NEPTUNE
ANAESTHESIA WORKSTATION

The Neptune anaesthesia configuration has been specially developed for use during anaesthesia.

It was possible to give it a number of unique features, thanks to the use of modern electronics.

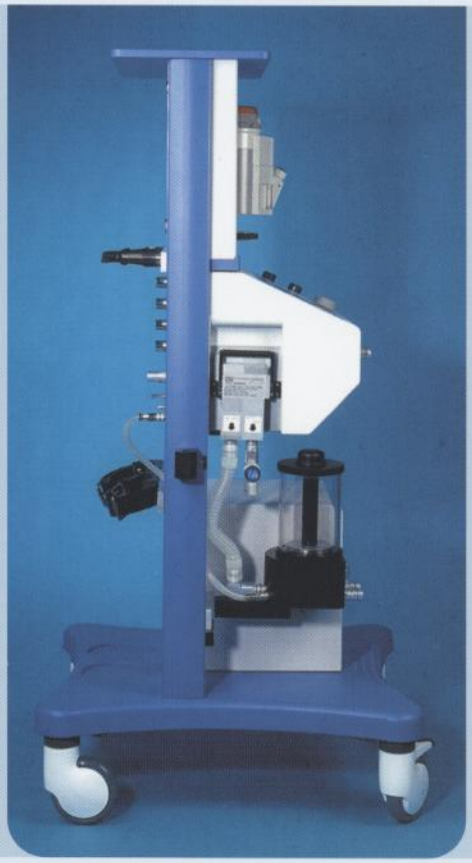
The Neptune configuration is reliable and easy to operate and can be used in all situations where vapour anaesthesia is used and ventilation is required.

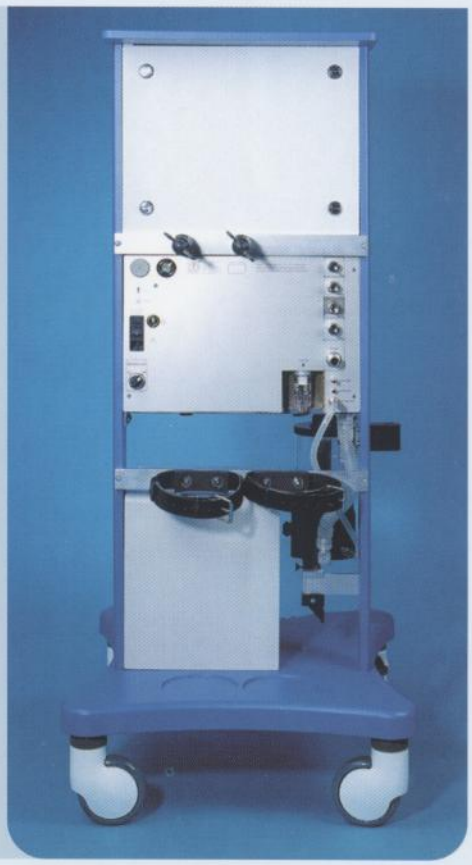
This unit can be used both as a 'stand-alone' machine, and as a part of a system comprising a computer, printer, gas and/or ventilatory monitor.

MEDEC

NEPTUNE :
A breathtaking experience.

An advanced anaesthesia delivery system





Our Neptune configuration combines some never seen abilities, high technological research and a high level of security.

Our well studied platform is easy to handle and gives you many exceptional features. The platform is based on the well-known horizontal bag-in-bottle system.

The shown configuration consists of :

- The Neptune electronic ventilator.
- Our Uniflow rotameter with oxygen ratio controller. (min. 25% of oxygen and N20 cut-off in case of oxygen failure)
- The Neptune trolley with drawer unit, built-in regulators, double selectatec system, monitor shelf, bottle holders and rail systems.
- Fully autoclavable absorber system and circle breathing system.

The ideal choice when value for money is a priority.

Due to our unique principle of horizontal bag-in-bottle system, we are able to start from 10 ml up to 1500 ml, which makes it perfectly suitable for all patient groups. From neonates to adults, without having to change any bellow or bag.

This unit is modular in design and can be expanded through software upgrades. The unit provides volume controlled ventilation, pressure controlled ventilation as well as manual / spontaneous modes.

Some unique features include :

- A guaranteed delivery of the tidal volume setting.
- Automatic adjustment from half-open to fully closed, depending on the fresh gas flow settings.
- Automatic compensation for minor leaks and changes in patient parameters. (compliance, resistance,...)
- Intrinsic safety, permitting ventilation in all situations.
- Large reduction in gases by setting of minimum fresh gas flow. (low flow and minimal flow)
- Continuous fresh gas flow on the inspiratory side of the absorber system.
- Five years of guarantee on the flow sensor.
- Software available in different languages.

Technical data pneumatic system

Pipeline inlet pressure
O_2 3 - 8 bar - NIST entrance
N_2O 3 - 8 bar - NIST entrance
Air 3 - 8 bar - NIST entrance

Oxygen flush
40 l/min (between 3 - 8 bar)

Suction
Built-in, operating on vacuum
(optional with injector system)

Regulators (optional)
Built-in regulator for O_2 - N_2O
PIN-Index.

Cylinder holders
2 holders for 10 litre bottles

Manometer gauges regulator
O_2 : 0 - 250 bar
N_2O : 0 - 100 bar

Manometer gauges
O_2 0 - 10 bar
N_2O 0 - 10 bar
Air 0 - 10 bar

Rotameter
3 gases - 4 tubes
O_2 tube : 0 - 1 l/min
0 - 10 l/min
N_2O tube : 0 - 12 l/min
Air : 0 - 15 l/min

With oxygen ratio controller. Guarantees a minimum of 25% oxygen. N_2O cut-off if 02 fresh gas valve is closed or if O_2 pressure drops below 2,5 bar.
Optional : 5 or 6 tubes.

Vaporizer mounting
Selectatec system two station

Vaporizers
Flow and temperature compensated

Shelfs
1 monitor shelf (optional external arm)

Absorber features
Safety overpressure valve at 100 cmH_2O
Autoclavable

Drawer unit
Drawer unit incorporated
2 drawers

Volume of CO_2 absorber
1,5 liter

Technical data ventilator

Electronically controlled, pneumatically driven

Principle
Bag-in-bottle system

Ventilation modes
CMV, PCV, manual, spontaneous

Tidal volume (CMV)
10 - 1500 ml

Peak pressure (PCV)
5 - 60 mbar

Ventilation frequency
4 - 60 breaths per minute

I:E ratio
1:1, 1:2, 1:3, 1:4, 2:1, 3:1

Peep (electronic)
0 - 20 mbar

Trigger
-2 to -20 mbar

Sigh
On - off

Plateau time
0 - 50%

Upper pressure alarm limit
7 mbar to 99 mbar

Lower pressure alarm limit
2 mbar to 94 mbar (CMV)
2 mbar to 58 mbar (PCV)

Low oxygen alarm limit
18 - 98 %

High oxygen alarm limit
18 - 98 %

Measured parameters
Expired tidal volume, frequency, minute volume, PIP, plateau pressure, PEEP, mean pressure, patient pressure

Alarms
Low air/O_2/N_2O input pressure
Apnea alarm, O_2 alarms
Upper/lower limit alarm
Leak or patient disconnection
User and technical alarms

Other display readings
Silent indicator
Time & Date
Mains and Battery indicator

Battery backup
Minimal 2 hours when fully charged

Operating voltage
100 - 240V, 50 - 60 Hz

Power consumption
< 100 VA

Battery type
Sealed lead acid battery

Operating temperature
10 - 40°C

Storage temperature
5 - 50 °C

Humidity
0 - 95% RH non condensing

This folder is subject to modification.

MEDEC
Medec Benelux nv.
Lion d'Orweg 19 - B-9300 Aalst - Belgium
Phone: +32 (0)53 70 35 44 - Fax: +32 (0)53 70 35 33
E-mail: sales@medecbenelux.be - Website: www.medecbenelux.be