RIGEL MEDICAL
GMC-INSTRUMENTS GROUP

Why test infusion pumps?

Infusion devices are used extensively in clinical conditions and patients' homes providing perioperative care, critical care and pain management. It is estimated that 80% of hospitalised patients receive intravenous (IV) therapy. Therefore, it is essential that the infusion of fluids to a patient is in an accurate predetermined and consistent manner. There is a variety of infusion device methods which provide the ability to feed, hydrate, medicate or replace blood loss to a patient.

Millions of infusion devices are safely used in hospitals and in the community every year. Incidents with infusion devices continue to dominate adverse incident reports with at least 1000 incidents investigated by the MHRA between 2005 and 2010 in the UK alone. The majority of problems relate to over-infusion of drugs, either due to user error with dosage and patient data, product design and engineering or software malfunction. However, genuine infusion pump malfunctions rarely occur, except when a pump has been mishandled, dropped or damaged.

Infusion devices must be capable of delivering infusions at pressures between 100 and 750mmHg (2 to 15PSI) to overcome any internal or external resistance to the flow of fluid. Resistance arises due to filters, anti-siphon and anti-reflux valves, administration set, in particular the cannula, the internal diameter, potential kinking of tubing, sticky (viscous) solutions and syringe/cassette stiction can accumulate the pressure. The patient's venous system contains pressure and therefore the IV infusion device must be proven to be compatible with pressures found in the body.

If you require more help, please contact us at
https://www.seaward.com/gb/enquiry/

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