



AK MedTec

SMART TEXTILES

Heated stretcher padding



www.akmedtec.com

Prices



Heated stretcher padding

1.948,00 €
plus 19% VAT
plus Shipping



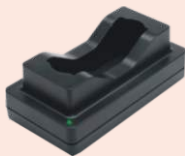
Rechargeable battery

269,00 €
plus 19% VAT
plus Shipping



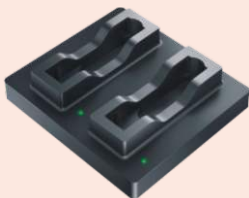
12 V-Charger

219,00 €
plus 19% VAT
plus Shipping



220 V-Charger (Single)

227,00 €
plus 19% VAT
plus Shipping



220 V-Charger (Double)

268,00 €
plus 19% VAT
plus Shipping



Set Heated stretcher padding

- Heated stretcher padding
- 2 Rechargeable batteries
- 220 V-Charger (Single)

2.489,00 €
plus 19% VAT
plus Shipping

The heated stretcher padding

The heated stretcher padding by AK MedTec is a patented system of the product brand "SMART TEXTILES".

So far, it has only been a matter of course for every driver

A claim that every healthy person already takes for granted in their car.

Advantages of heated stretcher padding

The original goal of heated stretcher padding is the prevention and regulation of hypothermia. It leads to:

- coagulation disorder
- cardiodepressive arrhythmia
- electrolyte imbalance
- Change in medication metabolism
- infections

A must in emergency rescue and patient transport

For sick people, heated stretcher padding should be standard in emergency rescue and patient transport. Many emergency situations and circumstances in patient transport justify the all the year round use of heated stretcher padding:

- traumatised patients with major blood loss
- burns
- intoxications
- induced hypothermia
- diseases of the musculoskeletal apparatus
- sepsis
- old people (reduced heat generation)
- paediatric emergencies
- improved medication metabolism

Analog or via app in the future

It was very important to us that we create the handling for the rescue service staff in such a way that everyone finds his or her own personal comfort zone. The heated stretcher padding can be controlled directly via the control panel as well as via a control app. The app is perspective available for iOS and Android.



No chance for liquids

The heated stretcher padding does not give body fluids any chance to penetrate into the inside of the stretcher padding. All seams are welded and internal. The control unit and the battery compartment cover are also protected against penetration of liquids.

Disinfection

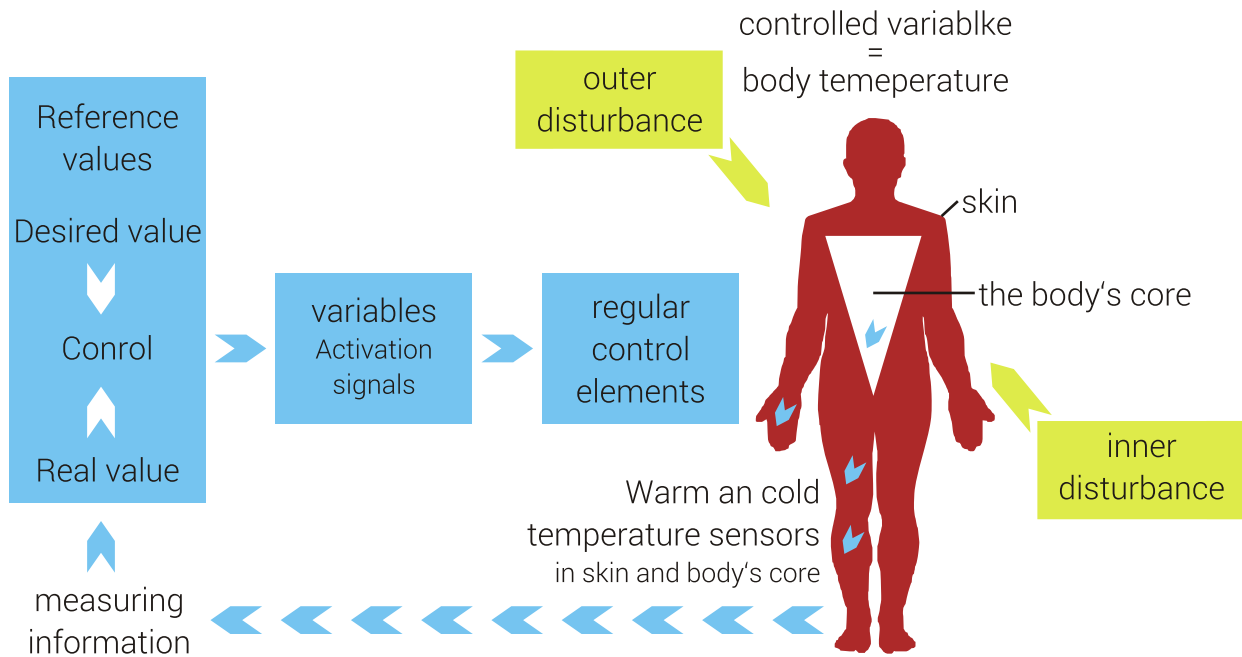
If the stretcher padding is very dirty, no careful manual cleaning is necessary. The stretcher padding can easily be cleaned from dirt with a water jet. The disinfection is then carried out as defined, without coming into even close contact with the rest of the patient's body fluids.

Distribution

In the first step of the development for stretchers of our partner Stollenwerk, our heated stretcher padding is adaptive. The development for further partners is in progress and will follow. Our current distribution partners are:



Advantages and disadvantages of warming a patient during a pre-hospital emergency



Center of regulation > hypothalamus in the midbrain

1. Lateraler Hypothalamus: - behavioral change
 2. Front Hypothalamus: - bloodstream regulation/ temperature regulation/ sweat regulation
 3. Posteriorer Hypothalamus: - possibly set value adjustment
- > The hypothalamus measures the body temperature and sets the center of regulation.
 - > Adjustment of the current and goal temperature.
 - > The difference between - / + 0,1 ° C (interthreshold range) will be set by the effector.

Hypothermia > the body's core temperature sinks to under 36 ° C

1. Accidental Hypothermia > „accidentally“ (shipwreck, trauma, bathing accidents...)
2. Induced Hypothermia > deactivation of the counter regulation for the cold (for example: through the introduction of anesthesia).

Bodytemperature is a fundamental vital parameter of our organism. The original goal of the heated stretcher is to supply heat to the patient through active preheating by the immediate heating of the stretcher. An efficient heat supply is not sufficient for the personal well-being of a patient.

Hypothermia leads to

1. Clotting > for every 1 ° C subtracted from the body temperature, the activity of the coagulation proteases sinks by 10% > induced trauma by coagulation increases.
2. Cardiodepressive effects / Arrythmia
3. Electrolyte shift
4. Change in drug metabolism
5. Immunsystem modulation / infections

Traumatized patient / especially with high blood loss both inside and out

- > Improvement / maintainance of the clotting
- > minimalizing the coagulation caused by induced trauma / circulation control.e
- > Protection against more loss of warmth.

Burning

- > Improves clotting.
- > The increasing heat emission on the damaged body parts can be reduced.
- > Avoiding further damage can cause hypothermia.

Advantages and disadvantages of warming a patient during a pre-hospital emergency

Intoxications / especially alcohol intoxications

- > The increasing heat emission through peripheral vasodilation will be counteracted.
- > Less cardiovascular complications.

Induced Hypothermia (through anesthesia)

- > The cold regulation mechanisms turn off through the introduction of anesthesia
- > potential hypothermia will be avoided (especially also with the introduction of anesthesia on a traumatized patient).

Resuscitation (with massive hypothermia)

- > According to ERC 2015, a mild hypothermia is between 32 °C- 34 °C: „no one is dead, until warm and dead“ > resuscitation until the body temperature reaches a minimum of 32 °C (through heating).

Musculoskeletal apparatus disease (intercostal neuralgia / tenseness)

SIRS (Systemic Inflammatory Response Syndrome) = Sepsis

- > A disturbance with the temperature regulation
- > Temperatur hypotherm

Elder people

- > Have impaired temperature measurements (especially a decrease in the peripheral thermal sensor function).
- > Have reduced heat formation (through reduced basal metabolism).
- > The thermo regulation is limited specifically through acute and chronic diseases with elderly people.

Pediatric Emergencies

- > These acute (not feverish) diseases and injuries give more heat than with grow-ups, because of the changing anatomy of a child's body. > It is essential to avoid hypothermia.

Improved drug metabolism / ensured (through avoiding/ improving hypothermia)

Disadvantages of warming

Hypothermic disturbance (except burning)

- > Heatstroke
- > Heat exhaustion
- > Insolation

Resuscitation (when the body temperature is between 32 °C and fever)

Pyrexie / Fever

SIRS (in case the body temperature is in a febrile state)

With complications of malignant hypothermia during anesthesia (mutation in ryanodine receptor 1)

Local inflammation

Skin infection / parasite infestation

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

Reference

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