

Collaboration b/w Dow Class of 1991 and DOTS (Dowite 78 Operation Theater Welfare Society)- an NGO

**ABOUT DOTS:** Dowites78 Operation Theatre Welfare Society-DOTS is an NGO, which is running an Operation Theatre Complex in the premises of Civil Hospital, Karachi, and is in its 8<sup>th</sup> year since its commencement in September 2007.

The Operation Theatre Complex comprises of 14 Operation Theatres, Central endoscopic suit and Eye diagnostic centre, along with all the complementing areas like 18 bedded recovery, sterilized corridors, dirty linen storage & disposal, autoclave, wet and dry storage, staff and doctors room etc.

The O.T. Complex is currently catering Cancer, Ophthalmology, General Surgery, ENT, Pediatric, Maxillofacial, Vascular, and Plastic Surgeries. Till date, more than 70,000 surgeries of poor and needy patients suffering from Hernia, Appendix to Cancer, Retinal and other serious ailments, have been completed Free of Cost. An addition of DOTS G. I. Care and DOTS Eye Care Centre has also emerged as a new hope for the patients of Eye and Gastrointestinal diseases. According to the recent data, over 14,000 surgeries are performed in Dowites78 OT Complex annually worth 30 million with no cost to the patients.

An auditorium with a seating capacity of 200 is also built on the third floor of OT Complex. Live demonstration of surgical procedures from any of the OTs can be performed with two way audio communication between the surgeon in the OT and audience sitting in the auditorium. The O.T Complex is conducting seminars and live surgical conferences, workshops, teaching session, lectures and monthly clinical meetings, that are attended by students, doctors, and both national and international delegates.

**Project:**

To replace outdated anesthesia machines in Main OT Complex at Civil Hospital

**Number of Machines to be replaced: 10**

Price of each Unit( \$ 30,000)

**Vendor:** MedEc

Medec offers a complete range of anaesthesia units. All units are well known for their user-friendliness, complete configuration and optimum patient safety, as all safety features are standard, including anti-volutrauma and anti-barotrauma systems.

Each Unit:

**Features**

It has lowest work of breathing.

It has NO inadvertent PEEP.

It has lowest PEEP settings (1-20 in steps of 1 mbar).

It provides Fresh gas flow directly to the patient.

It provides fastest saturation Compensation of Compliance, resistance and small leaks.

It indicates laminar flow measurement and decelerating flow pattern

It has vertical light weight absorber valve.

It reduces the consumption of Soda lime.

It has Unique ANTI-VOLUTRAUMA software system.

It has special ANTI-BARATRAUMA software system.

**Specifications****For Pneumatic System**

Pipeline inlet pressure

O<sub>2</sub> 3 - 8 bar - NIST inletN<sub>2</sub>O 3 - 8 bar - NIST inlet

Air 3 - 8 bar - NIST inlet

Regulators

Built-in regulator for O<sub>2</sub> - N<sub>2</sub>O

PIN-Index.

Manometer gauges:

N<sub>2</sub>O 0 - 10 bar

Air 0 - 10 bar

O<sub>2</sub> 0 - 10 bar

Vaporizer mounting:

Selectatec system two station

Absorber features:

Autoclavable system Built-in

Overpressure valve

Connection system to oxygen cell

Oxygen flush:

35 l/min (between 3 - 8 bar)

Cylinder Holder

2 or 3 holders for 10Liters

Rotameter:

3 gases - 4 tubes

O<sub>2</sub> tube 0 - 1 l/min

0 - 10 l/min

N<sub>2</sub>O tube 0 - 12 l/min

Air 0 - 15 l/min

Vaporizer

Flow and Temperature Compensated

Volume of CO<sub>2</sub> absorber:

1.5 litres

Quick change' canister system

Manometer gauges regulator:

O<sub>2</sub> 0 - 250 barN<sub>2</sub>O 0 - 100 bar

Mobile Trolley:

3 x Drawer unit incorporated,

Monitoring Shelf

**For Ventilator**

Electronically Controlled, Pneumatically

Driven

Principle:

Bag-in-bottle system

Tidal volume (CMV):

10 - 1600 ml

I:E ratio:	1:1, 1:1.5, 1:2, 1:3, 1:4, 1:5, 1:6, 2:1, 3:1, 4:1
Plateau time:	0 - 50%
Low oxygen alarm limit:	18 - 99 %
Measured parameters	Expired/Inspired tidal volume, frequency, Minute volume, PIP, Plateau pressure, PEEP, Mean pressure, Ratio, Patient Pressure
Battery backup:	Minimal 3Hours when fully charge
Battery type:	Sealed lead acid battery
Ventilation modes:	CMV, PCV, SIMV, manual, spontaneous
Peak pressure (PCV):	5 - 70 mbar
Peep (electronic):	0 - 20 mbar
Upper pressure alarm limit:	7 mbar to 99 mbar
Inspiratory Pause	0%-50%
Audible and visual Alarms:	Low air/O <sub>2</sub> /N <sub>2</sub> O input pressure Apnea alarm, O <sub>2</sub> alarms Upper/lower limit alarm, leak or patient disconnection User and Technical alarms
Ventilation Frequency	4-80 breaths per minute
Trigger	-2 to -20 mbar above PEEP
Lower Pressure Alarm Limit	2 mbar to 92 mbar (CMV) 2 mbar to 66 mbar (PCV)
Power Consumption	< 100VA
Storage Temperature	5-50°C

#### To be Supplied with Following Accessories

1. Breathing Circuit
2. 1 Vaporizer
3. Re-breathing Bag
4. CO<sub>2</sub> Absorber
5. Operating Manual
6. Power Cord

Origin: Medec Benelux, Belgium

**TERMS & CONDITIONS:**

**WARRANTY** : 2 years  
**VALIDITY** : 30 days.  
**DELIVERY** : 6 to 8 Weeks.  
**INSTALLATION** : By our qualified service engineers  
**PAYMENT** : At the time of Order

**Ps. One year free service without parts after completion of two years warranty**

Class Representatives:

Shehzad Saeed

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