









DANVEC Development and Manufacturing 8 Boon Lay Way #04-08 TradeHub 21 Singapore 609964 Tel: 6897 0626 support@danvec.com

DANVEC Sales
25 International Business Park
#04-103J German Centre
Singapore 609916
Tel: 6569 9062
sales@danvec.com





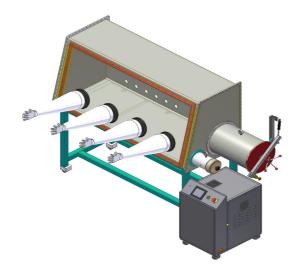




# CONTROLLED ATMOSPHERE GLOVEBOX

# **VORTEX-I**

A complete controlled atmosphere glovebox system for your standard process.



A highly durable and sophisticated process tool providing a controlled atmosphere for numerous applications.

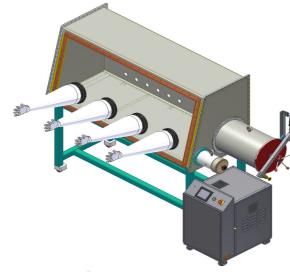
The closed loop circulation and purification system sustains ultra-low oxygen and moisture levels below 1PPM.

Features:

Stainless Steel work chamber **PLC Control** Large and small Antechambers Vacuum system Automatic regeneration system Closed loop circulation system Stainless steel piping Integrated high vacuum feedthroughs

## **VORTEX-PRO**

A complete controlled atmosphere glovebox system for more highly sophisticated processes.



The Vortex-Pro takes the standard controlled environment system to the next level. A highly durable and sophisticated process tool providing a controlled atmosphere for numerous applications.

The single or dual column closed loop circulation and purification system sustains ultra-low oxygen and moisture levels below 1PPM.

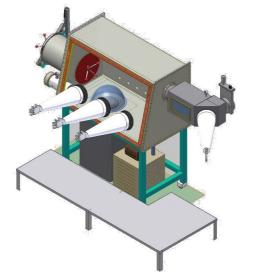
Numerous control and automation options for highly efficient process output.

Features:

Stainless Steel work chamber PLC or PC Control Large and small Antechambers Vacuum system Automatic regeneration system Variable Speed Closed loop circulation system Stainless steel piping Integrated high vacuum feedthroughs Advanced circulation and purification options

# **VORTEX- PRIME**

When a single system is not enough the Vortex Prime provides a complete process solution.



A highly durable and sophisticated process tool providing a controlled atmosphere for numerous applications.

The single or dual column closed loop circulation and purification system sustains ultra-low oxygen and moisture levels below 1PPM.

With numerous control, automation and integration options- the Vortex Prime provides a complete turnkey process solution.

### Features:

Stainless Steel work chamber PLC or PC Control Large and small Antechambers Vacuum system Automatic regeneration system Variable Speed Closed loop circulation system Stainless steel piping Integrated high vacuum feedthroughs Interfacing with multiple process tools Advanced circulation and purification options





# CONTROLLED ATMOSPHERE GLOVEBOX

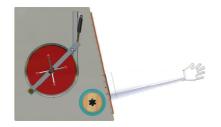
		Vortex-I	Vortex Pro	Vortex Prime
	Material	SS 1.4301 (304)	SS 1.4301 (304)	SS 1.4301 (304)
Main Chamber	Feedthrough	NW40 Feedthroughs	NW40/NW25 Feedthroughs	Various Sized Feedthroughs
	Particle Filter	Class H13 HEPA Filter (inlet and outlet)	Class H13 HEPA Filter (inlet and outlet)	Class H13 HEPA Filter (inlet and outlet)
	Windows	Polycarbonate	Polycarbonate/Glass	Polycarbonate/Glass
	Gloves	Butyl or Hypalon (various sizes)	Butyl or Hypalon (various sizes)	Butyl or Hypalon (various sizes)
	Glove Port	220mm (circular/oval)	220mm (circular/oval) or special size	220mm (circular/oval) or special size
	Box Lighting	Fluorescent Lamp (front mounted)	Fluorescent Lamp (front mounted or internal)	Fluorescent Lamp (front mounted or internal)
	Leak Rate	< 0.05 vol%h Class 1 (ISO 10648-2)	< 0.05 vol%h Class 1 (ISO 10648-2)	< 0.05 vol%h Class 1 (ISO 10648-2)
	Modular System	No	Yes	Yes
	Purifier Column	Single	Single/Multiple	Single/Multiple
Gas Purification	Regeneration	Automatic Regen and Start up	Automatic Regen and Start up	Automatic Regen and Start up
	Capacity	30L O2 Removal	30L – 200L O2 Removal	30L – 200L O2 Removal
		1350g H2O Removal	1350g – 3000g H2O Removal	1350g – 3000g H2O Removal
	Blower	Single Speed	Variable Speed	Variable Speed
		55 m3/h at ΔP= 60 mbar	85 m3/h at ΔP= 60 mbar	85 m3/h at ΔP= 60 mbar
	Attainable Purity	O2 < 1ppm; H2O < 1ppm	SS 1.4301 (304)	SS 1.4301 (304)
	Vacuum Pump	10 cfm Rotary/Dry Pump	10 cfm Rotary/Dry Pump	10 cfm Rotary/Dry Pump or larger
	Piping	SS 1.4301 (304)	SS 1.4301 (304)	SS 1.4301 (304)
	Valves	Electro-Pneumatic	Electro-Pneumatic	Electro-Pneumatic
	Electrical	230 V/50-60 Hz, 10 A	230 V/50-60 Hz, 10 A	230 V/50-60 Hz, 10 A
		115 V / 50-60 Hz, 20 A	115 V / 50-60 Hz, 20 A	115 V / 50-60 Hz, 20 A
		100 V/ 50-60 Hz, 20 A	100 V/ 50-60 Hz, 20 A	100 V/ 50-60 Hz, 20 A
Control & Interface	Controller	Programmable Logic Controller	Programmable Logic Controller or PC	Programmable Logic Controller or PC
	Interface	Touchscreen	Touchscreen or Keypad + LCD	Touchscreen or Keypad + LCD
	Box Pressure Control	Auto pressure control- includes	Auto pressure control- includes	Auto pressure control- includes
		foot switch	foot switch	foot switch
		(+15mBar, -15mBar)	(+15mBar, -15mBar)	(+15mBar, -15mBar)
	Trending Data	Optional	Yes	Yes
Large Antechamber	Туре	Cylindrical with Sliding Tray	Cylindrical with Sliding Tray	Cylindrical/Rectangular with Sliding Tray
	Size	390mm x 600mm	390mm x 600mm	390mm x 600mm (or other size)
	Door	Aluminium	Aluminium	Aluminium/SS
	Vacuum System	Manual	Manual/Automatic	Manual/Automatic
	Leak Rate	< 10 <sup>-5</sup> mbar l/s Class 1	< 10 <sup>-5</sup> mbar l/s Class 1	< 10 <sup>-5</sup> mbar l/s Class 1



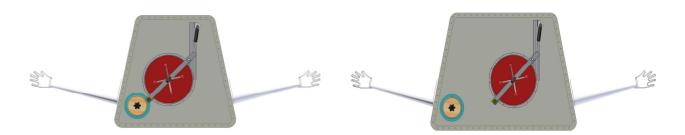


# CONTROLLED ATMOSPHERE GLOVEBOX

### **GLOVEBOX – STANDARD CHAMBER SIZES**



2 Glove Port Single Sided System 1250(L) x 800(W) x 960(H)



4 Glove Port Double Sided System 1250(L) x 1000(W) x 960(H) 4 Glove Port Double Sided System 1250(L) x 1200(W) x 960(H)



3 Glove Port Single Sided System 1500(L) x 800(W) x 960(H) 6 Glove Port Double Sided System 1500(L) x 1000(W) x 960(H) 6 Glove Port Double Sided System 1500(L) x 1200(W) x 960(H)



4 Glove Port Single Sided System 1800(L) x 800(W) x 960(H) 8 Glove Port Double Sided System 1800(L) x 1000(W) x 960(H) 8 Glove Port Double Sided System 1800(L) x 1200(W) x 960(H)

# **GLOVEBOX CONFIGURATIONS**

