

Scaled-down Requirements for Ventilators

Scaled down modes and parameters we would be looking for are:

1. Ventilation modes:

CMV (Continuous Mechanical Ventilation) with both Pressure/Volume Control (will consider if only one option of control available)

SIMV (Synchronized Intermittent Mechanical Ventilation) (optional)

PS (Pressure Support)

2. Parameters:

FiO₂: 21-100%

PEEP: 0-30 cmH₂O

Flowrates: 0-100 lpm

Tidal Volume: 50-1500 mls (can be scaled back to 1000) as patients VT are based on 4-8 mls/kg

Resp Rate: 4-45 bpm

I:E Ratio range: 1:1-1:4

3. Alarm settings (audible & visual):

High/Low Peak Pressure

High/Low VT (optional)

High/Low Minute Ventilation

High/Low RR (optional)

High/Low FiO₂

High/Low PEEP

Apnea Alarm with a backup rate and tidal volume

Disconnection Alarm

4. Extra considerations:

Safety relief valve

Plateau pressure readings

Ability to use multiple types and sizes of vent circuits on it.