

Supplementary Materials

WFSA Performance Standard for Anaesthetic Equipment for Low and Low-Middle income (LMIC) Countries. (9)

Electrical supply

1. The equipment must function normally in spite of mains fluctuations of 15% above or 20% below nominal mains rating.
2. The equipment must remain safe and usable in face of a complete power outage of at least 90 minutes

Oxygen supply

1. Where a cylinder or pipeline system is in use, the equipment must detect and signal impending failure, using a system not dependent on mains electricity.
2. When the oxygen supply fails, it must be possible to continue a safe anaesthetic, including IPPV.
3. Must be able to supply room air to the patient in the event of failure of compressed gas supply
4. If any gases other than oxygen and are supplied, there must be a monitor of inspired oxygen.
5. There must be the means of supplying high oxygen flows (flush) in emergency
6. It must be possible to ventilate the lungs manually; if a mechanical lung ventilator is fitted, it must have disconnect and high pressure alarms.

Physical environment

1. The equipment must function normally between temperatures of 10 and 45 degrees Celsius, and RH of 0-100%

Maintenance, Repairs and Instructions

1. Local maintenance by hospital technicians is the norm.
2. A clear set of instructions must be provided, in the language of the country concerned.
3. A manual of routine service operations and trouble-shooting must similarly be provided.
4. The manufacturer will provide an email address, and a Skype address, from which technical advice can be obtained.
5. If any repairs during the guarantee period are required, and part or all of the equipment has to be returned to the country of origin for such repairs, the manufacturer will bear the cost of shipping in both directions.