



Premium Hospital Beds

MATRIX B12



## INCLUSIVE HEALTHCARE



### Bariatric Bed

Matrix B12 was created as a solution to assist in the care of patients with morbid obesity. Focused on the inclusion of patients exceeding the maximum load of standard hospital beds, this is a key bed to complement any healthcare facility.

With pre-defined medical positions, safety features and tools to reduce hospitalisation times, it becomes a bed that fulfils the therapeutic requirements of most patients and an indispensable tool for healthcare professionals.

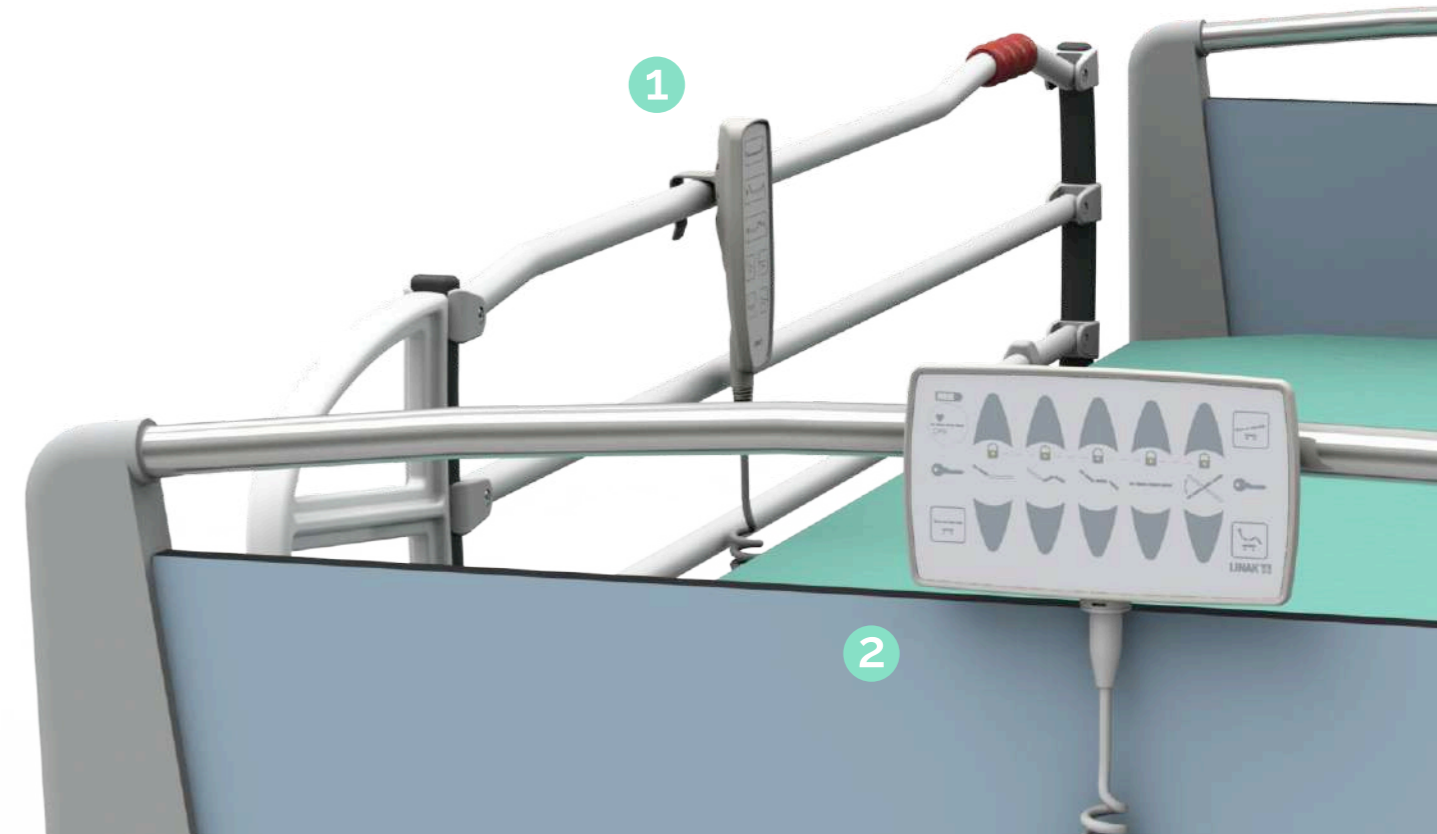
### Robust Architecture

Reinforced structure in key points and lifting system by trapezoidal arms electrically articulated by 2 linear motors Linak brand.

Lifting stroke of 420-715 mm and maximum patient load of 400 Kg.

## PORTABLE CONTROLS

User Friendly Device



### 1 Handset Control

Highly shock resistant. Portable control powered by an extendable helical cable.

Allows the following positions:

- Back and Legs
- Height
- Reverse Trendelenburg
- Cardiac Chair
- Examination
- Rest

### 2 Nurse Control

Located in a drawer at the foot of the bed and recessed in the foot of the bed panel. With selective locks as protection against accidental or improper use. Powered by an extendable helical cable.

Allows the following positions:

- Back and Legs
- Auto Contour
- Height
- Trendelenburg and Reverse
- Cardiac Chair
- Examination
- Shock
- CPR

Equipped with LED to indicate:

- Battery state
- Selective lock

## Cardiac Chair

Automatically performs, by the activation of a single button, the sitting position. Improves respiratory function and facilitate the administration of medication and the practice of autonomous activities.



## Examination

Automatically performs, by the activation of a single button, the position of maximum height and levels the mattress platform. Ensures an ergonomically correct posture for carers during examinations and treatments.



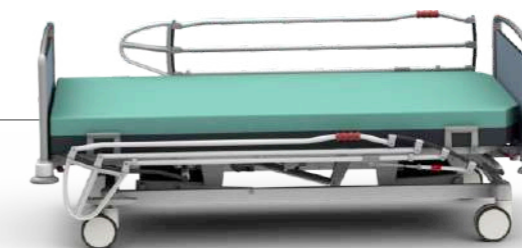
## Shock

It performs automatically, by the activation of a single button, the Trendelenburg position and levels the mattress platform. Used to reverse hypoxic episodes in vital organs.



## CPR

Automatically sets the minimum height position and levels the mattress platform at the push of a single button. Ensures correct posture for patient and caregivers during cardiopulmonary resuscitation manoeuvres.



# 3 STEPS OF EARLY MOBILITY

## 1 Stabilization

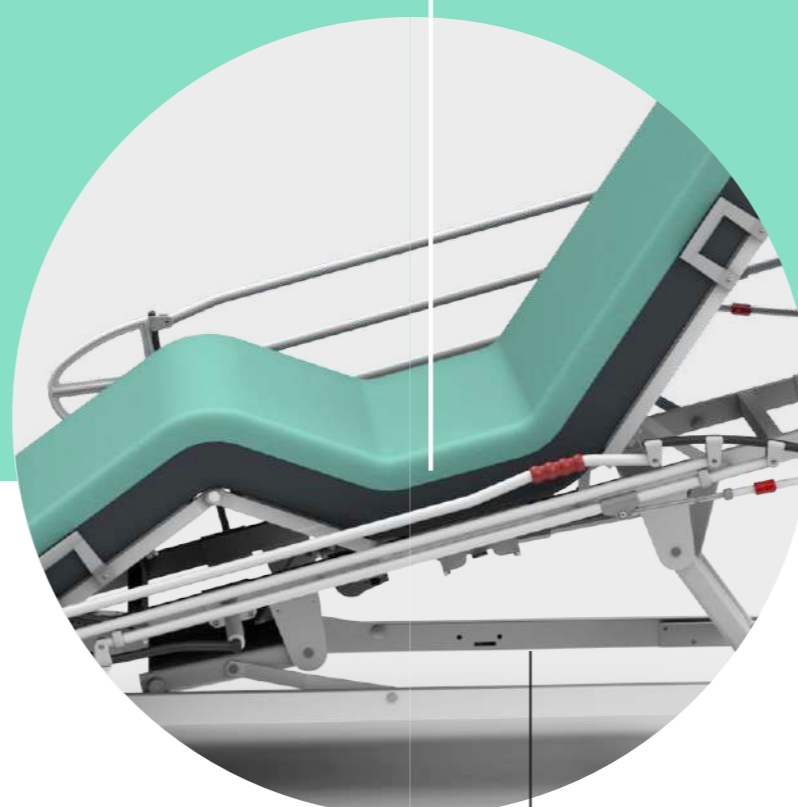
30° Back Stop  
Breath Well



Patient in Control  
Automatic Positions

## 2 Verticalization

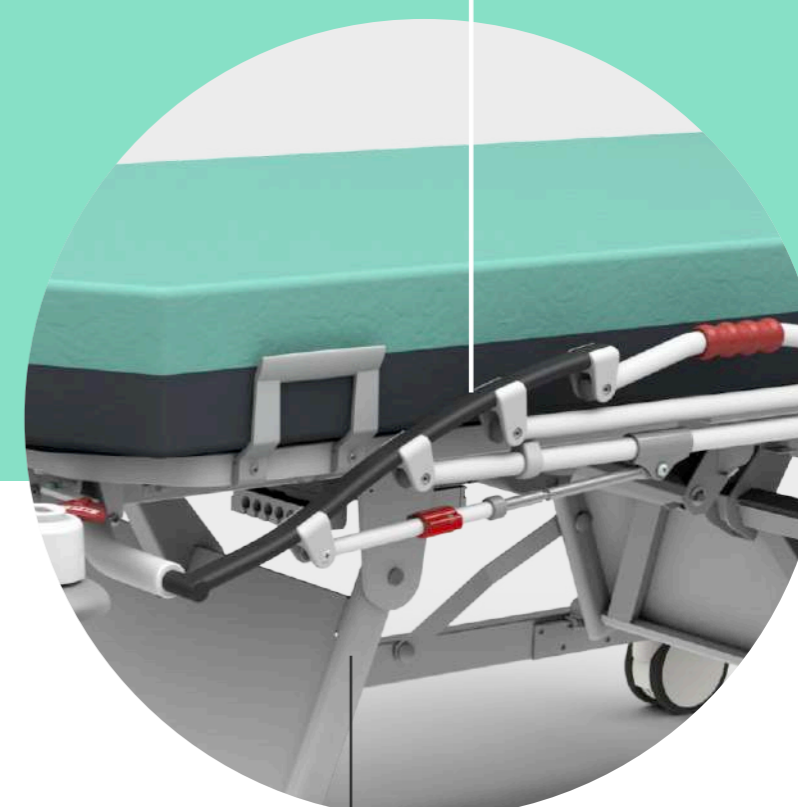
Seated Position  
High Backrest



Reverse Trendelenburg  
Set the Uprising

## 3 Mobilisation

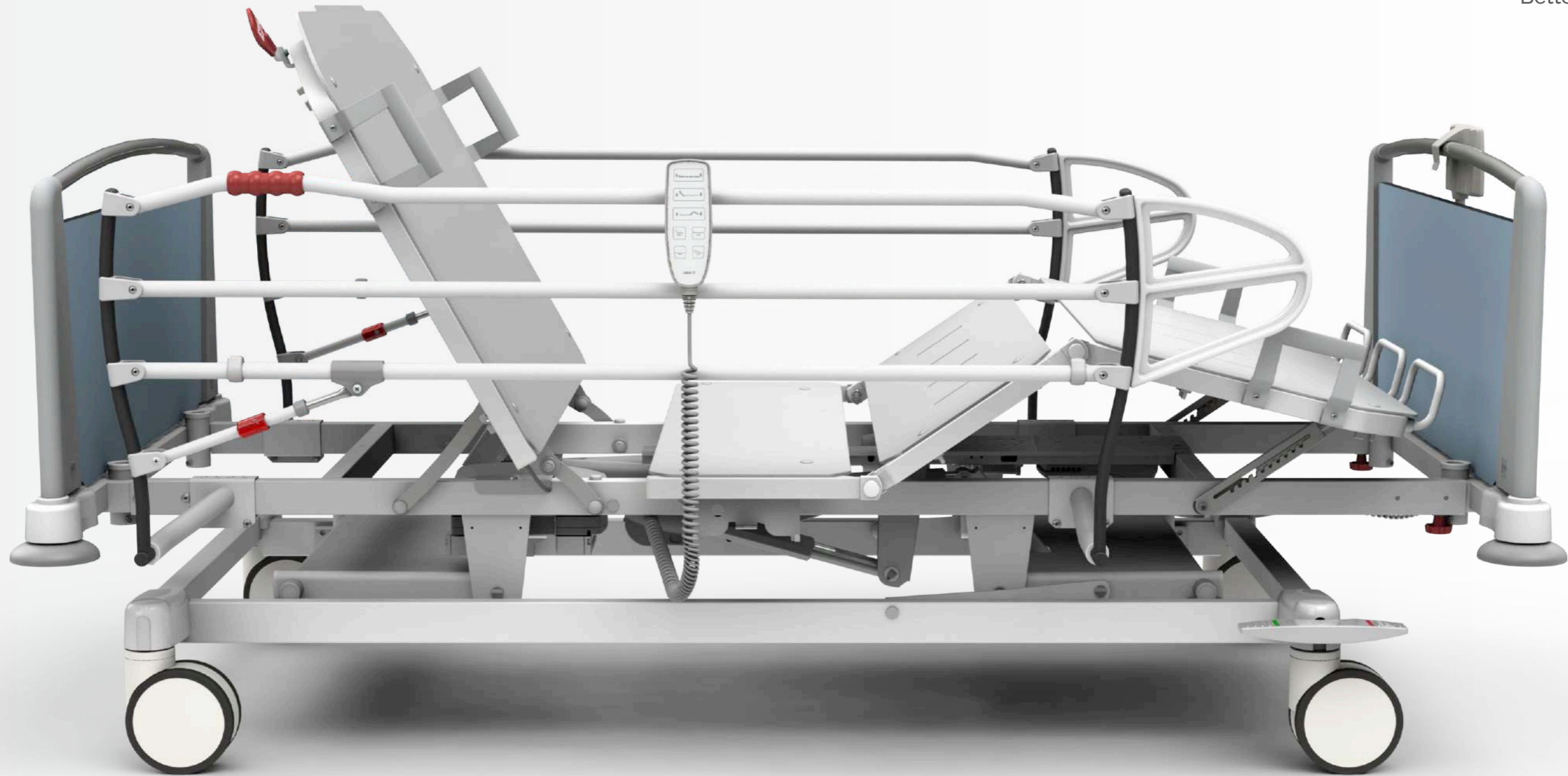
Rails Handgrip  
Safe Movements



Low Minimum Height  
Easy Bed Exit/Entry

## 3 STEPS OF EARLY MOBILITY

Better Outcomes

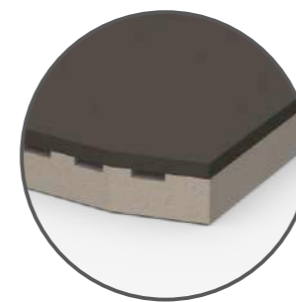


### Autoregression

The articulation of the mattress platform (backrest) causes harmful muscular pressure in the abdominal and lumbar areas. By lifting the back and leg articulations, they simultaneously perform a synchronised horizontal glide

### Pressure Ulcer Prevention

The autoregression of the backrest articulations causes decompression and relief of the sacroiliac area, a critical point in the development of pressure ulcers.



**Hospi 3**  
6,5 mmHg

### High Risk of Bedsores

The inclination in the foot area and the different foam layers allow for superior endurance, enabling the prevention of bedsores in heavier patients, ideal for bariatric units.

## ENHANCED SAFETY

Fall Prevention



### EN 60601-2-52 Standard

Side rails comply with EN 60601-2-52.

They prevent and avoid the risk of injuries caused by accidental falls through high side coverage.

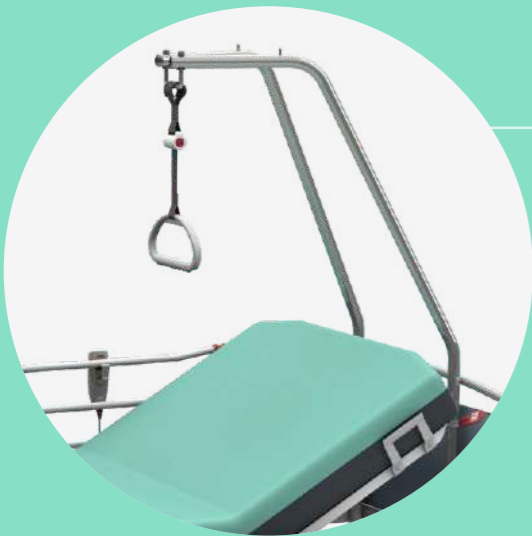
### Self-Confidence

A bed designed to improve the patient's autonomy, giving him/her control of functions such as the Cardiac Chair position to improve the practice of activities and meals or the Rest position for periods of safe sleep.



### Differentiating Accessories

Matrix B12 includes the option of incorporating accessories and extras important for various areas of healthcare for bedridden patients



## ENHANCED SAFETY

Emergency Procedures

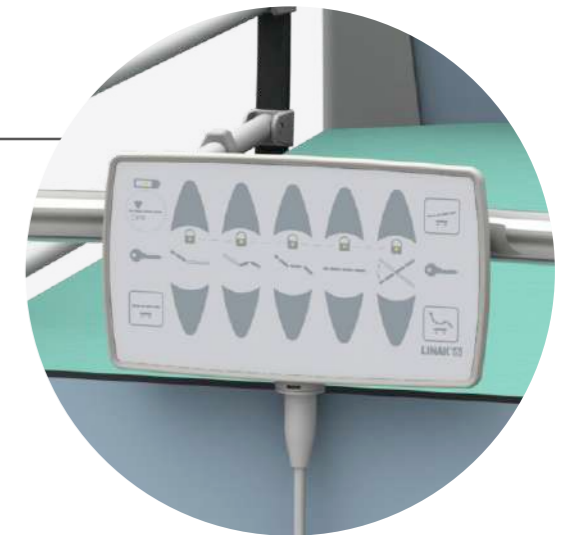


### Endotracheal Intubation

The head end and foot end panels are vertically removable, allowing unobstructed intubation.

### Selective Locking

The electrical functions of the bed can be selectively disabled for reasons of functional convenience or safeguarding the patient's health, the exception being the emergency functions, which are not affected by selective locking.



## INFECTION CONTROL

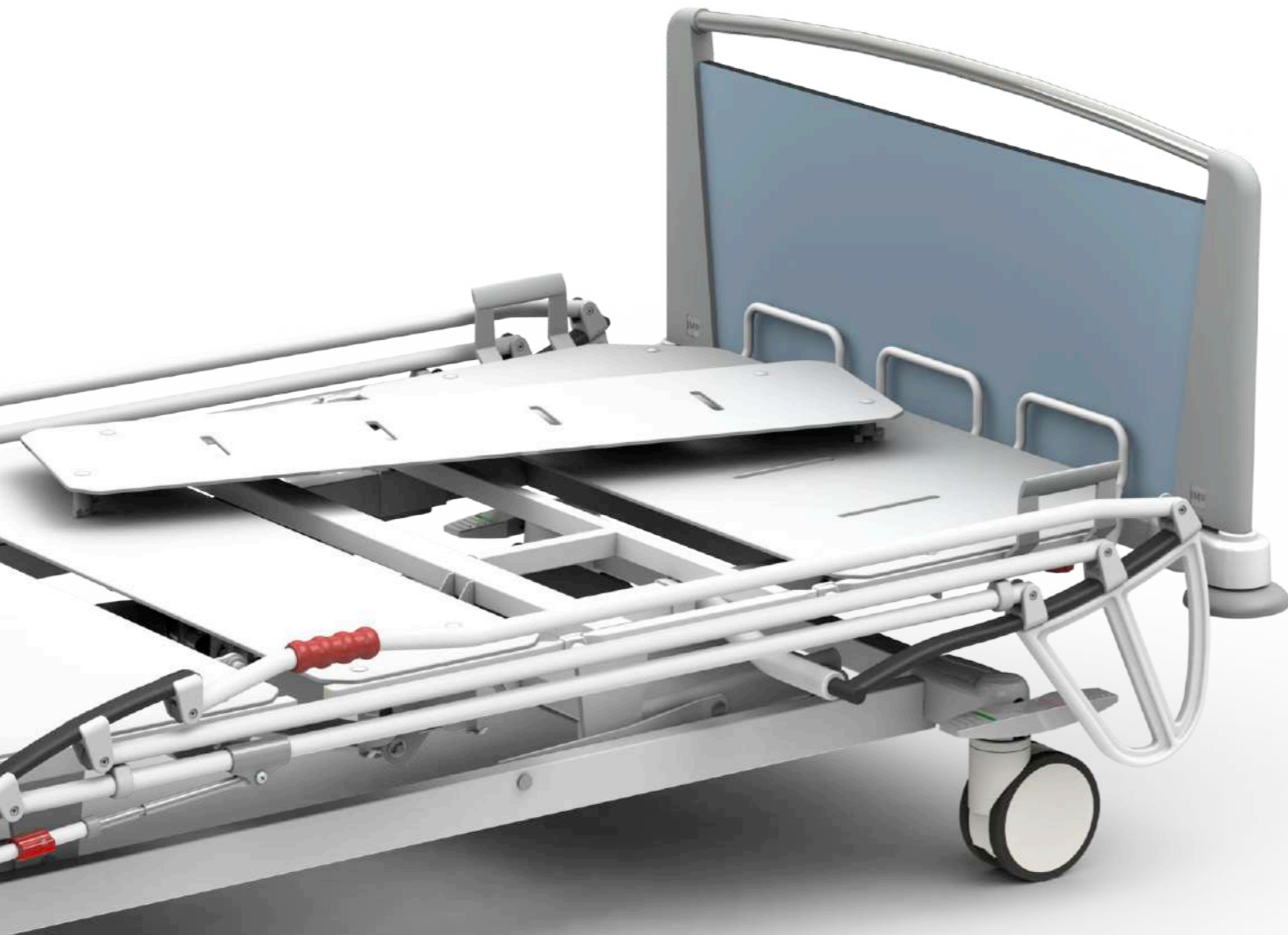
Hospitality

### Total Disinfection

The design of the bed has been conceived to facilitate the cleaning process. Reducing as far as possible the points where dirt accumulates.

### Mattress Platform

The bed frame is made up of 4 modular components in phenolic (HPL). All components are removable for cleaning.



## LIGHT HANDLING

Emergency Procedures



### Batteries

1.2A/h battery module to keep the bed operational when disconnected from the power supply.

When plugged in, it electronically manages the charging process, making it unnecessary to unplug the power socket once the batteries are charged

### Power Cable Protection

Power cables damaged by transport is one of the most frequent malfunctions in electric hospital beds.

Matrix B12 is equipped with a convenient portable cable holder to fit on top of the head panel in addition to the reel fixed to the snap-in frame of the same head panel.

## LIGHT HANDLING

Easier Transport

### 1 Transport Handrails

The head/foot boards are made entirely of washable materials, in particular the stainless steel handrail, a material with great capacity for cleaning and disinfection, durability and high resistance to impact. The panels are vertically removable.

### 2 Centralised Braking

Bed equipped with 2 brake pedals, at the rear corners of the bed, with centralised effect and directional lock.

### 3 Premium Casters

High-quality German brand Tente wheels, Ø150 mm, double-band ABS-faired, with high load capacity.





## Structure

Bed frame with Ipx4 protection

Robust metal frame epoxy painted

Mobile components zinc plated or/and stainless steel

Corners protected by soft bumpers

Bilateral foley bag hooks

## Base

Open design base to prevent dirt build-up

Base corners protected by plastic fairings

Integral Ø150mm ABS double casters

Central locking and steering control

## Mattress Platform

4 sections bed frame (3 articulated + 1 fixed)

Phenolic (HPL) panels extractable for cleaning

Autoregression

Flexible mattress shoulders

Bilateral levers for a quick manual CPR release

Foot section manually adjustable by a mechanical rack

## Head/Foot Boards

In laminated and plastic, with stainless steel handrail

Easily removable

Foot end with rack for nurse control support

## Side Rails

Full-length, in epoxy painted metal

Soft drop released by red handle

## Electric Setup

Motions managed by a microprocessed unit

Low voltage motors DC24V (4 linear actuators)

Gel batteries with discharge alarm

Cable holder for transport

## Control

Handset control with extendable helical cable

Nurse control with extendable helical cable

**BED ACCESSORIES**



**Crutches Holder**



Support for 2 crutches  
 Rubber fitting  
 Epoxy painted structure  
 Removable and adjustable

910.570

**IV Pole**



Serum support  
 Stainless steel column  
 Adjustable rod with 4 hooks

910.104i

Serum support  
 Epoxy painted column  
 Adjustable rod with 4 hooks

910.104

**Writing Tray**



Foldable writing tray  
 Epoxy painted structure  
 Top in phenolic (HPL)

910.806

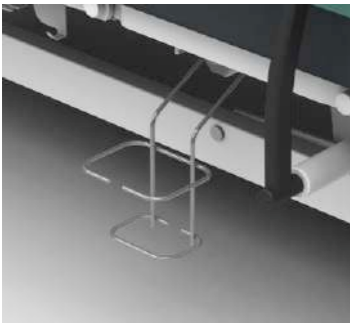
**Lifting Trapeze**



Bariatric patient lifting  
 Stainless steel double column  
 Trapeze with adjustable handle

910.200E1

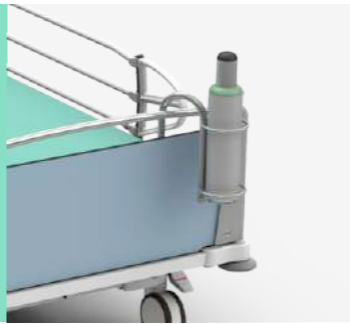
**Urinal Holder**



Support for urinal  
 Calibrated stainless steel rod construction  
 Removable and adjustable

910.019

**O2 Tank Holder**



Support for oxygen tank  
 Fitting on the corners of the bed  
 In stainless steel

910.530

## MATRIX B12



### Dimensions +/- 5%

Recommended mattress dimensions	1920 x 1060 x 180 mm
External dimensions	2120 x 1200 mm
Min/Max height	390/763 mm*

### Joints +/- 5%

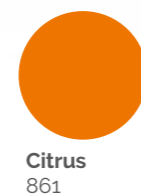
Maximum back incline	60°	
Maximum Cardiac Chair	85°	
Maximum leg incline	35°	
Maximum foot lowering	20°	
Maximum incline	Trendelenburg	15°
	Reverse Trendelenburg	15°

### Capacities +/- 5%

Maximum weight (SWL)	400 Kg
Power supply	100-240 VAC, 50/60 Hz
Control unit power	390 VA
Battery charge	18 W
Electrical protection	Class 1 Applied parts type B

## Endboard Decoration

Availability of non standard finishes on request.



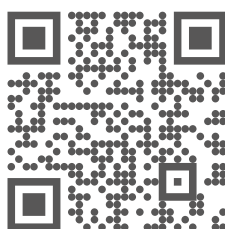
# IMO - Indústrias Metalúrgicas, S.A.

## Headquarters

Rua Dr. Aurélio Teixeira de Sousa, 575  
4650-312 Rande Portugal  
T. +351 255 340 220  
sede@imo.com.pt

## Showroom

Av. Defensores de Chaves, 87A  
1000-115 Lisboa Portugal  
T. +351 217 963 478  
lisboa@imo.com.pt



[www.imo.com.pt](http://www.imo.com.pt)