACHINE

6.3 TRAINING OF EXECUTION TEAM:

S.No.	Name of Trainee	Department	Designation	Acceptance Criteria	Signature of Trainee	Checked By (Sign & Date) QA
1.0						
2.0						
3.0				All personnel		
4.0				involved in execution of		
5.0				protocol shall be trained in the		
6.0				required procedure and		
7.0				shall be documented.		
8.0						
9.0						
10.0						

Name of the Trainer: _____

Inference:



PERFORMANCE QUALIFICATION REPORT FOR BLOW FILL & SEAL MACHINE

7.0 TESTS AND CHECKS:

7.1.1 AIR VELOCITY TEST OF FILLING ZONE:

Date of Test	Equipment ID No.	
Name of Instrument	Block / Area	
Test Instrument Calibrated done on	Test Instrument Calibration due on	

Location	Velocity [FPM]	Average Velocity [FPM]

ACCEPTANCE CRITERIA:

• Average Velocity across the filter should be within the range of $90 \pm 20\%$ FPM.

Compiled by: (QA) (Sign & Date).....

Inference:



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7.1.2 HEPA FILTER INTEGRITY TEST (PAO TEST) REPORT:

Date of Test	Equipment ID No.	
Name of Instrument	Block	
Test Condition	Area	
Test Instrument Calibrated on	Test Instrument Calibration due on	

Date	Area Name	HEPA ID. /S. No.	Acceptance Criteria	Observation (% of Leakage)
		75.110.	The PAO penetration/leak through HEPA filters should not be greater than 0.01% of the upstream PAO concentration.	(// of Eleanage)
			TAO concentration.	

Compiled by:

(QA) (Sign & Date).....

Inference:



PERFORMANCE QUALIFICATION REPORT FOR BLOW FILL & SEAL MACHINE

7.1.3 NON - VIABLE PARTICLE COUNT TEST:

Date of Test	Equipment ID No.	
Name of Instrument	Block	
Test Condition	Area	
Test Instrument Calibrated on	Test Instrument Calibration due on	

Filter No.	Particle Size		Particle Count at Different Location						
		First day		Second Day		Thire			
		Location		Location		Location			
		L1	L1 L2		L2	L1 L2			
01	≥ 0.5µm								
	≥ 5.0µm								

ACCEPTANCE CRITERIA:

• Not more than 3520 for $0.5\mu m$ particle and 20 for $5.0\mu m$ particle in $1m^3$ of air at static condition.

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Inference:



PERFORMANCE QUALIFICATION REPORT FOR BLOW FILL & SEAL MACHINE

7.1.4 VIABLE PARTICLE MONITORING (ACTIVE AIR SAMPLING):

Date of Exposure		Sample Volume	
Test Condition		Block/ Area	
1 st Incubation Temperature & time	20-25° C for 72 hrs.	2nd Incubation Temperature & time	30-35° C for 48 hrs.
Media Used		Autoclave Media Reference No.	
Test No.		Date of Report	

Date	Location No.	Counts	Remarks		
	L 1				

ACCEPTANCE CRITERIA: Microbial counts should be less than 1 CFU/m³.

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7.2 VERIFICATION OF SPEED OF THE MACHINE:

Product Name		Filling Speed	
Date		Block / Area	
Rejection Limit	NMT 1.0 %		

Trial-1

Machine Speed:- 3000 Bottles / hrs

Time (in hrs)		No. of Filled Bottles	No. of Rejected Bottles	Nature of Rejection		
From	То	(A)	(B)			

Rejection % = $\frac{B \times 100}{A}$ = $x \times 100$ = %

Trial-2

Machine Speed:- 3000 Bottles / hrs

(in hrs)	No. of Filled Bottles	No. of Rejected Bottles	Nature of Rejection
То	(A)	(B)	
		× / /	

•••••



PERFORMANCE QUALIFICATION REPORT FOR BLOW FILL & SEAL MACHINE

Machine Speed:- 3000 Bott							
Time From	(in hrs) To	No. of Filled Bottles (A)	No. of Rejected Bottles (B)	s Nature of Rejection			
TIOM	10						
Rejectior	$n \% = \frac{B \times 10}{A}$	<u>00</u> = <u></u>	.x 100 =	%			
	1	••••••					
nference	:						
				ariana d Dan			
			(N	eviewed By: /anager QA) lign & Date)			



PERFORMANCE QUALIFICATION REPORT FOR BLOW FILL & SEAL MACHINE

7.3 VERIFICATION OF VOLUME:

Product Name		Filling Speed	
Date		Block / Area	
Filled Volume	$102 \text{ ml} \pm 2 \text{ ml}$	Filling speed	

Trial-1

Date:....

Time:.....

Cavity	1	2	3	4	5	6	7	8	9	10	11	12	13	14
No.														
Net Fill Weight (in gram)														
Fill Volume (in ml)														
Observed By														
Checked By														

Trial-2

Date:	•••••	•••••							Τ	ime:	••••••	• • • • • • • • • •	•••••	•••••
Cavity No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Net Fill Weight (in gram)														
Fill Volume (in ml)														
Observed By														
Checked By														



PHARMA DEVILS

QUALITY ASSURANCE DEPARTMENT

PERFORMANCE QUALIFICATION REPORT FOR BLOW FILL & SEAL MACHINE

Trial-3

Date:.....

Time:.....

Cavity No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Net Fill Weight (in gram)														
Fill Volume (in ml)														
Observed By														
Checked By														

Compiled by: (QA) (Sign & Date).....

Inference:



PERFORMANCE QUALIFICATION REPORT FOR BLOW FILL & SEAL MACHINE

WEIGHT VERIFICATION OF EMPTY CONTAINERS: 7.4

Product Name		Filling Speed	
Date		Block / Area	
Acceptance Limit	11.0 g to 13.0 g	Weighing Balance ID	

Trial-1

Date:.... 5 7 9 Cavity 1 2 3 4 10 11 12 13 6 8 14 No. Weight of Empty Bottle (in gram) Observed By Checked By

Trial-2

Date:	Time:								•••••					
Cavity	1	2	3	4	5	6	7	8	9	10	11	12	13	14
No.														
Weight of Empty Bottle (in gram)														
Observed By														
Checked By														

Time:.....



PERFORMANCE QUALIFICATION REPORT FOR BLOW FILL & SEAL MACHINE

Trial-3

Date:.....

Time:.....

Cavity No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Weight of Empty Bottle (in gram)														
Observed By														
Checked By														

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QUALITY ASSURANCE DEPARTMENT

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7.5 VERIFICATION OF LEAK TEST OF THE CONTAINERS:

Cycle-1

Product Name		Filling Speed	
Date		Block / Area	
Applied Pressure	$0.75 \text{ to } 1.0 \text{ kg/cm}^2$	Acceptance Criteria	Leaked Bottles NMT 0.1%
Leak Test Equipment ID			

Bottle. No.	Parameter									
		Leakage Observation								
	Initial	Middle	End							
1.										
2.										
3.										
4.										
5.										
6.										
7.										
8.										
9.										
10.										
11.										
12.										
13.										
14.										



PERFORMANCE QUALIFICATION REPORT FOR BLOW FILL & SEAL MACHINE

Cycle-2

Bottle. No.		Parameter	
		Leakage Observation	
	Initial	Middle	End
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
13.			
14.			

Cycle-3

Bottle. No.	Parameter									
		Leakage Observation								
	Initial	Middle	End							
1.										
2.										
3.										
4.										
5.										
6.										
7.										
8.										
9.										



PERFORMANCE QUALIFICATION REPORT FOR BLOW FILL & SEAL MACHINE

Bottle. No.	Parameter Leakage Observation									
	Initial	Middle	End							
10.										
11.										
12.										
13.										
14.										

Compiled by:	
(QA)	
(Sign & Date)	•••

Inference:



PERFORMANCE QUALIFICATION REPORT FOR BLOW FILL & SEAL MACHINE

7.6 PHYSICAL APPEARANCE VERIFICATION:

Product Name	Filling Speed	
Date	Block / Area	

CYCLE -1

							Paran	neter						
Bottle No.	Tip Formation	Head Formation	Caller Formation	Head Ring Formation	Extra Plastic on Neck	Neck Breaking Problem	Dip Line	Hanger Physical Strength	Embossin g Problem	Rough surface problem	Smooth with no Scratches	Joining Lines & Sealing should be smooth	Foreign particle	Transpare ncy
1.														
2.														
3.														
4.														
5.														
6.														
7.														
8.														
9.														
10.														
11.														
12.														
13.														
14.														



PERFORMANCE QUALIFICATION REPORT FOR BLOW FILL & SEAL MACHINE

CYCLE -2 Parameter Bottle Dip Line Head Ring Hanger Tip Head Caller Extra Neck Embossin Rough Smooth Joining Foreign Transpare Formation Formation Formation Plastic on Breaking Physical surface with no Lines & particle ncy g No. Neck Problem Strength Problem problem Scratches Sealing should be smooth 1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14.

CYCLE - 3

					Paran	neter						
Bottle No.	Tip Formation	Head Formation	Head Ring Formation	Neck Breaking Problem	Dip Line	Hanger Physical Strength	Embossin g Problem	Rough surface problem	Smooth with no Scratches	Joining Lines & Sealing should be smooth	Foreign particle	Transpare ncy
1.												
2.												
3.												



PERFORMANCE QUALIFICATION REPORT FOR BLOW FILL & SEAL MACHINE

							Paran	neter						
Bottle No.	Tip Formation	Head Formation	Caller Formation	Head Ring Formation	Extra Plastic on Neck	Neck Breaking Problem	Dip Line	Hanger Physical Strength	Embossin g Problem	Rough surface problem	Smooth with no Scratches	Joining Lines & Sealing should be smooth	Foreign particle	Transpare ncy
4.														
5.														
6.														
7.														
8.														
9.														
10.														
11.														
12.														
13.														
14.														

Compiled by: (QA) (Sign & Date).....

Inference:



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7.7 VERIFICATION OF WALL THICKNESS:

Product Name		Filling Speed	
Date		Block / Area	
Wall Thickness	0.4 mm to 0.6 mm	Vernier Caliper ID	

CYCLE-1

Bottle				Pa	ramete	r : Thicl	aness Ol	bservatio	on			
		Ini	tial			Ν	liddle			I	End	
No.	Left Side (in mm)	Right Side (in mm)	Front (in mm)	Back. (in mm)	Left Side (in mm)	Right Side (in mm)	Front (in mm)	Back. (in mm)	Left Side (in mm)	Right Side (in mm)	Front (in mm)	Back. (in mm)
1.												
2.												
3.												
4.												
5.												
6.												
7.												
8.												
9.												
10.												
11.												
12.					<u> </u>		<u> </u>				<u> </u>	
13.												



PERFORMANCE QUALIFICATION REPORT FOR BLOW FILL & SEAL MACHINE

Bottle				Pa	ramete	r : Thick	ness Ob	oservatio	n			
		Ini	tial			N	liddle			I	End	
No.	Left Side	Right Side	Front	Back.	Left Side	Right Side	Front	Back.	Left Side	Right Side	Front	Back.
	(in mm)	(in mm)	(in mm)	(in mm)	(in mm)	(in mm)	(in mm)	(in mm)	(in mm)	(in mm)	(in mm)	(in mm)
14.												

CYCLE-2

Bottle				Pa	aramete	r : Thicł	kness Oł	oservatio	on			
		Ini	tial			Ν	liddle			E	Cnd	
No.	Left Side (in mm)	Right Side (in mm)	Front (in mm)	Back. (in mm)	Left Side (in mm)	Right Side (in mm)	Front (in mm)	Back. (in mm)	Left Side (in mm)	Right Side (in mm)	Front (in mm)	Back. (in mm)
1.												
2.												
3.												
4.												
5.												
6.												
7.												
8.												
9.												
10.												
11.												
12.												
13.												



PERFORMANCE QUALIFICATION REPORT FOR BLOW FILL & SEAL MACHINE

Bottle				Pa	ramete	r : Thick	kness Ol	oservatio	on			
		Ini	tial			\mathbf{N}	liddle			F	End	
No.	Left Side	Right Side	Front	Back.		Right Side		Back.		Right Side	Front	Back.
	(in mm)	(in mm)	(in mm)	(in mm)	(in mm)	(in mm)	(in mm)	(in mm)	(in mm)	(in mm)	(in mm)	(in mm)
14.												

CYCLE-3

Bottle				Pa	aramete	r : Thicł	kness Ol	oservatio	n			
		Ini	tial			N	liddle			F	End	
No.	Left Side (in mm)	Right Side (in mm)	Front (in mm)	Back. (in mm)	Left Side (in mm)	Right Side (in mm)	Front (in mm)	Back. (in mm)	Left Side (in mm)	Right Side (in mm)	Front (in mm)	Back. (in mm)
1.												(111111)
2.												
3.												
4.												
5.												
6.												
7.												
8.												
9.												
10.												
11.												
12.												
13.												



PERFORMANCE QUALIFICATION REPORT FOR BLOW FILL & SEAL MACHINE

Bottle				Pa	ramete	r : Thick	kness Ob	oservatio	n			
		Ini	tial			Μ	liddle			E	nd	
No.		Right Side		Back.		Right Side		Back.		Right Side		Back.
14.	(in mm)	(in mm)	(in mm)	(in mm)	(in mm)	(in mm)	(in mm)	(in mm)	(in mm)	(in mm)	(in mm)	(in mm)
-												

Compiled by:

(QA) (Sign & Date).....

Inference:



PERFORMANCE QUALIFICATION REPORT FOR BLOW FILL & SEAL MACHINE

7.8 STERILITY OF EMPTY CONTAINER, BLOW AIR & BLOWING AIR:

Product Name	Block / Area	
Date		

Bottle		terility 7 Container
No.	Result +ve =Growth -ve = No growth	Checked By
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		



PERFORMANCE QUALIFICATION REPORT FOR BLOW FILL & SEAL MACHINE

Compiled by: (QA) (Sign & Date).....

Inference:



PERFORMANCE QUALIFICATION REPORT FOR BLOW FILL & SEAL MACHINE

8.0 CHECKLIST OF ALL TESTS AND CHECKS:

TESTS OR CHECKS	EXECUTED [Y/N]	Checked By (Sign & Date) QA	COMMENT
1. Filling zone verification)			
A) Air Velocity Measurement Test			
B) Filter Integrity Test			
B)- Non viable particle count test			
C)- Viable Particle Count (By Active Air Sampling)			
2. Verification of Speed of The Machine			
3. Verification of volume			
4. Weight Verification of Empty Containers			
5. Verification of Leak Test of the Containers			
6. Verification of Physical Appearance of Bottles			
7. Verification of Wall Thickness			
8. Sterility of Empty Container			

Compiled by:

(QA) (Sign & Date).....

Inference:



PERFORMANCE QUALIFICATION REPORT FOR BLOW FILL & SEAL MACHINE

9.0 DOCUMENTS ATTACHED:

- Raw data of Microbiological Analysis
- Calibration Certificates for Anemometer
- Calibration Certificates for Airborne particle counter
- Calibration Certificates for Measuring Cylinder.
- Calibration Certificates for Vernier Caliper

10.0 NON COMPLIANCE:

11.0 DEVIATION FROM PRE-DEFINED SPECIFICATION, IF ANY:

12.0 CHANGE CONTROL, IF ANY:

.....



PERFORMANCE QUALIFICATION REPORT FOR BLOW FILL & SEAL MACHINE

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

·····

14.0 CONCLUSION:

15.0 RECOMMENDATION:



PERFORMANCE QUALIFICATION REPORT FOR BLOW FILL & SEAL MACHINE

16.0 ABBREVIATIONS:

QA	:	Quality Assurance
QC	:	Quality Control
No.	:	Number
Ltd.	:	Limited
ID No.	:	Identification Number
ml	:	Milliliter
FPM	:	Feet per Minute
BFS	:	Blow Fill & Seal



PERFORMANCE QUALIFICATION REPORT FOR BLOW FILL & SEAL MACHINE

17.0 REPORT POST APPROVAL:

PREPARED BY:

DESIGNATION	NAME	SIGNATURE	DATE
OFFICER / EXECUTIVE (QUALITY ASSURANCE)			

REVIEWED BY:

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

APPROVED BY:

DESIGNATION	NAME	SIGNATURE	DATE
HEAD (QUALITY ASSURANCE)			