



# Precioso® Series 2

Prevention and therapy for everybody, everyday





# EFFECTIVE PROVEN PREVENTION AND THERAPY

Effective and proven pressure ulcer prevention and therapy for all at risk patients in everyday general nursing environments.

#### SAFETY OF CARE

Patient and carer safety are key factors in this system design.

Precioso provides many features specifically to enhance the safety of all who come into contact with this product.

#### FLEXIBILITY OF CARE

The Precioso mattress system offers a wide range of features and options to create a flexible 24 hour care package designed to meet the pressure area care needs for nursing all at risk patients in everyday care environments.

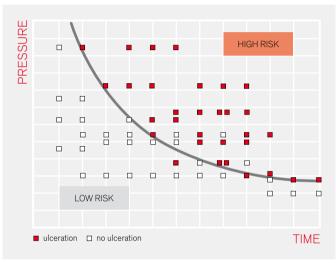
## EFFORTLESS DELIVERY OF CARE

The ease of use, cleaning and maintenance features of Precioso make nursing and maintenance tasks as simple and fast to perform as possible.



### Effective, proven prevention & therapy

Precioso with 3 cell technology provides the benefits of "**Zero Pressure**" for maximum prevention and "Regular application and removal of pressure" for maximum therapy. The 7.5 minute cell cycle simulates the body's normal response to pressure for natural protection.



#### [01] ZERO PRESSURE

Kosiak¹ 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]

### [02] REGULAR APPLICATION AND REMOVAL OF PRESSURE

The innovative design and construction of the connected air cells allows effective removal and application of pressure. This has been proven to increase the therapeutic effect of the system and promotes accelerated wound healing<sup>2,3</sup>.

#### REFERENCES

- Kosiak, M., Etiology of pressure ulcers. Archives Physical Medicine and Rehabilitation. 1961; 5: 19–29.
- West, J. et al. The effect of a unique alternating pressure mattress on tissue perfusion and temperature. Presented at the European Tissue Repair Society Conference 1995
- 3 Gunter, R.A. and Clark M. The effect of a dynamic pressure redistribution bed support surface upon systemic lymph flow and composition. Trend of Tissue Usability 10(3):10–15.

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.

#### [03] 3 CELL TECHNOLOGY [A, B, C]

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.

#### 7.5 MINUTE CYCLE

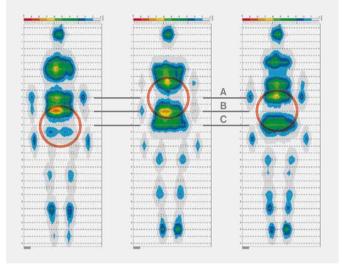
Exton-Smith and Sherwin studied number of movements in healthy subjects while sleeping in order to find out what is the natural body behavior<sup>4</sup>. They found out that none of the patients who moved more than 56 times during the night developed tissue damage. This frequency is equivalent to about one movement each 7.5 minutes.

#### [04] CONSTANT LOW PRESSURE

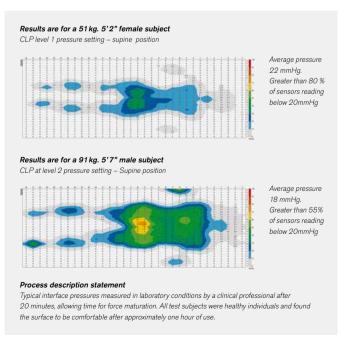
Automatically maintains the selected pressure regardless of changes in the patients weight distribution or position to achieve constantly good levels of pressure redistribution.

The use of active pressure redistribution products, such as CLP, is recommended for use for patients at higher risk of pressure ulcer development where frequent manual repositioning is not possible and is supported by direct scientific evidence from properly designed and implemented clinical studies<sup>5</sup>.

- 4 Exton-Smith, AN, Sherwin RW. The prevention of pressure ulcers: significance of spontaneous bodily movements. Lancet. 1961; 2: 1124–1126.
- 5 EPUAP and NPUAP Prevention and treatment of pressure ulcers: Quick reference guide 2009.



[03] "Zero Pressure" 3 cell [A, B, C] cycle



[04] Constant Low Pressure (CLP)

### Safety of care

Patient and carer safety are key factors in this system design. Precioso provides many features specifically to enhance the safety of all who come into contact with this product.

### [01] CARDIO PULMONARY 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] CABLE MANAGEMENT

Easy to use cable management system eliminates tripping hazard for staff and visitors. Also reduced potential power cable damage increases equipment availability and decreases repair costs.

#### [03] AIR FILLED SIDE FORMERS

Full length air filled side formers for improved patient & carer safety & security both in and while getting out of bed.





[01]



[02]



[03]

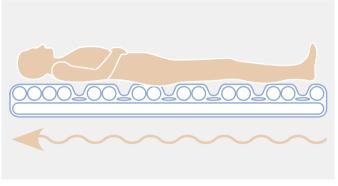
Easy, safe operation. Less staff training. More time for other tasks.



#### [04] WATER PROOF AND VAPOUR PERMEABLE COVER

Two way stretchable Dartex cover is fully water proof and vapour permeable. Prevents the infection control risk from fluid being absorbed into the mattress surface. Also reduces the risk of skin maceration due to liquid absorption and patient perspiration.





#### [05] WAVE ACTION

Three cell 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.

#### [05]



#### [06] GO BUTTON

Locks out controls when they have not been used for 3 minutes lowering the chance of human errors and accidental operation.

### Flexibility of care

The Precioso mattress system offers a wide range of features and options to create a flexible 24 hour care package designed to meet the pressure area care needs for nursing all at risk patients in everyday care environments.

#### [01] FOUR MATTRESS OPTIONS

Mattress replacement or active overlay options, provide flexibility for different facilities and for patient weights.

#### [01a] MATTRESS REPLACEMENT SYSTEM OPTION

This option is designed as a full autonomous pressure relieving system used in place of the original mattress.

#### [01b] ACTIVE OVERLAY OPTION

The overlay is designed to be used together with the existing bed mattress. It is smaller & light weight for easy handling & storage.

#### [01c, d] OPTIONAL INTERNAL FOAM MATTRESS.

For heavier patients (up to 210 kg) or those that wish to feel higher when laying in bed, an additional foam mattress can be easily fitted beneath the central air cells.

#### [02] 4 WORKING MODES - OPTIMISING CARE

ALTERNATING PRESSURE THERAPY is the basic therapeutic mode simulating the natural movement of a patient and thereby helping prevent and treat pressure ulcers.

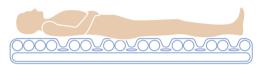
MAX INFLATE presents firm and stable support for patient care. After 30 minutes it automatically switches to the alternating mode to prevent the risk of pressure ulcers.

CONSTANT LOW PRESURE automatically maintains the selected pressure regardless of changes in the patient's weight distribution or position to achieve constant good levels of pressure redistribution.

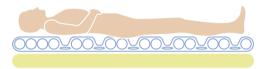
TRANSPORT MODE facilitates the transport of the patient in the bed as the mattress remains inflated for 24 hours when disconnected from the SCU.

#### [03] DYNAMIC CUSHION - 24 HOUR CARE

The optional alternating pressure dynamic seat cushion facilitates 24 hour care. Uses the same System Control Unit (SCU) as the mattress. SCU automatically changes to cushion mode when cushion connected, no manual adjustment required.



[01a] Mattress replacement system option



[01b] Active overlay option



[01c, d] Optional internal foam mattress



[02] 4 working modes



[03] Dynamic cushion – 24-hour care

# Precioso® System Control Unit

HANDLING AND OPERATING THE SYSTEM | The Precioso® 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] ALTERNATING PRESSURE THERAPY (APT) 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] MAX INFLATE

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.

### [03] CONSTANT LOW PRESSURE (CLP) MODE

Five different settings enable the caregiver to select the best level for their patient based on their clinical judgment taking into consideration the physiological factors, BMI, body position, weight and their psychosocial needs. The SCU automatically maintains the selected pressure regardless of changes in the patient's weight distribution or position. This achieves constant good levels of pressure redistribution. The smooth pressure adjustment cycle is designed for patient comfort with 2-stage reaction levels, allowing for large pressure changes caused by any sudden extreme increases in the mattress loading.

#### [04] "GO" BUTTON

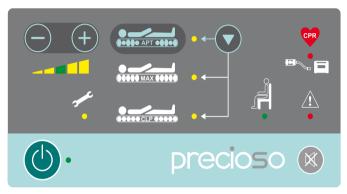
The "GO" button concept with its 3 minute time out when controls have not been used lower the chance of human errors and allow the nurses to concentrate on delivery of care to the patient.

#### [05] CUSHION MODE INDICATOR

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

### Effortless delivery of care

The ease of use, cleaning and maintenance features of Precioso make nursing and maintenance tasks as simple and fast to perform as possible.



[01]



[02]



[03]

#### [01] INTUITIVE EASY TO USE CONTROLS

The use of easy to understand pictures & indicators together with simple push button controls, make the SCU easy for carers to use. Also minimises risk of incorrect operation and training requirements giving increased safety and staff efficiency.

#### **AUTOMATIC PRESSURE ADJUSTMENT**

Fully automatic cell adjustment ensures optimum patient protection and easy system installation.

#### [02] REMOVABLE COMFORT LAYER

Separate mattress internal layer adds to patient comfort. Easy to remove for cleaning or replacement.

#### [03] AIR DECK CONSTRUCTION

The construction of the connected cells increases the therapeutic effect of the system and comfort for the patient. It prevents the patient from bottoming out and slipping between the cells. Also facilitates ease of cleaning and disinfection.

# Effortless performance of Service

Based on many years of experience supporting mattress in different healthcare settings worldwide, we have developed our service features to make your engineers life easier and keep repair costs down.

#### [04] REPAIR STRATEGY

Three level repair strategy, patches, single cells or modules, enables cost effective mattress air cell and cover maintenance.

### [05] SERVICE DATA INTERFACE UNIT (SDIU)

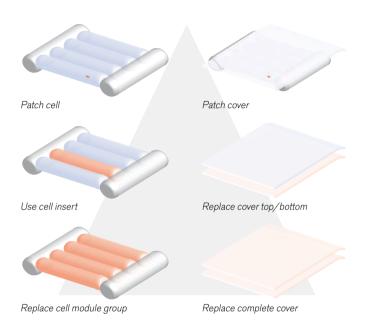
Service Data Interface Unit (SDIU) with infrared connection helps keep maintenance costs and times down to a minimum.

#### **TECHNICAL PARAMETERS**

Mattress dimensions	2000×860×170 mm
Overlay dimensions	2000×860×130 mm
Cushion dimensions	450×500×125 mm
SCU dimensions	136×360×290 mm
Max. patient weight	160 or 210 kg
Mattress weight (including	Overlay: 9 kg
compressor)	Mattress: 11,3 kg

#### **ELECTRICAL PARAMETERS**

Feed	220/240 Vac 50 Hz
Electrical safety	EN 60601-1
Protection against electrical current	Class II, Type B



[04] 3 level repair strategy



[05]

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