

# **MATERIALS REQUEST DETAILS**

## **BEDSIDE MACHINES**

### **INTENSIVE CARE BEDS**

- Electric bed,
- Rechargeable battery
- 4 twin wheels, antistatic and lockable
- positions: trendelenburg, anti-trendelenburg, cardiology chair,
- electrically and mechanically achievement of PCR emergency position
- variable height, between about 40 and 80 cm at least
- extendable length
- removable headboard and footboard without sharp edges
- integrated bathroom scale
- safe working load over 220 kg
- the whole structure must have smooth, easily sanitized and resistant to corrosive agents
- Large radiolucent area for RX exams
- control panel and keyboard easily sanitized and impact resistant
- safety and alarm devices
- oxygen cylinder housing
- Support for urine bag and drainage
- Anti-decubitus mattress
- preferably compliant with the Italian medical devices legislation in force in Italy applied to medical devices.
- Supply: 220 V, 50 Hz

## **SYRINGE PUMPS**

- Programmable drug protocols
- Dose calculation based on dosages, patient weight and time
- Bolus function
- It may work with different types and brands of syringes
- 12 V low voltage power supply with external transformer
- Rechargeable battery with an autonomy of approximately 8h at 25 ml/h
- electronic state of charge and cyclers (automatic)
- Large and bright display for easy reading of all parameters and any alarms
- Alarms
- Stackable
- Rack
- preferably compliant with the Italian medical devices legislation in force in Italy applied to medical devices.
- Supply: 220 V, 50 Hz
- IEC 60601-1 class;
- protected against dripping IP 22

## **MONITOR**

- Minimum size 12"
- Required signals: ECG 3/5 leads, SpO2, EtCo2 mainstream, minimum 2 Invasive pressures, NIBP;
- Visual and audible alarms,
- complete with all the necessary cables and sensors,
- preferably compliant with the Italian medical devices legislation in force in Italy applied to medical devices.
- Supply: 220 V, 50 Hz

## **PULMONARY VENTILATOR**

- High performance Intensive Care pulmonary ventilator for ventilation on adults and children in invasive and non-invasive mode
- Types of ventilation required: IPPV, assisted IPPV, BIPAP and BI VENT, Autoflow or Automode, IRV (inverted ratio ventilation), PCV-MMV ASB or PA CPAP,
- Apnea ventilation on all respiratory methods.
- Non-invasive ventilation with loss compensation
- parameters required: Expiratory minute volume, Spontaneous minute volume, Expirated tidal volume, Peak pressure, Plateau pressure, Average pressure, Minimum pressure, Fraction inspired by O<sub>2</sub>, EtCO<sub>2</sub>, Compliance, Resistance, Autopeep, Total respiratory rate, spontaneous respiratory rate.
- Flow trigger on all ventilations.
- Functions required: inspiratory pause block (e.g. for expanding radiographs); expiratory pause block (e.g. for reading max. depression); bronchoscopy
- screen for viewing pressure, volume flow curves and capnogram
- A series of operator help messages is also required on display data setting.
- Screen of at least 10 " and capable of displaying the type of ventilation in use
- For patient safety, different levels of alarm must be present, both optically that acoustic (adjustable in intensity).
- Alarms required for the following parameters: Minute volume exp./FiO<sub>2</sub>/Network/Gas supply / pressure min. and max of the airways; patient disconnection
- Additional expiratory circuit in addition to the one supplied to avoid technical shutdown the ventilator (for patient change or accidental breakage)
- Loops and trends recording
- RS 232 connection
- Humidifier
- tube holding arm
- dedicated trolley
- internal or added medication nebulizer
- supply: 220V, 50 Hz

# **INFUSION PUMPS**

## **Technical features**

- Volumetric or peristaltic operation
- Infusing from bag, bottle
- program for succession drug infusion
- Availability of a wide range of special infusion sets (for blood, for photosensitive drugs, for oncological drugs, with / without injection point)
- wide setting range (from 1 to 999 ml / h)
- Total infusion volume settable between 1 - 9999 ml
- Large and bright display for easy reading of all parameters and any alarms
- Accuracy  $\pm 5\%$
- Alarms for Occlusion, End of infusion, Low battery, Air on line
- Rechargeable battery (autonomy for at least 3 h with an infusion rate of 125 ml / h)
- preferably compliant with the Italian medical devices legislation in force in Italy applied to medical devices.
- Supply: 220 V, 50 Hz
- IEC 60601-1 class;

## **Infusion sets for volumetric infusion characteristics**

- EVA or PVC latex free material
- Distal luer lock fitting
- Transparent, non-rigid drip chamber
- Length  $\geq 2$  meters
- anti-free-flow device