

HVHA RH-N95 COMPARISON WITH VHP AND ULTRAVIOLET N95 RESPERATOR MASK DECONTAMINATION

FEATURE	HVHA RH-N95	VHP Sterilizer	Ultraviolet
Device Type	Tabletop	Stand-Up Cabinet	Conveyor Style Or UVGI Room
Chamber Size (W x H x L)	11" x 12" x 18"	17" x 15" x 33"	24" X 60" X 72"
Cycle Temperature	162° F.	122°F.	104°F.
Cycle Time	30 minutes	30 minutes	60 minutes
Cycle Capacity	48 Masks	10 Masks	500 Masks
O&M Cost/Cycle	\$6.00	\$35.00	\$150.00
Capital Cost	≤\$10,000	≥\$75,000	≥\$25,000
Treatment Cost/Mask	\$0.125	\$3.50	\$0.30
Mask Compatibility	All Masks	Non-Cellulose Masks	All Masks
Safety Risks	None	Can ignite organic Matl	Can harm skin/eyes

Notes/Assumptions:

- 1) Data is derived from internet research and actual documentation.
- 2) UV O&M costs includes annual lamp replacement for LP and LPHO lamps, semiannual replacement of MP lamps, quarterly calibration of sensors, spare parts, cleaning chemicals, monthly cleaning for systems without automatic cleaning. O&M costs varied significantly by as much as ten-fold + labor mask set-up and removal = 60 min.
- 3) RH-N95 O&M = Labor – 10 min. x \$.54/min = \$5.40 + \$.66 energy/mnt. = \$6.00/cycle
- 4) VHP (vaporized hydrogen peroxide) O&M costs include required pouches, prep labor, energy, germicidal chemical, and periodic maintenance.