

1) Double- End Pressure-Flow?

RENDER: Through the pressure sensor which will offers the Flow-Time wave drawing during machine's working.

2) Tidal Volume?

RENDER: It is the volume for inspiration.

3) Minute Volume?

RENDER: Minute Volume = Frequency x Tidal volume

4) Suffocation?

RENDER: Which means if it occurs any problem on the respiration pipe for example like sputum, the machine will gives alarm.

5) Closed System?

RENDER: Which means the anesthesia air was running inside the machine, nearly no exhaust.

Under such condition, adjust Rotameter to keep O<sub>2</sub> < 1 L.

6) Semi-closed system?

RENDER: Which means the anesthesia air was running inside the machine, it can exhaust anesthesia air, but not empty. Under such condition, adjust Rotameter to keep O<sub>2</sub> < 2 L.

7) Semi-open system?

RENDER: Which means the anesthesia air was running inside the machine, it can exhaust anesthesia air, but not empty. Under such condition, adjust Rotameter to keep O<sub>2</sub> < 4 L.

8) Airway Pressure?

RENDER: It means the resistance of human beings in the respiratory system.

9) Apnea?

RENDER: it is the same as above 4) Suffocation. Which means if it occurs any problem on the respiration pipe for example like sputum, the machine will gives alarm.

10) Power Outages?

RENDER: It means no AC power supply.

11) Vaporizer?

RENDER: It is a container for agents like enflurane, isoflurane, halothane etc.

Below sentence for your study reference:

"The order of preference of inhalant anesthetics for euthanasia is halothane, enflurane, isoflurane, sevoflurane, methoxyflurane, and desflurane, with or without nitrous oxide."  
"

12) Enflurane?

RENDER: A kind of euthanasia, see explanation in 11).

13) Isoflurane?

RENDER: A kind of euthanasia, see explanation in 11).

14)Oxygen Flush?

RENDER: Purge of oxygen, to offer a certain volume oxygen within a short time, for one thing to keep bellows smoothly working, for another to supply oxygen to test lung during Manual operation.

15)Pneumatically driven?

RENDER: It is a kind of working theory, for anesthesia machine there are 2 driven, one is Pneumatically, another is electricity, Pneumatically means the driven was given by gas;

16)I/E-Ratio?

RENDER: It is the time rate between inspiration and expiration.

17)Peak Airway Pressure?

RENDER: It means the max airway pressure, this data can be set by machine, once the machine detect that the pressure from body greater than this data, it gives alarm;

18)IPPV?

RENDER: It is a kind of respiration mode, the full name of IPPV is Intermittent positive pressure ventilation, no matter the patient can breath by himself or not, the machine will offers respiration strictly according to frequency, I/E ratio, Tidal Volume setting by doctor .

19)SIGH?

RENDER: It is a kind of respiration mode, SIGH means the machine will offers respiration according to the frequency, I/E ratio, Tidal Volume setting by doctor, and for every each 60 times, it offers 1 time deep respiration, the tidal volume of deep respiration is around 1.5 times of that tidal volume setting by doctor.

20)SIMV/F/2?

RENDER: It is a kind of respiration mode. for example we set the machine's frequency at: 20 times/min, if machine detect that the patient doesn't have his own breath, the machine will provide respiration at 10 times/min to the patient; if patient has his own breath – very weak, the machine will check at its last 1/4 times which is 1.5 seconds to see whether the patient indeed has own breath or not, if confirm patient has his own breath, the machine will offer the same frequency as patient's or otherwise provide respiration at 10 times/min to patient.

21)PEEP?

RENDER: PEEP: Positive end-expiratory pressure, it assures after 1 time breath, it exists a certain residual volume inside patient's lung, to keep pneumonocyte under inflation condition.

22)SIPPV?

RENDER: This is the preferred default mode in NICU.

60 ventilator breaths are delivered - synchronised with the patient's breath. If the patient is breathing faster than 60 bpm, only 60 ventilator breaths are delivered and any additional breaths are not assisted. The  $T_i$  is 0.35 seconds. If the patient is not breathing, breaths will usually be delivered 1 second apart. If the patient takes less

than 60 breaths per minute, the ventilator will synchronise all the breaths, plus deliver some untriggered breaths.

23) Linkage of O<sub>2</sub>??

RENDER: When you increase N<sub>2</sub>O by its rotameter, the O<sub>2</sub> rotameter will increase accordingly, to protect patient's safety during the mis-operation of N<sub>2</sub>O.

24) Keep oxygen concentration above 25 %? From what 25 percent???

RENDER: When you increase N<sub>2</sub>O by its rotameter to its Max. data, the O<sub>2</sub> rotameter will increase accordingly, at last, the O<sub>2</sub> percent of mixed gas (O<sub>2</sub>+N<sub>2</sub>O) will be no less than 25%, it can protect patient's safety during the mis-operation of N<sub>2</sub>O.

25) Orderliness Respiratory Loop?

RENDER: It is a drawing displayed in the screen for each time inspiration and expiration. Under Auto operation, it can only display 1 time by 1 time; under Manual operation, it displayed every each time respiration.

26) Scope of concentration regulation?? 0,2-5% Vol??

RENDER: It should be the accuracy of euthanasia.

27) Automatic compensation of flow?

RENDER: To protect leakage, and assure the O<sub>2</sub> percent of machine's internal respiration.

28) Selflock?

RENDER: for Vaporizer, if you use one vaporizer, another can not be used to avoid mix of euthanasia.

29) Interlock?

RENDER: the same as Selflock.

RENDER TEAM

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For any question or doubt please keep us informed:

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