



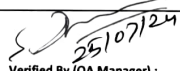

		NEW PRODUCT TEST REPORT	Part Description:	Vogue Tusker 3B 5S	Date:	24/07/2024	
Tested At: 			Model Description:	New Design	Sample given Date:	16/07/2024	
ID.No: 61			Nature Of Test:	Full Test	Test completed On:	23/07/2024	
SL/NO			Type of test	Specification	Observation	Result	Remarks
Safety Test							
1	Gas soundness (IS STD 5116:2020,CL: 16)	There shall be no leak or shall not be less than 10sec Interval between successive bubbles at 150 gf/cm2	No Leak issues Observed	Satisfactory	-	-	
2	Safety test	In Gas Stove shall not have any sharp edges and Burr etc.	Sharp edges Observed	Unsatisfactory	-	-	
Construction							
1	Design For maintenance (IS4246,CL:6,2,6,3,6,4,6,5,6,6)	The Burner should be so spaced that the relative distance between the centers of the adjoining burner shall not be less than 180 mm.	Big to Small Burner Distance - 280mm Small to Big Burner Distance - 280mm	Satisfactory	-	-	
		Burner ports shall be so Designed and located that in normal use spillage of food shall not cause internal fouling of mixing tube or blockage of injector jet.	No Issues Observed	Satisfactory	-	-	
		Burner and parts of burner only so same rating model and make,shall be interchangeable or replaceable without effecting performance.	No Issues Observed	Satisfactory	-	-	
		Parts which are intended to be removable by the user ,shall be easy to replace correctly, and difficult to assemble Incorrectly.	No Issues Observed	Satisfactory	-	-	
		All nuts,bolts and fittings having spanner flats shall be capable of being move by suitable spanner or be readily accessible to an adjustable spanner.	No Issues Observed	Satisfactory	-	-	
2	Design IS 4246, Amd-5	Any metallic part shall not be directly contact with glass.	-	NA	-	-	
3	Pansupport IS 4246 ,CL:12	pan of 100mm dia, over atleast one top burner without the use of loose rings,and 125mm dia. Vessel remains stable over each burner. Prongs of the support shall have suitable taper to accommodate round bottom pans.	Prongs to Prongs Distance - 94 mm	Satisfactory	-	-	
Performance Test							
5	Noise control (IS STD 4246:2002,CL: 20)	The ignition of the burner flames, their operation and turning 'OFF' shall not give rise to undue or excessive noise during all the operations.	No Noise Observed	Satisfactory	-	-	
6	Strength & Rigidity (IS STD 4246:2002,CL: 15)	Vertical deflection shall not exceed 2mm & Lengthwise and Widthwise deflection shall not exceed 5mm	Lengthwise - 1mm Widthwise - 1mm Vertical Deflection - 0.75	Satisfactory	-	-	

SL/NO	Type of test	Specification	Observation	Result	Remarks	Attachment		
7	Resistance to draught (IS STD 4246:2002, CL: 23)	There shall be no extinction of the flames on any of the burners operation at max consumption when the appliances is placed in a general current of air with a velocity of 2M/S, as measured with a rotating vane anemometer.	No Flame Extinguished	Satisfactory	-	-		
8	Flame Stability (IS STD 4246:2002, CL:19)	Flame should not extinguish,blow off or stick back or form soot at fully ON from 25 to 30 gf/cm2.After 1/2 hr at full ON,at SIM flame should not extinguish, blow off or stick back or form soot	No Flame issues observed	Satisfactory	-	-		
9	Ignition and flame travel (CL 18 : IS 4246)	Easy and safe access for lighting the flame complete travel of flame thruout the burner when lighted at any port at all pressure from 25 to 30 gf/cm2,smooth travel of flame when ignited by a eletric lighter without delay	No Issues Observed	Satisfactory	-	-		
10	Formation of Soot (IS STD 4246:2002, CL:22)	A Vessel, 150mm dia, full of water, shall be placed on the burner lighted at 'ON' position of the tap for one hour. After the test, no soot shall be deposited on the burner and on the bottom of the vessel	No Issues Observed	Satisfactory	-	-		
11	Gas consumption (in l/hr) (IS STD 4246:2002, CL:17)	For ON ,Small Burner 58 ± 8% l/h (53.36 - 62.64) Medium Burner 77 ± 8% l/h (70.84 - 83.16) Big Burner 90 ± 8% l/h (82.8 - 97.2) For SIM,Small Burner - 23.2 max. Medium Burner - 24 max Big Burner - 28 max.	Burner type	ON	SIM		InBig 90Jet -0.80mm jet used Refer the attachment	
			Small (Center)	49.82	20.02	UnSatisfactory		
			Medium (LHS)	66.83	21.36	UnSatisfactory		
			Big (RHS)	81.23	30.45	UnSatisfactory		
			-	-	-	-		
			-	-	-	-		
12	Thermal Efficiency (in %) (IS STD 4246:2002, CL:26)	Shoud Be min 68 %	Burner type	Efficiency			Refer the attachment	
			Small (Center)	68.98%		Satisfactory		
			Medium (LHS)	70.10%		Satisfactory		
			Big (RHS)	69.80%		Satisfactory		
			-	-		-		
13	Flash back (IS4246:2002, CL:13)	After 1/2 hr at full ON with vessel with water,turning to SIM and ON for 5 times should develop flash back at pressure from 25 to 35 gf/cm2	No Flash Back Observed	Satisfactory	-	-		

SL/NO	Type of test	Specification	Observation	Result	Remarks	Attachment	
14	Combustion test (IS STD 4246:2002, CL: 24)	The ratio of carbon monoxide and carbon dioxide shall not exceed 0.02	Burner type	CO/CO2 Ratio		-	-
			Small (Center)	0.002	Satisfactory	-	-
			Medium (LHS)	0.005	Satisfactory	-	-
			Big (RHS)	0.010	Satisfactory	-	-
			-	-	-	-	-
15	Fire Hazard and limiting Temperature test (in °C)	Temp for fire hazard apparatus at wall – RT+65° C	39	Satisfactory	-	-	
		Temp for fire hazard apparatus at floor–RT+65° C	31	Satisfactory	-	-	
		Temp for fire hazard apparatus at ceiling–RT+65° C	38	Satisfactory	-	-	
		Accidentally touched shall exceed 120 °C(working surfaces include pan supports,oven flue outlet,grill covers and plate racks.	58	Satisfactory	-	-	
		Temp of the Flame at height of H±20mm should not exceeded 500° C	237	Satisfactory	-	-	
		Surface which is normal use have to be touched for short period (for eg.,tap handles),shall not exceed 60° C	33	Satisfactory	-	-	
		The temperature of synthetic diaphragm in gas carrying components shall not exceed 60° C	38	Satisfactory	-	-	
Critical Dimension							
16	Critical Components	Refer the Attachment	-	NA	Regular Component	-	
Material Test							
17	Flash back for Material of the Burner (IS STD 5116:2020, CL:5.2)	The burner parts shall not distort or melt when operates at flashback condition for 1/2 hr.	No Issues Observed	Satisfactory	-	-	
18	Thickness of Glass (IS4246 CL 5.1.2 AMENDMENT 5)	Shall be atleast 6mm	SS Top Sheet - 2mm	NA	Only for Glass top Model	-	
19	Tickness of Glass fibre with Aluminium foil sheet (IS4246 CL 5.1.2 AMENDMENT 5)	An adhesive tape of glass fibre with Aluminium foil of minimum thickness as 0.13 mm	-	NA	Only for Glass top Model	-	
20	Temperature resistance of Glass fibre with Aluminium foil sheet (IS4246 CL 5.1.2 AMENDMENT 5)	An adhesive tape shall not burn or peel off	-	NA	Only for Glass top Model	-	

SL/NO	Type of test	Specification	Observation	Result	Remarks	Attachment
21	Glass Thermal Shock test (IS4246 CL 5.1.3 AMENDMENT 5)	There shall be no chip, crack or break in the glass.	-	NA	Only for Glass top Model	-
22	Gas Valve Lubricant (IS 5116,CL.8.5.1)	Taps Shall be lubricated with a suitable grease, Grease should be capable of operated at the max. temperature of 110 °c	-	NA	Test not Required Regular Component	-
23	Injector Jet, Gas valve (IS 5116 CL9.1.1)	The melting point shall not be less than 650° c	-	NA	Test not Required Regular Component	-
24	Burner (IS5116 CL 5.5)	The melting point shall not be less than 510° c	-	NA	Test not Required Regular Component	-
25	Mixing tube (IS5116 CL 5.5)	The melting point shall not be less than 510° c	-	NA	Test not Required Regular Component	-
26	Plastic components (IS 5116 CL 5.1.1)	Free of fissures, distortion, blemishes and discolouration after kept for 48 hours at 60° c	-	NA	Test not Required Regular Component	-
Coating Test						
27	Coating Thickness Test	Coating thickness shall be 50 micron and above.	-	NA	Test not Required Regular Component	-
28	Coating adhesive Test	Coating Shall not be peel off while removing the tape.	-	NA	Test not Required Regular Component	-
Application Test						
28	Endurance test (With Water)	After 234 Hours all the components should work with good condition.	-	NA	Test not Required Regular Component	-
29	Dry Heat test (Dosa Tawa)	After 234 Hours all the components should work with good condition.	-	NA	Test not Required Regular Component	-
30	After 234 Hours Endurance Test	Should not observe Outer or inner Leak on Burner. Should not occur pipe & gas cock leakage. Should not melt mixing tube during test and switch knob should not crack or melt.	-	NA	Test not Required Regular Component	-
31	Coating test during continuous soot formation test	After test shall not coating peeloff	-	NA	Only for Glass top Model	-
32	Glass Drop Test (10Kg)	Should not broken the Glass While dropping 10Kg load at 1 feet Height on Pan support.	-	NA	Only for Glass top Model	-

SL/NO	Type of test	Specification	Observation	Result	Remarks	Attachment
33	Rotation test.	After completion of 20,000 cycle rotation ,shall not get tight rotation,stuck and gasvalve leak observed.	-	NA	Regular Component	-
34	Flame test with various type of vessel	During test flame jump,flame extinguish,over flame should not occur.	No Flame Jump Observed	Satisfactory	-	-
35	Vibration test	Shall not occur Major Damages & Funtional failures , After 60 Min in Vibration tester.	No Issues Observed	Satisfactory	-	-
36	Cooking Test	Refer the Attachment	No Issues Observed	NA	Test not Required Regular Component	-
37	Salt Spray Test	Refer the Attachment	-	NA	Regular Component	-
Packing Test						
38	Packing Standard	Refer the Attachment	-	NA	Regular Component	-
39	Packaging Drop Test	No Major Damages & Funtional failures observed While Dropping 6Faces, 4 Corners & 1 Edges from particular height mentioned in standard.	-	NA	Regular Component	-
<p>OBSERVATION:</p> <ol style="list-style-type: none"> 1 Gas Consumption Test Failed in small,Medium and Big burner in ON Position and Big Failed in SIM Position. (Note : same as Existing Gas Consumption) 2 Front <u>area no</u> Clearance from the ground level this is leads to easily hit the ground when the load kept on the gas stove 3 In Assembly Condition , Front Side frame and Revolving nozzle not in straight position 4 Gas stove top sheet sharp edges observed 5 In Big burner , Mixing tube leg uneven flatness observed. <p>Note : Refer the PPT for your Reference.</p>						
 Tested By:		 Verified By (QA Manager):		 Approved By(QA DGM):		

Gas Consumption Test Report

Model Name : Vogue Tusker 3B SS	CM/L : 6700000198	Test Method / Clause : IS 4246 : 2002 / Clause : 17
ID Number : 61	Test Date : 20/07/2024	Room Temperature in °C : 26

Formula :

$$\text{Correction Factor} = \frac{(\text{Barometric Height} + 22.06 - \text{WVP At Gas Flow Meter Temp})(273+27)}{760 \times (273 + \text{Gas Flow Meter Temp})} \times 0.75$$

$$\text{Gas Consumption} = \frac{\text{Volume(Litres)} \times 60(\text{Hours}) \times 60(\text{Seconds}) \times \text{Correction Factor}}{\text{Time taken in Seconds}} \text{ L/hr}$$

Burner	Rating	ON ± 8%		SIM	
		Min.	Max.	Spec.	Max.
Small	58 L/hr	53.36	62.64	40% (23.2) or 22L/hr	22 L/hr
Medium	77 L/hr	70.84	83.16	30% (23.1) or 24L/hr	24 L/hr
Big	90 L/hr	82.8	97.2	30%(27) or 28L/hr	28 L/hr

Calculation:

Barometric Height (mmhg) = 749.9
 Gas Flow Meter Temperature (°C) = 26.1
 Water Vapour Pressure (mm Hg) = 25.2

GFM Capacity in Litre = 3
 GFM Revolution = 2
 Gas Consumption = 15965.67598
 Corrective Factor = 0.739151666

Corrective Factor = $\frac{168021}{227316}$

Burner	Position	Time Taken in Sec	G.C. in L/hr	Result	Remarks:
Small (CENTER)	ON	160.23	49.82	Unsatisfactory	In Big 90 jet -0.80mm drill used.
	SIM	398.63	20.03	Satisfactory	
Medium (RHS)	ON	119.45	66.83	Unsatisfactory	
	SIM	373.71	21.36	Satisfactory	
Big (LHS)	ON	98.28	81.23	Unsatisfactory	
	SIM	262.16	30.45	Unsatisfactory	
	Full ON +5%-15%	40.57	196.79	Satisfactory	

V. Anandh
Tested By

S. Srinivasan
25/07/24
Verified By

S. Srinivasan
25/07/24
Approved By

Vidiam MAYA APPLIANCES		Thermal Efficiency Test Report	
Test Method : IS 4246 : 2002		CM/L : 6700000198	
Model Name : Vogue Silver 3B		Clause : 26	
Description : New Design Gas stove 3B SS		Date : 18/07/2024	
Formula :	$E = \frac{100(G+W)(T_2-T_1)}{MK}$	Spec : Should be above 68%	
E = Thermal efficiency of the burner in percent		M = Gas consumption in kg (M=M1-M2)	
G = Quantity of water in the vessel in kg		M1 = Initial weight of cylinder in kg	
T1 = Initial temperature of water in °C		M2 = Final weight of the cylinder in kg	
T2 = Final temperature of water in °C		K = Calorific value of the gas in (kcal/kg 10900)	
W = Water equivalent of the vessel complete with stirrer and lid		Specific heat of aluminium is 0.214	
Burner: Small			
Jet Rate:	58	Burner To Pansupport Height in mm :	15.94-15.97
T1 :	28	Room Temperature °C :	26.5
T2 :	90.5	Time Duration in min. :	16.5
M1 :	3.7397	Weight of Vessel+Stirrer+Lid in Kg :	0.531
M2 :	3.7080	Gas Consumption in L/hr :	-
W :	0.113634	Calorific value K :	10900
G :	3.7	Specific Heat Of Aluminium :	0.214
		$= \frac{23835.2125}{345.53}$	
Thermal efficiency = 68.98			
Burner: Medium			
Jet Rate:	77	Burner To Pansupport Height in mm :	15.07-15.10
T1 :	27.7	Room Temperature °C :	26.6
T2 :	90.5	Time Duration in min. :	21.55
M1 :	3.7911	Weight of Vessel+Stirrer+Lid in Kg :	0.717
M2 :	3.7397	Gas Consumption in L/hr :	-
W :	0.153438	Calorific value K :	10900
G :	6.1	Specific Heat Of Aluminium :	0.214
		$= \frac{39271.59064}{560.26}$	
Thermal efficiency = 70.10			
Burner: Big			
Jet Rate:	90 (0.80)	Burner To Pansupport Height in mm :	17.16-17.21
T1 :	28	Room Temperature °C :	26
T2 :	90.5	Time Duration in min. :	21.32
M1 :	3.7079	Weight of Vessel+Stirrer+Lid in Kg :	1.052
M2 :	3.6428	Gas Consumption in L/hr :	-
W :	0.225128	Calorific value K :	10900
G :	7.7	Specific Heat Of Aluminium :	0.214
		$= \frac{49532.05}{709.59}$	
Thermal efficiency = 69.80			
Burner: -			
Jet Rate:	-	Burner To Pansupport Height in mm :	-
T1 :	-	Room Temperature °C :	-
T2 :	-	Time Duration in min. :	-
M1 :	-	Weight of Vessel+Stirrer+Lid in Kg :	-
M2 :	-	Gas Consumption in L/hr :	-
W :	#VALUE!	Calorific value K :	10900
G :	-	Specific Heat Of Aluminium :	0.214
		$= \frac{\#VALUE!}{\#VALUE!}$	
Thermal efficiency = #VALUE!			
Remarks: In Thermal Efficiency, Small, Medium and Jumbo Burner met the standard - TEST PASS			
Prepared By:	<i>K. Dinush</i>	Verified By:	<i>S. B. 25/07/24</i>
		Approved By:	<i>S. B. 25/7/24</i>