No. IV-21011/45/2009-Prov-I
Government of India
Ministry of Home Affairs

P.B.No-5/07

26, Man Singh Road, Jaisalmer House,
New Delhi, 29.7.2010

To, 11/04 11/02 5/08 5/07
The DGs:Assam Rifles/BSF/CISF/CRPF/ITBP/NSG/SSB/BPR&D

Subject:-Specifications of various Medical/Hospital Equipments,Laboratory equipments and Laundry equipments -regarding

Sir,

The Specifications for the following Medical/Hospital Equipments, Laboratory equipments and Laundry equipments have been accepted and approved by the Competent Authority in MHA and the same are enclosed for information and Record:-

1. Condom Vending Machine- Annex-I
2. Flowcytometer- Annex-II

3. **Laboratory Equipments**

a) Coagulatation Analyzer- Annex-III
b) Glycosylated Haemoglobin/Micro Albumin/CRP/D-Dimmer Analyzer-IV
c) Urine Analyzer – Annex-V
d) Semen Quality Analyzer- Annex-VI
e) Auto Pipette System- Annex-VII
f) Anaesthesia Work Station- Annex-VIII

4) **Laundry equipments**- Annex-IX

a) Washing Machine
b) Drier Washing Machine- 30 Kg (Moderate size)
c) Heavy Electric Press(Hand Operated)
d) Hydro Extractor
e) Table for pressing hospital linen
g) Sluice machine
h) Laundry Trolley
i) Bulk sterilizer electric for sterilizing linen and mattresses

2. Henceforth, all the CPMFs should procure the above items required by them strictly as per the laid down Specifications.

Yours faithfully,

(S.B.Nanda)
Under Secretary to the Govt. of India

Encls: as above

Copy to:-DD(Procurement),MHA

Copy for information to:-PS to JS(PM),MHA

Appendix-VIII

TECHNICAL SPECIFICATIONS OF ANAESTHESIA WORK STATION

1.	Integrated Anaesthesia work station for advanced surgical setup comprising of anesthesia delivery system with compact rebreathing system, Two agent specific vaporizers and ICU quality ventilator for adult and children with advanced modes like PVC, PSV & SIMV etc.
2.	Ergonomic design with coloured graphic user interface, and date port with oxygen, gas flow and ventilator information available in electronic form
3.	Anaesthesia machine Unit should have primary connection for central gas supply with pressure gauzes indicating inlet line pressure of all three gases i.e. Air, Oxygen and Nitrous Oxide. As a backup machine should also have provision for connecting oxygen and nitrous oxide pin index cylinders
4.	Machine should have electronic fresh gas control/monitoring of flows, audio visual alarms for failure of oxygen
5.	Control of minimum of 21% of oxygen in fresh gas up to Flow>1 litre /minute and at least 250 ml of oxygen concentration for minimal flow application (fresh gas flow< 1L/min) No basal flow
6.	Integrated oxygen flush with self returning valve
7.	Machine should also have an independent fresh gas outlet for connection to Bain's or Magill's circuit
8.	Fresh gas flow setting from 50 ml / min to 12 Ltr /min
9.	Breathing System Compact breathing system suitable for minimal flow anaesthesia with least patient circuit volume including absorber etc approx 3 L (excluding bag) for fast response to change in fresh gas composition
10.	Fresh gas decoupled/compensated breathing system for adult and children with possibilities to mount the breathing system on left or right side
11.	APL valve with direct setting of release pressure
12.	Integrated ventilator • Ventilator suitable for adult and children without changing of bellow automatic breathing circuit Compliance correction • Spontaneous breathing • Manual Ventilation • IPPV with plateau adjustment from 0 to 50% of Ti • PLV with decelerating flow • Pressure controlled ventilation PCV • Pressure support and SIMV • High peak inspiratory flow up to 70 LPM • Tidal volume adjustment range 20 ml to 1400 ml • PEEP from 0 to 20 mbar electronically adjustable • Resp frequency from 6 to 60 per minute • 1:E from 1:4 to 4:1

13.	Single step changeover of mode. Ventilator should have standard PVO (airway pressures, volume and oxygen) monitoring. Easy to start with auto set alarms and a central colour graphic display for settings and monitored values
14.	Vaporizers Temperature/pressure compensated and flow independent halothane and Isoflurance vaporizers, vaporizers should have extended delivery range from 0-6 vol %. Vaporizer should have transport lock to provide hermetic sealing of agent chamber during transport and storage
15.	The vaporizer designed should be maintenance free. Should not require periodic overhaul etc. As per manufacture recommendation.
16.	Scope of Supply Three gas anesthesia workstation Trolley with 3 drawers and locking Full length side GCX rails for mounting of accessories Yokes-2 X oxygen & 1 X N 20, besides central supply connections Integrated ventilator and semi-closed breathing system. Two agent specific vaporizers for halothane and Isoflourance.. Reusable Adult and Paediatric patient tubings- 5 Adult and 5 Paed with each machine.(optional) Central gas supply hoses.
17.	Anaesthesia & patient Monitor Atleast 8 channel monitor with minimum 15 inch color (active matrix display) screen. Suitable for adult paed & neonatal patient
18.	Graphic &Tabular trends for 24 HRS Arrythmia detection and alarm 3 lead ST segment analysis Drug dose calculation OXYCRG Network capability
19.	Accessories for adult and paediatric including all sensors- ECG 5 lead set- 2 NIBP cuff- 4 sizes- 5 sets with each machine SpO2 sensor- Adult and Paed- 3 sets with each machines Temp sensor- skin and rectal –sets with each machine IBP should be without transducer Suitable mount for mounting the monitor on anaesthesia machine A gases module for anaesthetic agents and N20 (with auto agent identification) including Capnography BIS Module
20.	Warranty 5 years (optional)

Presiding officer

(Dr. N.K. Bhambri, IG (Med))

Member BSF

(Dr. Amit Butola, CMO)

Member CRPF

(Dr. Himanshu Singh, MO,CRPF)

Member ITBP

(Dr. D.K Verma, SMO)

Member SSB

(Dr. B.K. Nigam, CMO (SG))

Co-op Member

(Dr. Rakesh Tiwari, Anaesthesist, SMO, ITBP)

Remarks of ADG (Med), CPFs

Technically approved

06/11/09

ADG (Medical), CPMFs