

An Unwavering Environment that Protects Cell.

In the fields of in vitro fertilization and research, each embryo and cell represents an irreplaceable future.

Even slight temperature fluctuations or the intrusion of outside air can affect that potential.

That is why what is required of a culture environment is “reliable stability” and “unwavering cleanliness.”

ASTEC’s VCI/VMI series has evolved by reflecting the voices from the field.

Uniform temperature distribution achieved through direct heating, precise gas concentration control via high-accuracy sensors, and the newly added glass inner door option — all work together to enhance the culture environment.

This inner door allows samples to be observed during culture while minimizing outside air inflow, and enables dry-heat sterilization without removal — bringing both peace of mind and efficiency to daily work.

Designed in response to requests from clinical sites in the Middle East, the VCI/VMI series was perfected through repeated prototyping and testing.

This dedication to staying close to the needs of practitioners is embodied in every function.

ASTEC quietly continues to support the future of cell, extending the hands of researchers and embryologists.

VCI/VMI series | Specification

	VCI-165P 120LE/230LE	VMI-165P 120LE/230LE
Exterior dimensions	620 mm x 740 mm x 850 mm/ 24.4 in. x 29.1 in. x 33.5 in. (W x D x H) (Projections not included)	620 mm x 740 mm x 850 mm/ 24.4 in. x 29.1 in. x 33.5 in. (W x D x H) (Projections not included)
Interior dimensions	W481 mm x D531 mm x H640 mm	W481 mm x D531 mm x H640 mm
Capacity	Approx. 163 L	Approx. 163 L
Outer facing	Electrogalvanized steel sheet (Baked powder coating)	Electrogalvanized steel sheet (Baked powder coating)
Inner facing	Stainless steel plate (SUS304, SUS430)	Stainless steel plate (SUS304, SUS430)
Shelf board	W455 mm x D468 mm x H23 mm 4 boards in the standard configuration (10 boards max.)	W455 mm x D468 mm x H23 mm 4 boards in the standard configuration (10 boards max.)
Access board	φ29 mm (Standard configuration)	φ29 mm (Standard configuration)
Temperature control method	Digital PID control	Digital PID control
Temperature control range	Room temperature plus 5°C to 50°C (0.1°C steps)	Room temperature plus 5°C to 50°C (0.1°C steps)
Temperature control accuracy	±0.1°C	±0.1°C
Temperature uniformity	±0.3°C	±0.3°C
Temperature control range for dry-heat sterilization	50°C to 160°C (1°C steps)	50°C to 160°C (1°C steps)
Temperature uniformity regarding dry-heat sterilization	±3°C	±3°C
Sterilization temperature setting time	0.1 to 10.0 hours	0.1 to 10.0 hours
CO2 sensor	NDIR sensor	NDIR sensor
CO2 concentration control range	0.0%~20.0%	0.0%~20.0%
CO2 concentration control accuracy	±0.1%	±0.1%
O2 sensor	-	Galvanic battery-type sensor
O2 concentration control range	-	2.0%~80.0%
O2 concentration control accuracy	-	±0.5%
Humidifying method, humidity	Natural evaporation method (Vat water filling), 95% ±4% RH	Natural evaporation method (Vat water filling), 95% ±4% RH
Safety devices	Over-temperature protection, over-temperature alarm, CO2 alarm, O2 alarm, other various alarms	Over-temperature protection, over-temperature alarm, CO2 alarm, O2 alarm, other various alarms
Product weight	90 kg	90 kg
Power supply	Single-phase 110-120V AC, 50/60 Hz, or Single-phase 220-240V AC 50/60 Hz, 7.5 A	Single-phase 110-120V AC, 50/60 Hz, or Single-phase 220-240V AC 50/60 Hz, 7.5 A
Power consumption	750 W(max.)	750 W(max.)
Power consumption (Watt-hour)	75 Wh (at room temperature 25°C, set temperature 37.0°C, stable operation)	75 Wh (at room temperature 25°C, set temperature 37.0°C, stable operation)
Working temperature range	10°C ~ 30°C	10°C ~ 30°C
Working humidity range	30% ~ 80%RH	30% ~ 80%RH
Storage temperature range	-20°C ~ 50°C	-20°C ~ 50°C
Storage humidity range	20% ~ 80%RH	20% ~ 80%RH
Options	Cell monitor Analogue output Alarm contact output Gas guard Door lock Cart Vertical joint bracket Dust collection filter	Cell monitor Analogue output Alarm contact output Gas guard Door lock Cart Vertical joint bracket Dust collection filter



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Direct Heat Incubator VCI/VMI series



01 Culture Stability

An Unwavering Environment that Protects Cell

To minimize fluctuations in the culture environment, the VCI/VMI series achieves advanced gas control and uniform temperature distribution.

CO₂ and O₂ concentrations are automatically regulated by high-precision sensors, reducing stress on embryos and cells. A design philosophy that limits the influence of outside air makes stable cultivation possible.

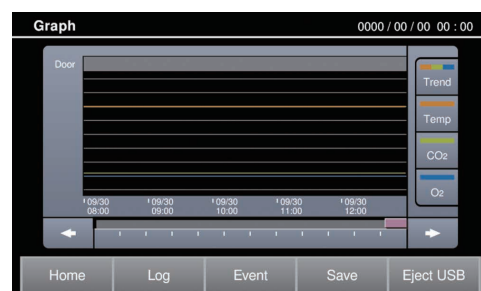
Gas control with high-precision sensors

CO₂/O₂



Uniform temperature distribution

direct heating control method



Design to minimize fluctuations in the culture environment



02 Cleanliness & Sterilization Efficiency

Enhancing Cleanliness, Providing Peace of Mind

The internal chamber is made of highly corrosion-resistant stainless steel.

Its tool-free removable parts make daily cleaning and maintenance simple and efficient.

Equipped with a dry-heat sterilization function, it allows effective sterilization without removing the door.

This ensures a high level of cleanliness required in laboratories and significantly reduces the risk of contamination.

Stainless steel chamber structure

easy to clean, corrosion-resistant



Tool-free removable internal parts



Dry-heat sterilization function



03 User-Centered Design & Usability

Turning Feedback from the Field into Reality

The VCI/VMI series is designed to incorporate feedback from actual clinical environments.

Features include a rear access port for flexible equipment connections, stacking capability for multiple units, and a dedicated cart for easy relocation.

Additionally, a choice of inner door types allows optimal operation tailored to the laboratory environment.

This user-centered design philosophy enhances daily workflow efficiency.

OPTION

We offer small glass door options to meet your specific needs.

Available with a full glass inner main door or stainless steel, with multiple levels featuring Three Separated Access Windows or Glass Multi-Small Windows.

The inner chamber corners are ergonomically rounded to make setup and cleaning a speedy process. The version with Glass Multi-Small Windows are designed to allow for smooth and easy insertion of a humidification tray at the very bottom.

