





# Eleganza 3XC ICU bed









**HEALTHCARE** PROGRAM

## Eleganza 3XC Ideal system for ICU

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The design and function of the Eleganza 3XC bed is customised to meet the high demands of intensive care. This modern bed with a column construction offers an integrated programme which helps hospital staff save the lives of critically ill patients.

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#### LUNGS AND HEART SYSTEM

Eleganza 3XC supports optimum lung ventilation and improves cardiac function when utilising the Cardiac Chair Position adjustment. Nosocomial pneumonia and atelectasis can be detected in time by the use of the sophisticated in-bed X-ray lung examination. C-arm compatibility allows the performance of many interventions directly on the bed.

#### FALLS PROTECTION

Sophisticated features such as the Eleganza Protector<sup>®</sup> and bed exit alarm enhance falls prevention.

#### PRESSURE ULCER PREVENTION

The unique Ergoframe<sup>®</sup> system reduces the pressure applied to the tissues in the pelvic area during positioning and minimises friction between the skin on the patient's back and the mattress. The side rail construction (height) allows the application of most therapeutic mattresses.

#### RECOVERY

The negative consequences of immobility can be eliminated by active patient mobilisation using the mobilising aids. The patient can be mobilised to an adequate degree safely.

#### INFECTION CONTROL

Decontamination of the bed's surface is very easy and comprehensive due to the column design, flat and joint-free construction and steam cleaner compatibility.

#### STAFF SUPPORT

Numerous smart features ease the work of caregivers, technicians and other healthcare professionals. The  $5^{\rm th}$  castor, i-brake, in-bed scales, and others.



## Cardiac chair

### Support for healthy lungs

The support of vital functions for critically ill patients is a priority for intensive care units. Thanks to the unique functions of the Eleganza 3XC bed, hospital staff can easily and frequently control and monitor the condition of two of the most important organs – the heart and lungs. In this special position the bed supports respiration and heart activity.





- Staff may comfortably adjust the position of the cardiac chair with one touch of a single button on the Supervisor control panel. The vital lung capacity increases and lung ventilation improves in the sitting position.
- The Ergoframe<sup>®</sup> kinematic system extends the mattress platform in the pelvic area. This minimises compression of the lungs when a patient is positioned in the cardiac chair position.
- The cardiac chair position reduces cardiac workload and improves cardiac output.





## Falls prevention

### Unique 3 section siderails - Absolute protection

The unique siderail system of the Eleganza 3XC creates a safe area on the bed. The siderails allow staff to optimize the siderails use according to the individual medical condition of patients. The siderail system of the Eleganza 3XC consists of three sections – the head siderail, central siderail and the optional Eleganza Protector<sup>®</sup> siderail allocated at the foot end of the bed. So staff can use the system components variably based on the rate of risk of a fall of individual patients.



#### FULL LENGTH – ABOVE STANDARD PROTECTION

If the patient is assessed as being at high risk of sustaining a fall, the nurse may apply the side rail along the entire length of the mattress platform.

The Eleganza Protector<sup>®</sup> provides a protective barrier all around the mattress platform. This may prevent falls to confused or at risk patients.



#### STANDARD PROTECTION

Side rails without the Eleganza Protector<sup>®</sup> provide a standard level of protection for most patients.



### Active elements for enhanced fallsprevention

Bedsides the mechanical solutions E3XC brings other progressive methods how to minimize fall risk. To achieve the highest level of patient's safety on the bed, the bed can be equipped with other sophisticated features like Multizone Bed Exit Alarm and I-Brake. These features provide nurses with security that the patient is on the bed and the bed is always safely braked.

#### **BED EXIT ALARM**

Multi zone bed exit alarm is a part of the whole falls prevention concept. The system detects the patient motion towards the bed edge and alerts the patient and staff to the potential fall risk.



#### I-BRAKE

The i-brake is an optional feature minimising the risk of falls that may occur due to the unstable (unbraked) bed. When the bed has accidently been left unbraked, the system activates the bed brakes automatically 1 minute after the bed is plugged in to the mains electricity.



## Pressure ulcers prevention I.

### Ergoframe<sup>®</sup> extends space in problematic area

LINET devotes much attention to the problem of pressure ulcers. It has developed an integrated system of features which involves not only the function of the bed for easier prevention and treatment of pressure ulcers, but also offers LINET's own active mattress with class leading performance for pressure ulcer prevention.

#### **ERGOFRAME**®

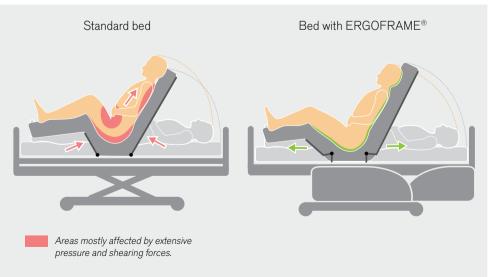
- The Eleganza 3XC bed is equipped with the Ergoframe<sup>®</sup> which extends the mattress platform in the pelvic area and reduces the pressure load on the tissues in this region.
- Up to 40% of pressure ulcers develop just in this sensitive region.
- Another cause of pressure ulcers is friction and shear of the skin. The Ergoframe<sup>®</sup> system also reduces friction between the mattress and patient's skin in the back and shoulder blade area, which consequently reduces the risk of the formation of pressure ulcers.



#### EFFECTS OF THE ERGOFRAME® SYSTEM

- Maintaining good lung ventilation.
- Reducing the risk of pressure ulcers in the pelvic, sacral and shoulder blade area.
- Patient comfort in all positions especially in the sitting position.
- Prevention of complications arising from compression of internal organs in the abdominal cavity.
- Ensuring constant head support.







### Pressure ulcers prevention II.

### Active mattress Virtuoso

Important equipment in the fight against pressure ulcers and their prevention are active mattresses. The zero pressure concept of the Virtuoso active mattress, that LINET has developed and manufactures is one of the most effective pressure relieving mattresses. It is designed for acute and long-term recumbent patients and allows effective prevention and treatment of pressure ulcers.



#### 3 CELLS SYSTEM WITH ZERO PRESSURE

- The Virtuoso is designed for a 4-section mattress platform. The brand new concept of a three-cell mattress system results in the total removal of pressure loading especially on parts of the body that are at risk. The inflation cycle of the mattress is repeated every 7.5 minutes and operates 24 hours a day. The 7.5 minute cycle is based on the movements of a sleeping person whose position changes about eight times an hour.
- The body of the mattress consists of two layers with each layer having a different cell structure. The cells are firmly connected preventing the patient sinking between the cells.



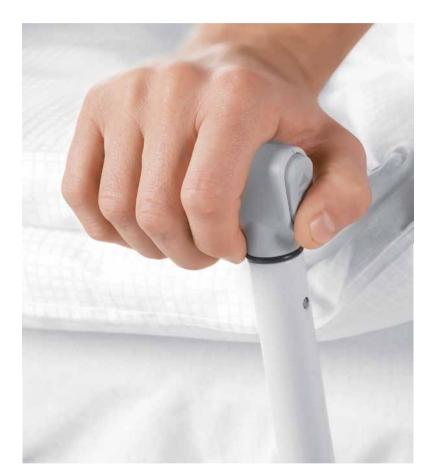
#### **3 MODES FOR EVERY SITUATION**

The Virtuoso mattress offers three operation modes: therapeutic, static and assessment modes. This enables the assessment of pressure ulcer treatment and allows for the selection of the best procedure. The panel on the ergonomically designed compressor, which is easy to handle, operates the modes and other functions.

### Recovery

### Active mobilisation

The construction of the Eleganza 3XC bed offers a full system of features for facilitating patient mobilisation in the safest and most effective way. The bed's mobilisation features save time and energy for both nurses and physiotherapists.



#### MOBI-LIFT<sup>®</sup> SYSTEM

The Mobi-Lift<sup>®</sup> mobilising handles integrated into the bed's mattress platform act as a stable support for the patient when exiting and entering the bed. The Mobi-Lift<sup>®</sup> support handles give the patient a certain amount of security and an increase in confidence. A simple bed height adjustment button is integrated into the Mobi-Lift<sup>®</sup> support handles. This function is used by the patient when they are sitting on the edge of the bed.

The rehabilitation nurse or physiotherapist assists with the patient's mobilisation but their assistance is reduced to a safer minimum level due to the mobilisation aids of the Eleganza 3XC bed. The Mobi-Lift<sup>®</sup> handles contribute to reducing much of their physical work and motivate the patient to become more active.

#### MOBILISATION PROCEDURE



The patient can sit up safely with the support of the backrest and middle side rail.



The patient can slide out the Mobi-Lift  $^{\otimes}$  handle using one hand.



Using the control integrated into the Mobi-Lift® handle the patient can adjust the optimum bed height for getting up.





## In-bed X-ray

X-ray examination of a critically ill patient is a daily routine for intensive care units. Frequent lung and chest X-ray monitoring can prevent life-threatening complications such as pneumonia or atelactasis. Thanks to the special features of the Eleganza 3XC bed, staff can perform vital diagnostic tests aided by an in-bed mobile X-ray device.

#### INTEGRATED X-RAY CASETTE HOLDER

The patient's condition is not compromised by being moved from the bed to special X-ray tables. There is also no uncomfortable lifting of the patient in order to place the X-ray cassette under the patient's back.

The backrest of the Eleganza 3XC is X-ray translucent and a holder for an X-ray cassette is fixed beneath it. The holder's special sliding construction allows the cassette to be comfortably inserted under the mattress platform from the side of the bed.



In-bed X-ray examination

#### C-ARM COMPATIBILITY

The Eleganza 3XC bed allows the performance of certain C-arm assisted cardio-surgical operations directly on the bed. Such procedures include the introduction of temporary intracardiac cardiostimulation, the insertion of catheters into the pulmonary artery for measuring haemodynamic parameters, intra-aortic balloon counterpulsation (mechanical heart support) or control of the position of the catheters or electrode stimulation.

C-arm assisted cardio-surgical treatments are enabled due to the X-ray translucent mattress platform (from the pelvic area to the head of the bed). Unrestricted accessibility of the C-arm is provided by the double column construction.



C-arm compatibility





## Infection control

The core of effective nosocomial infection prevention is perfect hygiene and the disinfection of all surfaces in a ward including the bed. The easy decontamination of the Eleganza 3XC bed is guaranteed due to the simple construction and use of joint-free technology.



#### COLUMN CONSTRUCTION [01]

The column construction on the bed is at the foundation of easier hygiene. The columns consist of smooth aluminium profiles with no difficult-to-clean gaps and joints. The construction allows unrestricted access to all the parts of the bed.



Column construction [01]



Plastic mattress platform



## Staff support

#### Examination position



#### In-bed scales

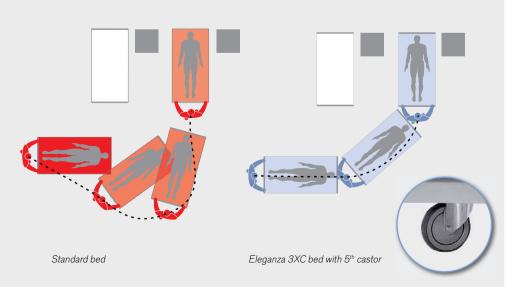
Eleganza 3XC beds can be equipped with integrated scales which can weigh the patient without the need for inappropriate or potentially hazardous transfers of the patient from the bed. The Eleganza 3XC weighing system measures the absolute values of the patient's body mass (without the effect of the bed) and detects any changes in the patient's body mass independently of the bed's position.



### 5<sup>th</sup> castor

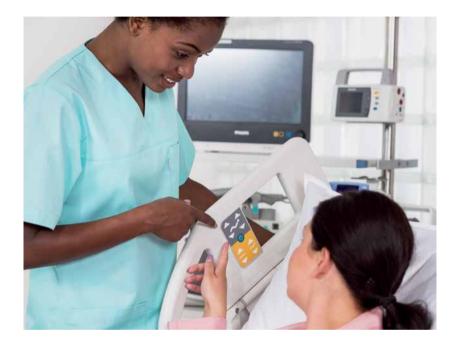
If the 5th castor is inactive it can be easily retracted into the chassis so that it does not obstruct the use of servers or patient lifters.

The 5<sup>th</sup> castor is in the central part of the undercarriage making it easier for staff to handle the bed when manoeuvring in places with a lack of space. The 5<sup>th</sup> castor allows the bed to be manoeuvred smoothly into position without repeated pushing and pulling. In long corridors the 5<sup>th</sup> castor maintains direct steering. Easy bed steering during patient transport contributes to reducing the nurses' work load.



## Controls system

The set of controls allow nurses to handle the Eleganza 3XC bed effectively and ergonomically. The patient can control some functions which contribute to their independence and good physical welfare.





Side rail control [01]



Supervisor panel [02]



Hand set [03]



Foot controls [04]



Plug & play [05]

#### SIDERAIL CONTROL [01]

The control is located in the siderail so it is easily accessible to the patient and adjusts the bed to its basic positions.

#### SUPERVISOR PANEL [02]

The Supervisor panel is ergonomically shaped and its clear graphic design is user-friendly. It contains a number of functions including 5-position memory – CPR, Trendelenburg, cardiac chair, mobilising position, examination position.

#### HAND SET [3]

The practical patient and nurse handset contains the basic bed positions including the backrest tilt and mattress platform height adjustment.

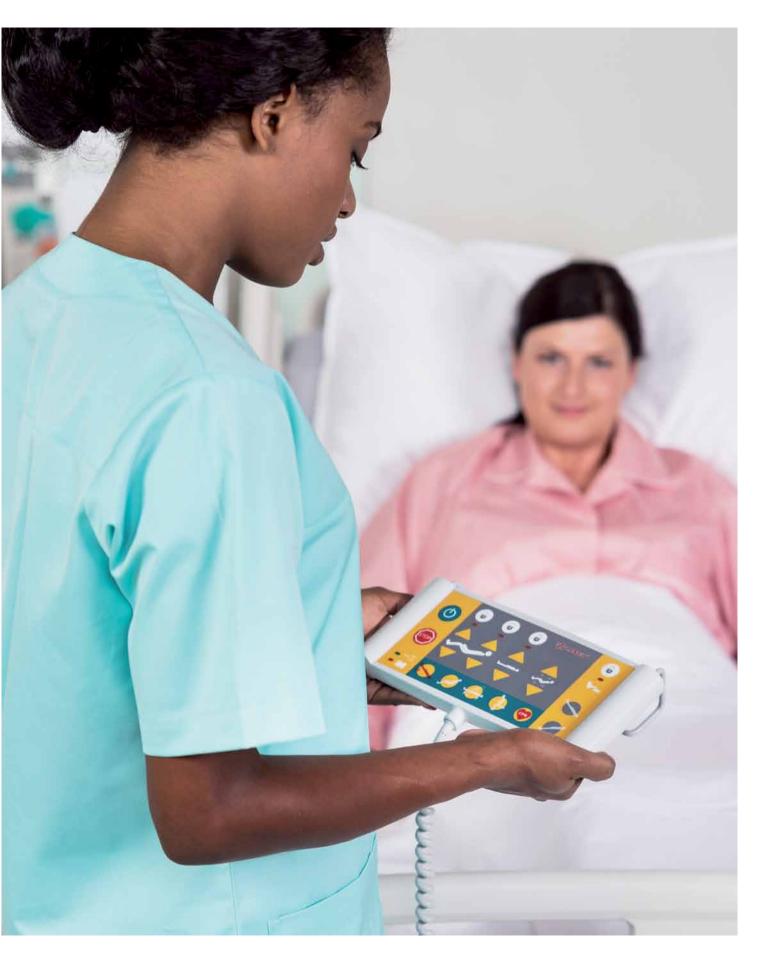
#### FOOT CONTROLS [04]

The foot controls are located beneath the bed undercarriage on both sides and enable practical and easy height and examination position adjustment. They are equipped with a mechanical protector against accidental activation.

#### PLUG & PLAY [05]

In some cases, particularly when the patient is confused, it may be appropriate to remove the remote control unit. With the Plug and Play socket located on the accessory bar, the handset unit can be easily removed.





## Ideal features for ICU

#### Features



- [1] CONSTANT HEIGHT HEAD ENDS Fixed height head end enables quick and easy access to the patient's head, neck and thorax.
- [2] SIDE RAILS Split side rails provide the patient with protection against falls and also with support during mobilisation.
- [3] INTEGRATED SCALES The in-bed scales control panel located under the foot end is protected against impacts.
- [4] MOBI-LIFT<sup>®</sup> SUPPORT HANDLES The Mobi-Lift<sup>®</sup> support handles provide the patient with more effective and safer mobilisation. The handles can be slid under the bed.
- [5] ERGOFRAME<sup>®</sup> MATTRESS PLATFORM The Ergoframe<sup>®</sup> mattress platform is the basis for ergonomic positioning.

- [6] CENTRAL NURSE CONTROL The Supervisor can adjust the bed into all positions. It contains a memory for the most frequently-used positions, GO button, STOP button, battery capacity and lifetime indicator.
- [7] COLUMNS

Electric lifting units in two columns enable the mattress platform height adjustment and all of the other positions. The column construction ensures that the bed is perfectly stable.

- [8] CONTROLS IN THE SIDE RAILS Controls in the side rails increase the patient's independence.
- [9] 5<sup>TH</sup>CASTOR

The  $5^{th}$  castor makes it easier to steer the bed around corners, especially in places with a lack of space.

[10] BED EXTENSION

The integrated bed extension adjusts the mattress platform length to the individual patient's height.

[10] LINEN SHELF

The linen shelf also stores the Supervisor panel.

[12] END LOCKS

The bed end locks prevent accidental removal of the bed ends when steering or handling the bed.

[13] FOOT CONTROL

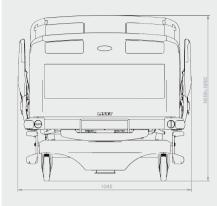
The controls are protected by a metal bar that prevents accidental activation.

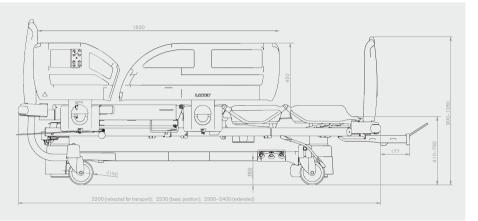
[14] X-RAY CASETTE HOLDER The holder's special sliding construction allows the cassette to be comfortably inserted beneath the mattress platform from the side of the bed.



## Parameters of Eleganza 3XC

#### Dimensions





#### Technical parameters – dimensions

Side rails in the upper position	223×104.5 cm
Side rails in the lower position	223×102.5 cm
Bed extension	+7/+17 cm
Mattress dimensions	208×86×14 cm
Max. mattress height	23 cm
Height adjustment	41.0-79.0 cm
TR/ATR tilt	±13°
Two-section folding side rails height above mattress platform (without mattress)	45 cm
Weight (basic equipment)	138 kg
Safe working load	250 kg
X-ray cassette holder for cassette	35×43 cm

#### Electric parameters

Power supply	230 V, ±10 %, 50-60 Hz
Maximum input	max. 1.6 A, 370 VA
Protection against water and dust	IPX4
Equipment classification per IEC 60601-1	Class I
Level of protection against injury from electrical current	Applied part type B
Electric motor operation mode (load factor)	10%, max. 2 min/18 min

#### Certificates

LINET is certified according to European norms and quality system: EN ISO 9001:2000, EN ISO 13485:2003.

Products are manufactured according to European norms for medical technology and hospital beds: EN 60601-1, EN 60601-1-2, EN 60601-1-4, EN ISO 14971, 93/42/EEC, 90/384/EEC and EN 60601-2-52:2010.

### Colours and decors

The Eleganza 3XC bed design meets the latest aesthetic trends in healthcare. The colour versions of the bed ends are highly variable and fully blend in with the surroundings.

The Eleganza 3XC bed is also available in a wide range of wood effects which would be well suited to any interior.









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