



AUDION

Packaging Machines

Together we make the perfect package

Validatable Audionvac

Table models
Single chamber models
Double chamber models

Equipped with:
Audion Touch Techware
V7.06

Technical
Specification Sheet

Rev.02

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 (Scanner : Honeywell Voyager 1400g) |
| Labeller | For printing tracing information on labels and apply on bags (Label printer : CAB MACH2) |



| 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 | 25 – 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 |
| 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 Chinese |
| | 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 | 550 mm | |
| Effective chamber dimensions (WxDxH) | 440 x 580 x 230 mm | 550 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