AK MedTec

SMART TEXTILES

Heated stretcher support

Heated vacuum mattress

04/2022

www.akmedtec.com

Prices

AK MedTec

Stretcher support

from €1,948.00
plus shipping costs

Vacuum mattress

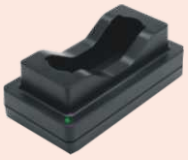
from €1,977.00
plus shipping costs

Battery

€ 269.00
plus shipping costs

12 V charger

€ 219.00
plus shipping costs



220 V charging unit (single)

€ 227.00
plus shipping costs

220 V charging unit (double)

€ 268.00
plus shipping costs

Stretcher support set

from €2,489.00
plus shipping costs

- Stretcher support
- 2 batteries
- 220 V charging unit (single)

Vacuum mattress set

from €2,518.66
plus shipping costs

- Vacuum mattress
- 2 batteries
- 220 V charging unit (single)

The heated stretcher pad/vacuum mattress

The heated stretcher pad and vacuum mattress from AK MedTec is a patent-pending system of the product brand "SMARTTEXTILES".

So far only a matter of course for every motorist

A claim that every healthy person already enjoys as a matter of course in the car.

Advantages of SMART TEXTILES

Body temperature is one of the most fundamental vital parameters of our organism.

The original aim is to supply heat to the patient by actively preheating or directly heating the stretcher support or vacuum mattress. An efficient heat supply not only helps to maintain the patient's personal well-being.

A must in emergency rescue and ambulance services

The heated stretcher pad and vacuum mattress should be the standard in emergency rescue and patient transport, not only for sick people. Many deployments and situations in patient transport justify the year-round use of SMARTTEXTILES.

Hypothermia is caused by or leads to:

- Clotting disorder
- Cardio-depressive arrhythmias
- Electrolyte shifts
- Alteration of the drug metabolism
- Infection/Intoxication
- Traumatised patients with major blood loss
- Burns
- Elderly people (reduced heat production)

Analogue or in future via app

It was very important to us that we integrate the operation for the rescue service staff in such a way that everyone finds their personal comfort zone. The SMART TEXTILES can be controlled both in analogue form directly via the control panel and in future via a control app, which is currently being developed. The app is prospectively available for iOS and Android.

GET IT ON Google Play

Download on the App Store

No chance for liquids

The heated stretcher pad and vacuum mattress offer no chance for body fluids to penetrate the interior. All seams are largely welded and internal. The control unit and the battery compartment are also protected against the ingress of liquids.

Disinfection

Careful manual cleaning is not required for a heavily soiled stretcher pad or vacuum mattress. The stretcher support can be easily cleaned of dirt with a jet of water. The relevant defined disinfection is then carried out without even coming into contact with the rest of the patient's body fluids.

Our current distribution partners

Germany

medida® Notfallausrüstung

meetB gesellschaft für medizintechnik mbH

Austria

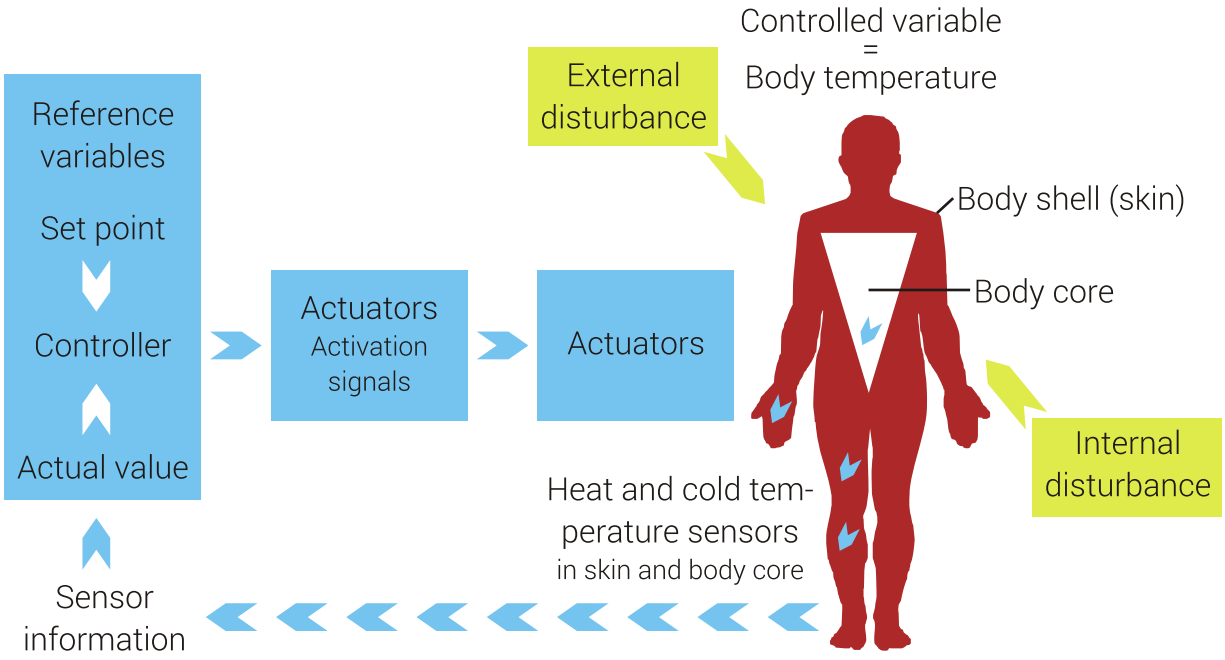
kmt koloszar medizintechnik GmbH

Switzerland

procamed cardiac medical systems

Advantages and disadvantages of warming the patient in prehospital emergency medicine

AK MedTec



Regulatory centre > Hypothalamus in the intermediary brain

1. Lateral hypothalamus: - Behavioural changes
2. Anterior hypothalamus: - Blood flow regulation / heat generation regulation / regulation of the sweat glands
3. Posterior hypothalamus: - Set point adjustment if necessary

> Hypothalamus measures body temperature and is the regulatory centre

> Adjustment of the set and actual temperature

> At deviations of - / + 0.1°C (inter-threshold range), effector mechanisms are set in motion

Hypothermia > Drop in body temperature below 36°C

1. Accidental hypothermia > "Accidental" (shipwreck, trauma, bathing accidents...)
2. Induced hypothermia > Switching off cold counter-regulation (e.g. induction of anaesthesia)

Body temperature is one of the most fundamental vital parameters of our organism. The original aim of the heated stretcher support is to supply warmth to the patient by actively preheating or directly heating the stretcher support. An efficient heat supply not only helps to maintain the patient's personal well-being.

Hypothermia leads to

1. Coagulation disorders > For every 1°C drop in core body temperature, the activity of coagulation proteases decreases by 10% > Trauma - induced coagulopathy is increased
2. Cardio-depressive effects/arrhythmias
3. Electrolyte shifts
4. Alteration of the drug metabolism
5. Immune modulation/infections

Traumatised patients / especially with major blood loss internally and/or externally

> Improvement / maintenance of coagulation

> Reduction of trauma-induced coagulopathy / bleeding control

> Protection against further heat loss

Burns

> Improvement of the coagulation

> The increased heat emission via the damaged parts of the body can be reduced

> Avoidance of hypothermia leading to further damage

Advantages and disadvantages of warming the patient in prehospital emergency medicine

Intoxication / especially alcohol intoxication

> The increased heat release due to peripheral vasodilation is counteracted
> Fewer cardiovascular complications

Induced hypothermia (during induction of anaesthesia)

> The induction of anaesthesia switches off the cold counter-regulation mechanismst
> Threatening hypothermia is avoided (especially when inducing anaesthesia in traumatised patients)

Resuscitation (with accompanying massive hypothermia)

> According to ERC 2015, mild hypothermia is the goal (32 °C - 34 °C / or also 36 °C) > for all temperatures below 32 °C, the guiding principle applies ("no one is dead until warm and dead") > Resuscitation until body temperature has reached min. 32 °C (under warming)

Diseases of the musculoskeletal system (intercostal neuralgia / tension)

SIRS (Systemic Inflammatory Response Syndrome) = Sepsis

> If temperature regulation is massively disturbed > Temperature hypothermia

Elderly people

> have impaired temperature measurement (decrease in peripheral thermo-sensory function in particular)
> have reduced heat production (due to reduced basal metabolic rate)
> In elderly people, thermoregulation is limited, especially in acute and chronic diseases

Paediatric emergencies

> Due to the changed anatomy of a child's body, children give off more heat than adults, especially in acute (non-febrile) illnesses and injuries > Avoiding hypothermia is essential

Drug metabolism improved / ensured (by avoiding / improving hypothermia)

Not recommended for

Hyperthermic disorders (except burns)

> Heat stroke
> Heat exhaustion
> Insolation

Resuscitation (if KT is in the range of 32°C to fever)

Pyrexia / fever

SIRS (when body temperature is febrile

In the complication of malignant hyperthermia during induction of anaesthesia (mutation at the ryanodine - 1 - receptor)

Local / areal inflammation

Infections of the skin / parasite infestation

Many thanks for the elaboration to Thomas Doberstein from the rescue station Oschatz.

Source reference

Physiologie Chapter 13.5 p. 507 Thieme Verlag, Physiologie Chapter 13.7 p. 511 Thieme Verlag, Notfall Sanitäter werden Chapter 7 p. 102 Frage 245 Thieme Verlag, Notfall Sanitäter werden Chapter 12 p. 166 Frage 422 Thieme Verlag, Notfall Sanitäter werden Chapter 7 p. 102 Frage 248 Thieme Verlag, Notfall Sanitäter werden Chapter 12 p. 167 Frage 425/426 Thieme Verlag, Notfallmedizin Chapter 28.1 p. 369 Thieme Verlag, Physiologie Chapter 13 p. 512 Fig. 13.14 Thieme Verlag, ERC Guidelines 2015, www.wicker.de /Pain Treatment Clinics Author Dr med. Carsten Schröter, Notfall Sanitäter werden Chapter 11 p. 148 Frage 376/378 Thieme Verlag, Physiologie Chapter 13.7. p. 511 Thieme Verlag, Physiologie Chapter 13. p. 510 Thieme Verlag, Notfall Sanitäter werden Chapter 7 p. 102 Chapter 12 p. 166 Thieme Verlag, Physiologie Chapter 13.7 p. 511 Thieme Verlag, ERC Guideline 2015, Physiologie Chapter 13.7.2 p. 512 Thieme Verlag Physiologie Chapter 13.7. p. 513 Thieme Verlag

AK MedTec

STOLLENWERK

FERNO

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KARTSANA
The Rescue Company

KOHLBRAT & BUNZ

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