



MOBILE HOSPITAL - INTENSIVE THERAPY **- on semi-trailer -**

GENERAL SEMI-TRAILER CHARACTERISTICS

- Special flatbed semi-trailer with reinforced frame, equipped as an ambulatory unit;
- Overall dimensions cm. 1360x250x380h approximately;
- Body length cm. About 1360;
- P.T.T. Kg. 28000;
- Medium strengthened frame;
- Pneumatic suspension;
- Height adjustment valve of the loading surface;
- No. 2 or 3 fixed axles (depending on the most immediate availability) in simple ROR with disc brakes;
- Electric and pneumatic systems in compliance with EB + anti-lock device;
- N.5 or 7 iron rims;
- Winch wheel-holder;
- N.5 or 7 tires 385/65 R22.5 or similar;
- Telescopic lift;
- Wedges and wedge covers, retro-reflective panels and accessories for use;
- Frame completely sandblasted;
- Front parking feet;

BODY FEATURES

- Sandwich shell in aluminium or fiberglass internal and external (according to the most immediate availability) pre-lacquered white, insulated with styrofoam, for a total thickness of approximately 52 mm;
- N.1 access door to the compartment with safety key lock, installed in the rear part of the right wall; quickcoupling handrails, necessary for the entry of medical personnel and patients on emergency stretchers;
- N.7 opening windows equipped with aluminium frames and tempered glass, positioned on the right and left walls of the module;
- Sign application on the external sides (to be agreed);
- N. 1 manual Roll-up blind positioned at the entrance door;

INTERIOR LAYOUT

- Concealed storm door, in correspondence with the entrance door to the compartment, manual opening, with opacified methacrylate infill;
- Internal division into:
 - entrance hall;
 - doctor's room, with sliding access door with security key lock;
 - intensive care unit with 4 equipped stations, with lateral corridor and fixed semiwalls adjacent to the left wall of the vehicle and with privacy curtain as separation from the corridor, accessible from the entrance hall by means of a security sliding door, with electric button opening;
 - toilet compartment with toilet, hinged door and safety lock with key.
 - The different areas will be divided by immovable walls structurally fixed to the roof, to the floor and to the left wall of the structure, made of completely sealed fiberglass sandwich panels.
 - Within the "Intensive Care" area, the four workstations cannot be completely separated from each other, but they will be equipped with privacy curtains on the corridor side.



- Hospital-type rising floor at the edges in order not to create angles between the wall and the easily washable and sanitisable floor made of marine plywood, covered in non-slip and bacteriostatic material with high mechanical resistance.
- Washable white painted internal finish of walls and roof;

FURNITURE:

Entrance hall built in the right rear part of the vehicle allowing staff and portable stretchers (by ladder) access to the compartment, the "medical room" and/or the "Intensive Care" room.

Medical room, built in the rear left part of the vehicle and furnished with:

- N.1 office type desk with drawer unit;
- N.1 swivel chair for doctor;
- Open coat rack;
- N.1 wall cabinet with full doors, in the upper part of the left wall;
- Lockers for personal effects and/or medical shirts and clothing;

Intensive care room in the central part of the vehicle, accessible from the entrance hall through an electric sliding door and furnished with:

- N.4 semi-independent rooms, separated from the "corridor" area by sliding curtain on a roof rail with fireproof class I fabric, antiallergic, antibacterial, waterproof and highly resistant, washable and sanitisable;
- N.4 patient station, each one equipped with:
 - Hospital bed with 3 joints and 4 sections, electrically adjustable, and variable height with Trendelenburg and Reverse Trendelenburg position (15°). All steel parts are painted with epoxy powders. Backrest section adjustable with electric actuator with anti-crushing and roto-translation function to avoid abdominal compression. CPR handles for emergency maneuvers on both sides of the bed. Leg section adjustable by snap mechanism in 6 positions. Remote control to maintain or deactivate the position. Push button panel to adjust backrest, height of the bed base, legs and feet, comfort position, Trendelenburg and Reverse Trendelenburg positions. Compartment for patient lift and IV stand, 4 sides with total containment in technopolymers, individually foldable. Shaped and removable head/foot panels, with integrated handles for movement, 4 wheels Ø 150 mm with centralized locking system with directional control. Dimensions: 110 x 225 x h 91 cm. Bed weight: 130 kg. Flame retardant mattress and IV stand.



Technical features

- Bed net surface height min/max: 380-780 mm
 - ▪ Backrest height adjustment max: 71°
 - ▪ Max legs / feet adjustment: 30°
 - ▪ Trendelenburg and Reverse Trendelenburg: 15°
 - ▪ Min/max height: 835-1245 mm
 - ▪ Total bed width/length: 1010/2260 mm (with bumpers and sides)
 - ▪ Net bed width/useful length: 880/2000 mm
 - ▪ Power supply: 160-230 V - 50-60 Hz
 - ▪ Maximum capacity: 270 kg
 - ▪ Insulation class: I / B
 - ▪ Degree of protection: IP66
 - ▪ Italian production
- N.1 fixed equipment shelf installed on the wall;
- N.1 shelf for equipment, foldable up against the wall;
- Service beam near the bed head, complete with:
 - N.2 UNI 9507 Quick Coupling Oxygen Therapy sockets;
 - N.1 oxygen delivery flowmeter with humidifier;
 - N.1 oxygen system opening valve;
 - N.1 pressure gauge for displaying the operating pressure on the oxygen system;
 - N.1 Vacuum socket with quick coupling according to UNI 9507 standards;
 - N.1 vacuum gauge with valve and secreted container of 1 lt;
 - 230V schuko type electrical outlets panel;



Toilette compartment in the front part of the vehicle (or in another area if this position is not suitable), accessible directly from the intensive care area through a hinged door with key lock and furnished with:

- sink with mirror;
- Chemical toilet with removable tank from outside;
- Shower tray complete with accessories;
- Lockers for clothes and accessories;

SERVICE FACILITIES:

Electrical and lighting system:

- Standard electrical system with self-extinguishing and reinforced insulation cables. The system is installed with special easily replaceable compartmentalized ducts (by pulling out the cables) in the event of a breakdown;
- Main control panel (with safety cover) and complete lifesaving control with sector 220V and 12V, switches, warning lights, control instruments, remote for generator control, command and control of air conditioning system and auxiliary systems positioned in the entrance room;
- Separate management of 12 Volt and 220 Volt line. The 220 Volt line system is protected by a circuit breaker and can be connected to an external current source or to the generator.
- N.1 220V 32 A external socket, in accordance with EEC standards;
- 12V and 220V internal sockets conveniently positioned;
- Continuous indirect linear LED lighting, with diffusers that guarantee optimal and scattered lighting in all conditions and the possibility of dimming intensity at least 3 levels;
- No.2 additional batteries 150 Ah each, connected to the module's electrical system, necessary to power low voltage utilities, rechargeable from the generator or from an external electrical network;
- N.1 220V battery charger dedicated to recharge the batteries mentioned above;
- N.1 Silenced generator set with diesel power supply with a dedicated 32 lt tank and autonomous electric pump, equipped with electric starter, flue gas discharge outside the vehicle through a special muffler, command and control panel installed on the general electrical panel, capable to supply electricity up to a maximum of about 9 kw, continuous 8.2 kw at about 220 V, installed on special anti-vibration supports under the floor;
- Uninterruptible power supply capable of guaranteeing a maximum total power of 5.5 kW at 230V for about 10 minutes, with 2 dedicated sockets for each patient station;

Water system:

- Water system equipped with:
 - 200 lt clear water loading tanks and dark water discharge. Both tanks will be equipped with full/empty warning lights. The system works with automatic insertion pump and expansion tank to avoid "water hammer"; filling nozzle with key cap;
 - double line for hot and cold water;
 - n.1 electric water heater boiler at 230V, capacity about 50 lt;

Air conditioning and suction system:

- heat pump air conditioning system, inverter type, to guarantee the best microclimate within the entire sanitary environment, with condensers positioned under the trailer floor. The system will be suitably sized and operates via a generator or external network;



- room air intake system, made by 6 multi-speed electric vacuums, installed in each internal compartment, creating an internal forced air recirculation;

Medical gas plant:

- Centralized oxygen therapy system, built according to the latest regulations, equipped with a single cylinder compartment accessible directly from the outside of the vehicle and with plug-in outputs according to UNI 9507 standards located near the patient's head (2 sockets oxygen inside each of the 4 ICU rooms);
- Vacuum system equipped with:
 - Air compressor powered at 230V;
 - N.1 quick-fit socket according to UNI 9507 standards, located inside each ICU compartment;
 - N.1 1 lt secretion container with integrated vacuum regulator;

EQUIPMENT INCLUDED IN THE SUPPLY

- N.4 fixed lung ventilators, Siare brand mod. Sirio S2/T (or similar), with the possibility of monitoring respiratory parameters, suitable for Adult / Children / Babies patients, with the following characteristics:
 - Type of Ventilation IPPV Volumetric - IPPV Cycled in time with PRESSURE SUPPORT
 - Electronic control mode
 - Venturi system flow generation
 - Supply pressure: Medical compressed air or Oxygen - the gas pressure must be between 280 kPa and 600 kPa (2.8 - 6 bar). Maximum flow required by the fan: 50 l / min
 - Automatic compensation: Automatic compensation of the atmospheric pressure on the measured pressure: present (max. 5000 mt)
 - Ventilation modes: AUT + ASSISTED / PSV + APNEA BACK UP / CPAP / PEEP
 - Measured parameters Respiratory rate (RATE), Expiratory current volume (VT), Minute volume (VM), Instantaneous pressure and Peak airway pressure (PAW), Average pressure (MAP), End of expiration pressure (PEEP)
 - Monitoring: Correct respiratory cycle via lung icon
 - Respiratory rate From 5 to 70 bpm
 - Ratios I:E 1:1.5
 - Inspiratory time 40% of the respiratory cycle
 - Inspiratory pause automatically variable in PSV mode
 - Pressure limit adjustable from 0 to 50 cm H2O
 - Pressure support ventilation adjustable from 0 (SPONT.) to 50 cm H2O
 - PEEP Adjustable from 0 to 20 cm H2O
 - Current volume from 15 to 3000 ml
 - Minute volume from 1 to 16 liters/minute
 - Constant and decreasing flow trend (PSV)
 - Mixer 50% O2 or 100% O2 (21% O2 with medical compressed air)
 - Digital Electronic Bronchomanometer (-10 to 60 cm H2O)
 - Trigger (sensitivity) Adjustable from -1 to -5 cm H2O
 - Low and high airway pressure alarms / Apnea / Battery charge level
 - Gas supply/Power supply
 - Medical gases Medical oxygen
 - Supply voltage 12Vdc power supply or 100 - 240 Vac/12Vdc power supply
 - Current consumption 0.04 A - 220 Vac / 0.8 A - 12Vdc
 - Power 9 W



- Battery operation with internal Pb battery (3 hours autonomy approximately)
- Charging time: 4 hours with supplied power supply
- Safety Mechanical airway pressure limit adjustable from 0 to 50 cm H₂O.

Operator interface:

- Electronic digital bronchomanometer
- Display visualization of respiratory parameters
- LED battery charge level
- LED External power supply signal
- LED and acoustic alarms
- Knob controls
- Dimensions - Weight 31 x 19 x 18 cm (including handle) - 3.7 Kg



- Standard accessories supplied:
 - Power supply 100 - 240 Vac/12Vdc
 - 12Vdc vehicle power cable
 - O₂ feeding tube
 - PVC patient circuit with EXP valve
 - Flow sensor (disposable)
- Compliance with EN 1281-1, IEC 601-1, IEC 601-1-2, IEC 601-1-4, IEC 601-1-8, EN 794-3, o Directive 93/42 / EEC
- Class and type according to IEC 601-1: Class 1 Type B
- Class according to Directive 93/42 EEC: Class lib
- Environmental conditions:
 - Temperature from -10° C to 40 ° C
 - Relative humidity from 15% to 95% non-condensing
 - Atmospheric pressure from 70 to 110 Kpa
 - IP 44



Dmix International S.R.L.S.



- N.4 multi-parameter monitors, Edan brand mod. X12 (or similar), capable of monitoring 6/12 lead ECG, breath, Sp O 2, NIBP, 2 temperatures, equipped with a 12" color touch screen monitor;
- N.1 portable aspirator of secretions, Gima brand mod. Tobi Clinic (or similar), with 2 jars of lt. 2 + 2 + pedal, four antistatic wheels, two of which with locking system, that allow perfect mobility. Equipped with a vacuum indicator for suction control (1 bar), and 2 or 4 liters container built with autoclavable makrolon, with a graduation of 200/400 ml, each vessel contains a double safety valve. Piston pumps do not require lubrication and maintenance. Equipped with antibacterial filter. Pump flow rate 60 lt / min. CEI 62-5 (IEC 601-1) 93/42 EEC certified;



Dmix International S.R.L.S.

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STANDARD ACCESSORIES:

- External decoration with Institution's indications and symbols, made with self-adhesive vinyl film, color chosen by the customer;
- Cable reel with 20 mt. cable for network connection;
- N. 4 Fire extinguishers according to standards, appropriately located, of kg.6 each.

POSSIBLE OPTIONAL EQUIPMENT AND ACCESSORIES (NOT INCLUDED IN THE SUPPLY):

a) Infusion pump mod. Hedy I7Pro (or similar).....**€ 2.000,00**

b) Portable environmental sanitizer, brand Agif mod. C4 PO (or similar), equipped with 4 wheels, 2 pivoting ones to facilitate movement, unlimited autonomy, performance 1000 m2 of surface area, 2 liters of disinfectant solution, 230v - 50Hz power supply.....**€ 6.500,00**

- TANK CAPACITY
 - water 2 liters
 - liquid 2 liters
- JET POWER
 - (dry steam + disinfectant) 4 bar
- MATERIALS
 - Handle: painted steel
 - Internal components: AISI 304 stainless steel
 - Body: steel

c) Air purifier, brand Trotec model TAC5000 (or similar), to depurate and purify air in contaminated working environments, with max. air flow in free flow of 4500 m³/h.....**€ 7.500,00**

- Equipped with dustproof set and HEPA filter on the device terminal for clear rooms usage.

d) Triage or pre-hospitalization room kit, to be installed near the hospital trailer, to guarantee a covered and sanitized environment for the verification and acceptance of patients,.....**€ 15.000,00**
consisting of:

- Pneumatic tent, with pneumatic supporting structure which guarantees its rapid assembly even on accidental and/or unsuitable ground for conventional structures. Made of high mechanical characteristics materials and suitable for all weather conditions. The pneumatic load-bearing structure is equipped with a pneumatic spacer integrated into the arch itself in order to guarantee monolithic rigidity.
Furthermore, all the welded joints are covered so that better pneumatic efficiency is guaranteed. Tent size 7.55 x 5.65 m, weight 180 kg.
- Internal insulation sheet to isolate the inside of the tent from the external climate;
- Simultaneous electric inflation/deflation kit consisting of a small compressor powered with 220V electricity which allows the tent inflation in a few minutes by acting simultaneously on all the elements. The same appliance also allows to suck the air from the tubes when deflating the tent to put it back in the case, making deflation faster.
- Lighting system enslaved to the tent, consisting of 3 shatterproof 220V/24W 2400 lumen LED lamps, each equipped with 5 meters cable and CEE plug IP67, complete with polycarbonate pipe, protection degree IP55 / 65.
- N.1 portable air conditioner with dehumidification function, complete with adjustable air deflector, with the following technical specifications: cooling capacity 8500 BTU approximately. Consumption 900 W, class A. Power supply 220 / 240V-50Hz.
- N.1 portable electrical distribution panel, watertight, with double insulation IP65 butyl rubber container, with carrying handle, input with CEE P17 plug with 3 m cable and distribution with 4 sockets, one of which is a Schuko 2P + T from 16A, protected by differential magnetothermal switch;
- N.2 X-ray transparent spinal boards, with universal head immobilizer and spider belt;



- N. 2 foldable (in 4) emergency stretchers with PVC sheet;
 - N.3 transport sheets.
- e) Automated system for stretchers/disabled chairs access:.....**€ 9.250,00**
- N.1 access door with security lock, on the right side of the rear wall, reserved for the entry of stretchers and/or wheelchairs into the module;
 - N.1 under-platform electro-hydraulic lifting platform, complete with remote control;
 - N.1 internal sliding door with opacified glass infill;

Other equipment and endowments not expressly indicated and requested by the client.

A general technical drawing is attached to evaluate the distribution of the interior spaces that can be modified according to the needs and technical feasibility.