



AUDION

Packaging Machines

Together we make the perfect package

Validatable Audionvac

Table models
Single chamber models
Double chamber models

Equipped with:
Audion Touch Techware
V7.05

Technical
Specification Sheet

Rev.00

Features of Validatable Audionvac:

- Complies to ISO 11607-2 validation requirements for sealing
- Critical process parameters to be controlled and monitored:
 - Vacuum / gas pressure
 - Seal temperature
 - Seal time
 - Seal pressure
- Equipped with accurate Audion Temperature Controller (ATC)
- Equipped with user friendly touchscreen interface (ADC)
- Automatic stop of cycle if one of the critical parameters has exceeded alarm limit
- Critical process parameters can be calibrated
- Seal data can be logged and exported to PC via USB stick
- Access level controllable by login passwords for different user levels
- Bi-active 8mm seal bars





General specifications	
Type of machine	Validatable vacuum chamber
Control system	Audion Touch Techware Equipped with Audion Temperature Controller (ATC) + 7 inch touchscreen (ADC)
Seal system	Bi-active seal, 8mm flat seal, impulse seal
Vacuum system	Busch R5 Oil-Lubricated Rotary Vane Vacuum Pump

Available models					
Type	Table models	Single chamber models		Double chamber models	
Chamber material	Stainless steel	Aluminium	Stainless steel	Aluminium	Stainless steel
Models	VMS 153 VB VMS 163 B	VM 203 VM 303	VMS 233 VMS 333	VM 243 VM 273	VMS 253 VMS 263 VMS 283 VMS 883 VMS 503
Power supply	230V – 1P – 50Hz	400V – 3P – 50Hz			
Pneumatic supply	0.3 MPa				

Options	
Gas flush	Gas can be injected inside bags before sealing
External exhaust	Vacuum pump exhaust is discharged outside of cleanroom through a hose
External pump	Vacuum pump is placed outside of cleanroom
User administration	Personal login ID, password, and user level assignment
Barcode scanner	Quick recipe change by scanning a barcode

Technical specifications		
Recipe	Storage	50 recipes
	Recipe backup (.bin file through USB stick)	Copy recipe to USB Load recipe from USB
Process parameters	Vacuum pressure Setting range Tolerance range	25 – 700 hPa 0.0 – 20.0 % (default 10.0%)
	Gas pressure (optional) Setting range Tolerance range	75 – 700 hPa 0.0 – 20.0 % (default 10.0%)
	Seal temperature Setting range Tolerance range	100 – 200 °C 0 – 20 °C (default 5 °C)
	Seal pressure Setting range Tolerance range	1200 – 1800 hPa 0 – 150 hPa (default 100 hPa)
	Seal time Setting range	0.8 – 10.0 sec.
	Cooling temperature Setting range	50 – 150 °C
Adjustable parameters	Fine tuning for calibration	Vacuum pressure Seal temperature Seal pressure
Validation functions	Parameter monitoring (alarm stop)	Vacuum/gas pressure Seal temperature Seal pressure Effective seal time Cooling time
	Data logging (.csv file through USB stick)	Machine ID Login level Recipe name Batch number Parameter settings Parameter tolerances Alarm limits Date/time Seal ID Parameters results Pass/fail Alarm code
System & functions	Login level	Operator Supervisor (password access) Administrator (password access)
	Language	English Netherlands German French Italian Japanese Czech
	Alarm history	Date/time Alarm code/descriptions
	Counter	Bag counter (resettable) Machine counter (non-resettable)

Table models		
Model		
	VMS 153 VB	VMS 163 B
Chamber material	Stainless steel	Stainless steel
Machine dimensions (WxDxH) - lid closed	494 x 490 x 795 mm	490 x 670 x 440 mm
Seal bar configuration	Upper side	Front
Effective chamber dimensions (WxDxH)	410 x 370 x 120 mm	410 x 460 x 120 mm
Seal length	410 mm	410 mm
Seal width	8 mm	8 mm
Vacuum pump	21 m3/h	21 m3/h



Single chamber models			
Model			
	VM 203	VM 303	
Chamber material	Aluminium	Aluminium	
Machine dimensions (WxDxH) - lid closed	680 x 700 x 1060 mm	900 x 820 x 1060 mm	
Seal bar configuration	Left / Right	Left / Right	Front / Rear
Seal length	510 mm	550 mm	790 mm
Effective chamber dimensions (WxDxH)	510 x 500 x 230 mm	550 x 710 x 240 mm	790 x 460 x 240 mm
Seal width	8 mm	8 mm	
Vacuum pump	63 m3/h	100 m3/h	

Single chamber models

Model			
	VMS 233	VMS 333	
Chamber material	Stainless steel		Stainless steel
Machine dimensions (WxDxH) - lid closed	700 x 730 x 1100 mm		920 x 825 x 1125 mm
Seal bar configuration	Left / Right	Left / Right	Front / Rear
Seal length	510 mm	550 mm	790 mm
Effective chamber dimensions (WxDxH)	510 x 500 x 200 mm	550 x 710 x 200 mm	790 x 460 x 200 mm
Seal width	8 mm		8 mm
Vacuum pump	63 m3/h		100 m3/h

Double chamber models

Model			
	VM 243	VM 273	
Chamber material	Aluminium		Aluminium
Machine dimensions (WxDxH) - lid closed	1060 x 900 x 1070 mm		1260 x 1010 x 1070 mm
Seal bar configuration	Front / Rear		Front / Rear
Seal length	440 mm		540 mm
Effective chamber dimensions (WxDxH)	440 x 580 x 230 mm		540 x 700 x 240 mm
Seal width	8 mm		8 mm
Vacuum pump	63 m3/h		100 m3/h

Double chamber models		
Model		
	VMS 253	VMS 263
Chamber material	Stainless steel	Stainless steel
Machine dimensions (WxDxH) - lid closed	1490 x 820 x 1100 mm	1490 x 920 x 1100 mm
Seal bar configuration	Front / Rear	Front / Rear
Seal length	610 mm	610 mm
Effective chamber dimensions (WxDxH)	610 x 400 x 220 mm	610 x 500 x 220 mm
Seal width	8 mm	8 mm
Vacuum pump	63 m3/h	100 m3/h

Double chamber models		
Model		
	VMS 283	VMS 883
Chamber material	Stainless steel	Stainless steel
Machine dimensions (WxDxH) - lid closed	1490 x 1220 x 1100 mm	1900 x 1295 x 1130 mm
Seal bar configuration	Front / Rear	Left / Right
Seal length	610 mm	830 mm
Effective chamber dimensions (WxDxH)	610 x 750 x 230 mm	830 x 530 x 230 mm
Seal width	8 mm	8 mm
Vacuum pump	160 m3/h	300 m3/h

Double chamber models		
Model	 <p>VMS 503</p>	
Chamber material	Stainless steel	
Machine dimensions (WxDxH) - lid closed	2420 x 1210 x 1160 mm	
Seal bar configuration	Front / Rear	Left / Right
Seal length	1090 mm	830 mm
Effective chamber dimensions (WxDxH)	1090 x 730 x 300 mm	830 x 1000 x 300 mm
Seal width	8 mm	
Vacuum pump	300 m3/h	

Accessories / Services	Codes	Descriptions
Parameter verification	ATM	Seal temperature verification set
	ASPM	Seal pressure verification set
	AVLM	Vacuum pressure verification set
Calibration	KAL VAC AE	Audion factory calibration
	KAL VAC	Calibration by an accredited laboratory
IQ/OQ Check	IQ/OQ VAL	1 x IQ check for 1 machine > Operation training (max. 4 persons) > Maintenance training (max. 4 persons) OQ check for 1 type of bag > Peel test for defining seal temperature > Peel test with defined seal temperature > Dye penetration test > Seal check
	OQC	Extra OQ check for each extra bag
Seal integrity test	SIT	Seal integrity test service > Peel test > Dye penetration test > Seal check
	APT 100	Peel tester
	ASC SHEET	Seal check sheet
	ASC ROLL	Seal check sheet in roll
	ASC INK-B	Blue ink for dye penetration test

Data logging file

AUDION ELEKTRO LOG FILE										
Machine ID:	ETO18108									
Username:	Operator									
Recipe:	TEST									
Batch:	ABC12345									
		Seal Time	Seal Temp	Seal Temp 2	Seal Pressure	Cool Temp	Cool Temp 2	Vac level1		
	Setpoint	5	180	180	1200	90	90	100		
	TOL	0.3	5	5	100	10	10	10		
	UAL	5.3	185	185	1300	100	100	110		
	LAL	4.7	175	175	1100			90		
Date&Time [YYYY-MM-DD hh:mm:ss]	Seal ID	Seal Time	Seal Temp	Seal Temp 2	Seal Pressure	Cool Temp	Cool Temp 2	Vac level1	Pass/Fail	Alarm Code
2019/9/18 14:09	1637	5	179.7	179.6	1201.6	89.5	89.6	99	Pass	
2019/9/18 14:09	1638	5	179.7	179.7	939.4	89	88.5	101	Fail	30
2019/9/18 14:10	1639	0	0	0	0	49.4	0	111	Stopped	
2019/9/18 14:10	1640	5	179.7	179.6	1201.3	89.3	88.9	100	Pass	

Measuring instruments for parameter verification

Seal temperature



ATM

- Measurement range: -50°C to 260°C
- Resolution: 0,1°C (up to 199,9°C) / 1 °C (above 200°C)
- Accuracy display unit: 0.3% of reading + 1°C
- Accuracy sensor: +/- 2,2 °C or +/- 0,3% of measurement (whichever is larger)
- Measuring rate: 2,5 per second
- Minimum and maximum values readable
- Operating conditions: +5 ... 50 °C, 30 – 70% RH (non-condensing)
- Power supply: 9V battery
- Battery life: +/- 100 hours
- Dimensions: 63 (W) x 186mm (L) x 40mm (D)
- Weight: 350 grams

Seal pressure



ASPM

- Measurement range: 0,0 – 199,9 / 200 – 1999 mbar
- Max. Overload: max. 4000 mbar
- Resolution: 0,1 mbar (0,0 – 199,9 mbar) / 1 mbar (200 – 1999 mbar)
- Accuracy (up to 200 mbar):
 - +/- 1% FS (hysteresis and linearity)
 - +/- 2% FS (temperature drift from 0 – 50 °C)
- Accuracy (up to 1999 mbar):
 - +/- 0,2% FS (hysteresis and linearity)
 - +/- 0,4% FS (temperature drift from 0 – 50 °C)
- Operating conditions: -25 ... +50 °C, 0 – 95% RH (non-condensing)
- Power supply: 9V battery
- Battery life: +/- 1200 hours
- Dimensions: 67mm (W) x 122mm (L) x 30mm (D)
- Weight: 135 grams

Vacuum pressure



AVLM

- Measurement range: 0 – 1300 mbar (absolute)
- Max. Overload: max. 4000 mbar (absolute)
- Resolution: 1 mbar
- Accuracy: +/- 0,2% FS (hysteresis and linearity)
 - +/- 0,4% FS (temperature depending)
- Operating condition: -20 ... +50 °C, 0 – 95% RH (non-condensing)
- Measuring rate: 4 per second
- Power supply: 9V battery type IEC 6F22
- Environmental protection: IP 65 (front side)
- Dimensions: 71mm (W) x 142mm (L) x 26mm (D)
- Weight: 165 grams