Passive mattresses – comfort and safety

Passive mattresses

DECUBITUS PREVENTION

- The main principle of foam antidecubitus mattresses is to distribute patient´s body weight into the surrounding area as effectively as possible. This avoids excessive pressure being exerted on body tissues which is the primary cause of pressure ulcer development. This performance is especially important in the endangered areas of body where there are bony prominences close to the skin.
- Two way strechable cover, high quality foam core and its special profiling add up to create the antidecubitus effect.
- Optimally soft mattress allows sinking of the body into the foam core, thus reduces pressure on body areas that are at risk and copies natural shape of the back.
- The passive mattresses do not completely prevent development of pressure sores at high risk patients. However, the Linet mattresses significantly extend the intervals of patient re-positioning and furthermore, restrict skin maceration and provide comfort to patients bound to bed for long hours.

QUALITY AND PROFILING OF FOAM CORE

- Linet mattresses are made of high resilient polyurethane foam. Individual models consist of separate zones made of several different types of foams of various density, hardness and profiling.
- Linet mattresses ensures optimum softness and comfort for the patient, as well as aeration of the foam. Special shape of profiling with Flex-effect in the head and feet sections offers enough relief for regions where the body weight is concentrated into relatively small areas and therefore needs to sink more deeply to have the pressure distributed properly.
- The middle section of the mattress mostly consists of foam with large spread ability which effectively distributes body weight and releases pressure from burdened tissues.
- Rims of most of the mattresses are stiffened by tougher types of foams in order to provide a patient with defined edges. These edges bring a sitting patient feeling of safety, ease getting up from the bed and also make manipulation with the mattress easier for the caregivers because the mattress retains its overall shape.

LINTEX COVER AND MATTRESS SERVICE LIFE

- Most of the Linet foam mattresses feature Lintex cover which consists of two separate sections. The upper part is made of the two way strechable double coated Lintex fabric and the bottom part of the resistant Porotex material. The elasticity of Lintex reduces the effect of frictional and shear forces on the patient´s body while the bottom textile meets the need for firmness and slipperiness.
- The whole mattress including the cover is air permeable which helps to reduce skin surface humidity, one of the key factors in prevention of development of pressure sores.
- Lintex is covered by a goretex type membrane. Water resistance level attains a minimum of 2 000 mm of water column and it stops liquids from seeping in the foam core. At the same time the cover is breathable and ensures optimized climate inside the mattress.
- Possibility of rotating the mattress prolongs its service life and functionality. Recommended mattress replacement interval is approximately 7 years, depending on the load and functional demands throughout its life.

INFECTION CONTROL AND SAFETY

- Lintex covers are manufactured using high frequency welding which eliminates areas of stitching that can represent a possible gateway for infection. Welding of the cover fabric makes the mattress surface easily and effectively cleanable.
- Zippers are usually difficult to clean therefore Linet introduced a protective flap that prevents impurities from entering the foam core this way.
- The Lintex fabrics contain additives stopping bacteria growth, including strain of MRSA – Methicilin Resistant Staphylococcus Aureus.
- The Lintex cover can be cleaned using regular disinfecting agents and wash using neutral detergents. The foam core can be disinfected by steam according to common practice in the central sterilization wards.
- All mattress materials have reduced flammability. Parameters of core and cover inflammability are verified along with international standards.

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PASSIVE

antidecubitus MATTRESS

HEALTH- AND NURSING-CARE PROGRAM

passive mattresses

Linet foam pressure-relieving mattresses are suitable as an effective aid for prevention and treatment of up to second grade pressure sores. Due to special profiling of the core they provide perfect distribution of the patient's weight and prevent unnecessary tissue damage.

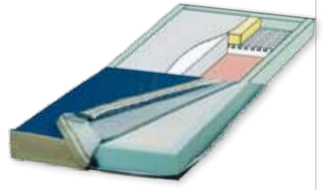
SIMCAIR ICON

- Auto-inflation valve system is totally non powered. SimCair I-Con self-inflates within 3 minutes without motor and power supplying.
- Mattress core is designed from medical grade foam protected by a multilayered internal sealing.
- The SimCair Mattress is placed in removable vapor permeable/breathable cover.
- Proven medical grade foam ensures the added pressure redistribution and comfort. Better support and alignment provides reduced pressure on tissues and joints.
- The multi-membrane surface is modified to minimize shear and friction forces to enhance blood flow to the skin tissues thereby assisting in the prevention of pressure ulcer formation
- Risk III, Norton 20-13, mattress height 13 cm, load capacity 225 kg.

ERGOMATT

- Preventive pressure reducing mattress suitable for lower risk pressure sore patients
- Especially designed for Ergoframe® mattress platform. In combination with this unique solution of the bedding area, Ergomatt provides optimum conditions for patient comfort and suppresses negative effects of positioning. Combination of Ergoframe® and Ergomatt reduces pressure in the pelvic area by 25% in comparison with a standard bed.
- The two way stretch Lintex cover and appropriately shaped foam core, in combination with thermo-elastic foam layer, favorably adjusts to all patients movements.
- The cover is waterproof, vapour permeable, its seams are welded to effectively prevent any ingress of fluids.
- Risk II - III, Norton 20-16, mattress height 14 cm, load capacity 120 kg, weight 12.5 kg.

CLINICARE



- Preventive combined mattress with a significant pressure-relieving effect. Designed for patients with a medium risk of pressure sores development and for patients with developed second-grade pressure sores. Clinicare significantly extends the intervals of positioning of risk patients.
- Clinicare is made of cold polyurethane foams (fire retardancy crib 5) with a Lintex cover.
- Mattress form three zones: head, body and heels. The section beneath the head and heels consists of three foams of different density and profiling. Foam with great distribution properties fills the centre of the mattress. The entire core of the mattress is covered with a layer of thermo-elastic foam, which also helps to distribute pressure well.
- The border of Clinicare is stiffened with high resilient PU foam. This ensures stability of the patient, comfort when sitting on the edge and better manipulation with the mattress.
- Risk III, Norton 20-13, mattress height 14 cm, load capacity 120 kg, weight 8.6 kg.

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PREMA

- Preventive layered pressure-relieving mattresses suitable for low risk pressure sore patients.
- Prema is made of cold polyurethane foam with a Lintex cover.
- The mattress core is divided into three zones according to the profiling shape. A special shape of cubes of great softness is created in the section beneath the head and heels. The profiled central section is adapted for equal weight distribution.
- The edges of the mattress are stiffened with high resilient foam to stabilise the patient and ensure comfort when sitting on the edge of the bed.
- Risk II, Norton 20-17, mattress height 14 cm, load capacity 110 kg, weight 8.2 kg.

Two directional profiled core increases the preventive properties of the mattress and the comfort of the patient.

EFECTA

- A general use mattress designed for patients at low risk of developing pressure ulcers.
- Its core is made from a high density polyurethane foam which is profiled in order to achieve effective pressure distribution and aeration of the surface.
- Cover is made from a flexible and steam permeable fabric, sewn.
- Risk I, mattress height 14 cm, load capacity 100 kg, weight 7,5 kg.

Two directional profiled core increases the preventive properties of the mattress and the comfort of the patient.

SIMCAIR OVERLAY

- Proven medical grade foam ensures the added pressure redistribution and comfort.
- Soft polymer cover has been designed specially to eliminate cracking noise when patient moves or turns.
- Faster self inflation and deflation with a dual high flow valve system – no pumps, no motors, no power.
- SimCair's unique sealed air envelope helps foam to last longer and prevent softening or bottoming out over time.
- One person can easily deflate the mattress for transport by opening the dual valves and simply exhausting the air from the overlay by rolling from one end to the other. Carry bag supplied.
- Infection control - smooth outer sealed membrane is totally waterproof which is easy to clean and disinfect by standard hospital disinfectants.
- Risk II-III, Norton 20-17, mattress height 6 cm, load capacity 150 kg.

X-Sensor DETERMINES OPTIMAL PRESSURE DISTRIBUTION

Linet passive mattresses are developed on the basis of pressure distributing measurements using the X-Sensor instrument. The device scans the rate of pressure distribution over time, so it is possible to measure a mattress on which a patient changes his position while lying on it, making a better assessment of its parameters. The result is pressure map with a resolution of up to 7 000 points indicating the mattress' pressure distribution ability. Histograms and trend curves are then available for statistical assessment. An optimal antidecubitus mattress attains pressure values in the risk spots of below 32 mmHg (so called CPP – Critical Pressure Point; the value at which tiny capillaries close up in body tissue) while commonly used standard hospital mattresses attain a pressure in certain parts of up to 150 mmHg.