



Virtuoso®

Innovative Pressure Area Care

HEALTHCARE



virtuoso



INGENIOUS PATIENT SURFACE

The innovative double deck construction and fully integrated cell structure embodies leading pressure eliminating qualities.

CLINICALLY PROVEN THERAPY

The Virtuoso® therapy is based on results of extensive clinical studies and combines the advantages of 3 cell technology with frequent elimination of pressure thus mimicking the behaviour of a healthy body.

EFFORTLESS DELIVERY OF CARE

Virtuoso® system is an automatically preset system that minimises the risk of carer's errors whilst facilitating a range of nursing procedures.

COST EFFECTIVE MAINTENANCE

Innovative approach to mattress surface servicing along with Service Data Interface Unit allow fast and cost effective maintenance.



Ingenious Patient Surface

Virtuoso® innovative modular double deck construction and fully integrated cells structure provide superior pressure relief, address the individual needs of the patients different body zones and improves patient and carer's safety during nursing procedures.



[01]

[01] SKIN PROTECTION

Two ways stretchable Dartex cover is fully water proof and vapour permeable. The vapour permeability helps to reduce patient perspiration and reduce risk of skin maceration.

OPTIMUM PRESSURE RELIEF

Cover design combined with alternating action of the mattress further enhances pressure relief.



[02]

[02] CABLE MANAGEMENT SYSTEM

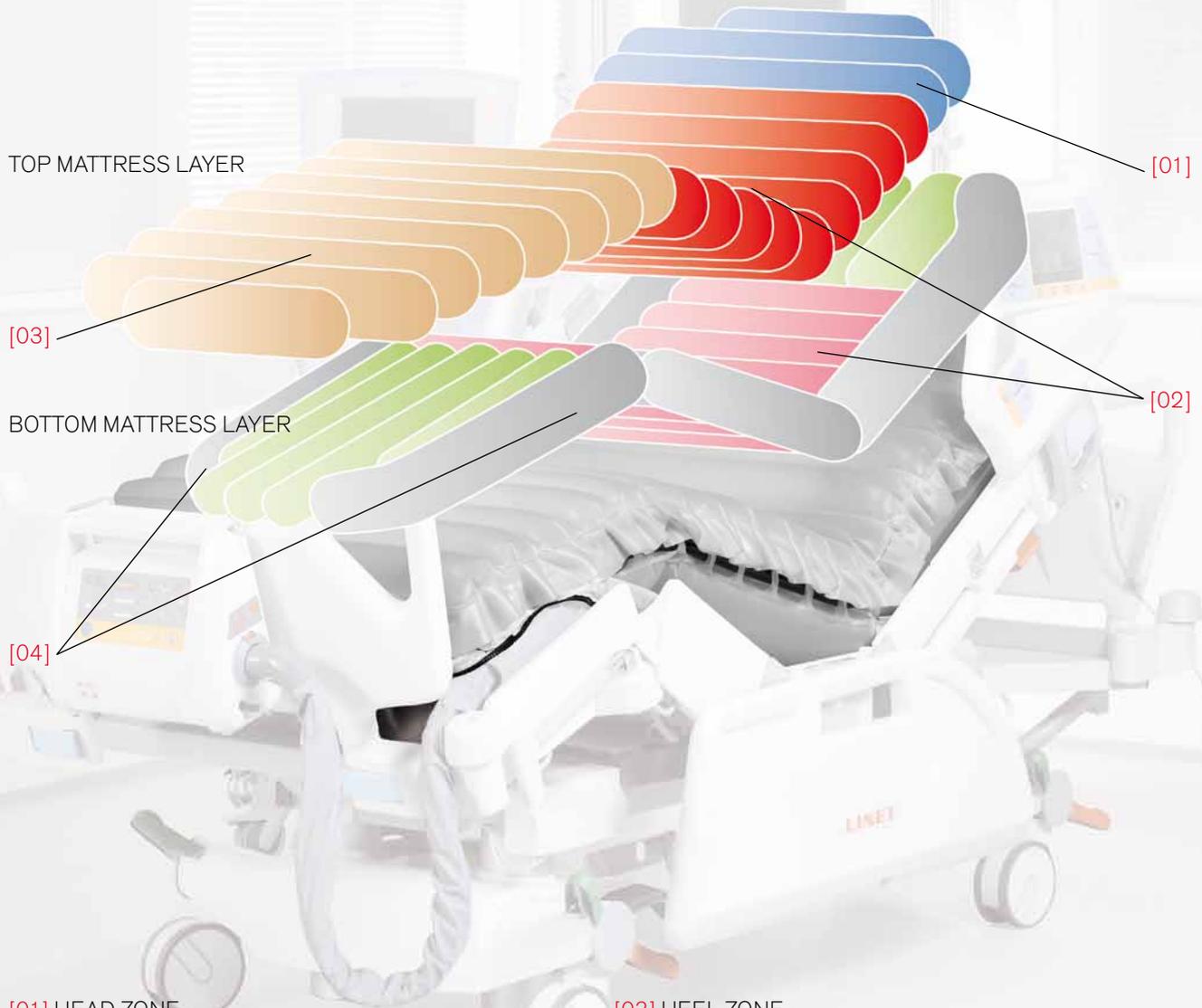
Popular cable management system keeps mains cable always in place thus preventing trip hazard or cable damage by being ran over.

INNER STRUCTURE PROTECTION

Washable Dartex cover is fully removable to facilitate laundering. Featuring welded seams and a continuous flap covering the zipper enhances protection of mattress cells.

Virtuoso Working Zones

SURFACE ZONING | The Virtuoso top deck modules are designed to create specific zones addressing the needs of different parts of the patient's body.



[01] HEAD ZONE
Head zone is static for comfort of patient and can be modified with a Head Zoner control feature providing selective setting of the cells (Static/Alternating/Deflated).

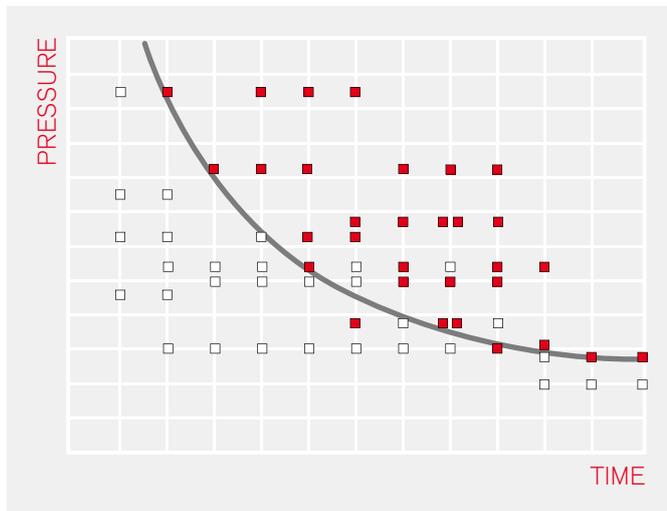
[02] TORSO ZONE
The active therapy is maximised by simultaneously alternating both lower and top deck cells.

[03] HEEL ZONE
Smaller cells provide the lowest interface pressure in this highly sensitive area.

[04] INTEGRATED SIDEFORMERS
Sideformers create a firm mattress edge to give a stable surface for patient transfer. Moreover, they increase the patient's feeling of security by cradling them when laying down.

Clinically Proven Therapy

Effectiveness of an active system is a key issue in dealing with pressure sores. Carers should be well aware of what equipment they are using and should put their patient solely on proven therapy products.



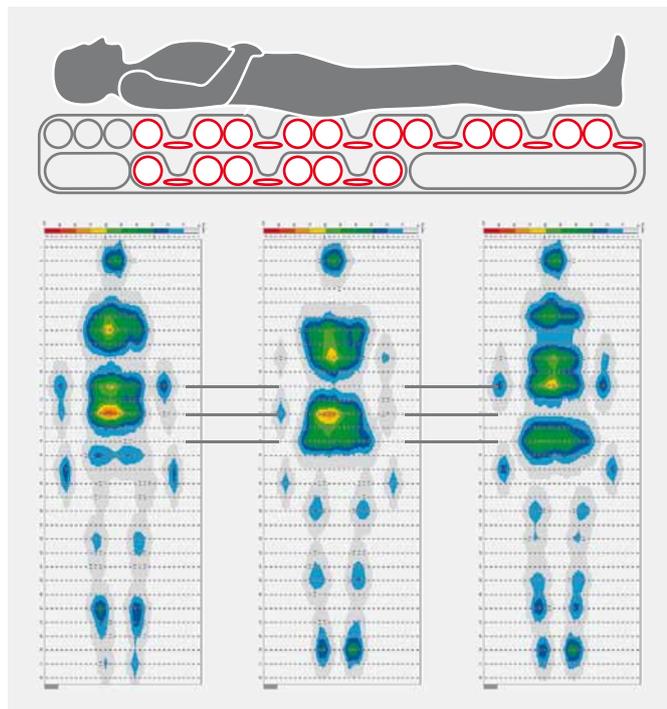
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[01] ZERO PRESSURE

Kosiak (1) studied the link between pressure and time and showed that even very low pressure when being unrelieved will over a long period of time lead to tissue damage. He concluded that "since it is impossible to completely eliminate all pressure for a long period of time, it becomes imperative that the pressure be completely eliminated at frequent intervals in order to allow circulation to the ischaemic tissues".

[02] 3 CELL TECHNOLOGY

The patient body weight is distributed onto two thirds of the surface thus allowing the mattress to be soft and comfortable without compromising its clinical outcome. Moreover, since only one third of the surface is active at a time (inflating/deflating) it provides optimum stable support to the body enabling maximum pressure relief to be achieved.



[02]

7.5 MINUTE CYCLE

Exton-Smith and Sherwin studied number of movements in healthy subjects while sleeping in order to find out what is the natural body behavior (2). They found out that none of the patients who moved more than 56 times during the night developed tissue damage. This frequency is equivalent to about one movement each 7,5 minutes.

WAVE ACTION

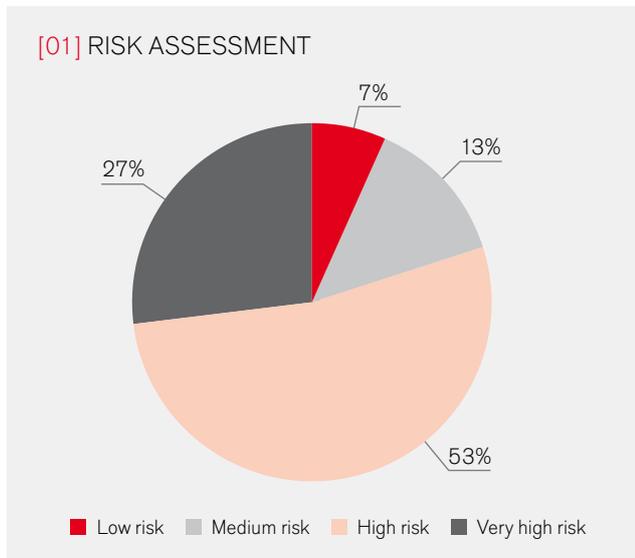
The 3 cell A,B,C inflation cycle working from the foot to the head of the mattress helps prevent the patient from sliding down in bed and requiring nursing assistance to reposition.

Virtuoso case study

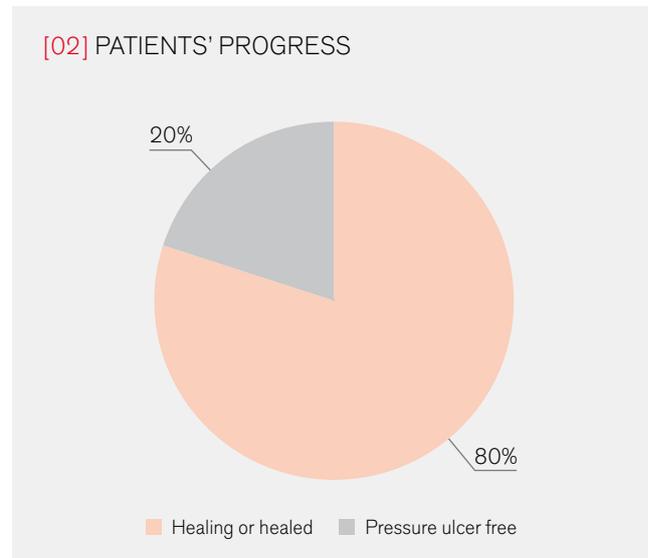
The three-cell technology of the VIRTUOSO® mimics the method by which the body usually prevents pressure damage by providing frequent complete elimination of pressure. The VIRTUOSO® is a 24-hour care pressure elimination system that provides accelerated healing of all grades of pressure ulcers irrespective of mobility.

BRISTOL ROYAL INFIRMARY, MARK GREEN B.SC. B.ED. RGN

The critical care unit used for this evaluation is part of one of the largest trusts in the UK and is a recognised centre of excellence. The Unit manages a wide range of critically ill patients with particular emphasis on neurointensive care, trauma and burns.



All patients were assessed as being at risk of pressure ulcer development.



The 80% of patients that were assessed to be at high or very high risk had a tissue damage prior to being admitted to the Unit. All of them were observed to be healing or healed whilst on the Virtuoso. The remaining 20% of patients remained pressure ulcer free.



REFERENCES

- 1 Kosiak, M., Etiology of pressure ulcers. Archives Physical Medicine and Rehabilitation. 1961; 5: 19-29.
- 2 Exton-Smith, AN, Sherwin RW. The prevention of pressure ulcers: significance of spontaneous bodily movements. Lancet. 1961; 2: 1124-1126.

Effortless Delivery of Care

Virtuoso active mattress replacement system offers a wide range of features and options to help meet the demanding needs of modern wound care and to accommodate any carer activity whilst staying intuitive and effortless to use.



[01]

[01] CARDIO PULMONAR RESUSCITATION (CPR)

Operated by one hand, CPR enables rapid deflation for emergency situations and is accompanied by visual and audio alarms to prevent inadvertent use.

[02] CARRYING HANDLES

Two sets of strong carrying handles for easy transport of the mattress are integrated in the bottom cover and conveniently located close to the mattress center.



[02]



[03]

[03] SEATING PATIENTS

The optional Alternating pressure cushion makes Virtuoso® a 24 hour system that ensures a round the clock care for your patients. The Virtuoso® SCU will automatically detect that a cushion has been connected and change its mode accordingly.

Virtuoso[®] System Control Unit

HANDLING AND OPERATING THE SYSTEM | The Virtuoso System Control Unit (SCU) is designed with ergonomics and ease of handling in mind. It is easy to carry and easy to mount on the bed. The unique air connector socket is approached easily from above reflecting the natural carer's posture. Simple to use front panel controls with their clear graphical symbols make operation easy to learn and remember.



[01] THERAPEUTIC MODE

Once turned on, the mattress automatically switches to alternating mode and adjusts the pressure inside mattress according to each individual patient's weight and position for their optimum pressure relief.

[02] RAISED BACKREST INDICATOR

Virtuoso specifically adjusts its internal air pressure if the backrest is raised or lowered in order to respond to more or less intense loading of the pelvic area.

[03] STATIC MODE

Provides firm and steady surface for various nursing procedures like wound cleaning, changing linen etc. It is equipped with an automatic safety time out to return the system to alternating mode after half an hour.

[04] EVALUATION MODE

In this mode the mattress performance simulates a high quality static foam pressure reducing mattress and has an audible tone to remind the carer to check the patient's skin condition every 2 hours. It helps the carer with the decision of when the patient can be stepped down onto a product with lower level of clinical efficacy.

[05] "GO" BUTTON

The "GO" button concept with its 3 minute time out when control have not been used lower the chance of human errors and allow the nurses to concentrate on delivery of care to the patient.

[06] CUSHION MODE INDICATOR

A visual indication on the front panel confirms to the carer that that cushion has been successfully connected.

Cost Effective Maintenance

Virtuoso® design allows highly effective cleaning and maintenance of the equipment, helping to reduce the facility costs for product upkeep throughout its life. These features combined with the use of special optional silver covers will help you achieve world class levels of infection control in your healthcare environment.

ROUTINE MAINTENANCE



[01]

[01] SERVICE DATA INTERFACE UNIT

Unit provides operation data like total hours run, fault codes with their time stamps or internal pressures through an infrared port on the side of the pump. This easy wire free access is achieved without disturbing the patient or having to open the pump.

REPAIR STRATEGY

Three level repair strategy of the mattress cells can be maintained in 3 different ways – patches, single cells or separate modules depending on the level of damage.

MARKET LEADING CLEANING APPROACH



[02]

[02] INTEGRATED CELLS

In case of a fluid ingress the connected cells stop the liquid from spilling inside the mattress keeping it on the top deck. From here it can be easily wiped off with a piece of cloth.

COVER OPTIONS

The Dartex cover material is white inside to easily identify potential leakage. Optional Dartex Silver3 cover with antimicrobial silver agents incorporated is also available.



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