cure & care

textile innovations

Centexbel – 1000 square (4 mm²)

Centexbel – 1000 square (1 mm²)

Centexbel – 1000 square (0.25 mm²)
Cure & Care textiles involve high-end textile innovations designed to

- restore the patient to health
- improve the patient’s comfort experience
- optimise and facilitate the work of healthcare providers and medical staff

**MOTEX - monitoring textiles**

Development of a validated intelligent textile to measure knee angles of users during physical activities. The smart textile is equipped with integrated sensors and corresponding embedded electronics. The electronics are placed on a stretchable circuit board, condition the sensor signal and transmit the data wirelessly to a smartphone app.
testing

innocuity of textiles
microbiological cleanliness
barrier properties
thermo-physiological comfort assessment

requirements of healthcare sector and patients

Nurses are daily working with disabled and elderly people and therefore have a clear idea on what innovations in textiles might be useful to make their tasks easier and improve the quality of life of their patients:

HOSPITAL LINNEN: soft, odourless, lint-free, anti-allergic hygiene textiles with increased absorption ...

MEDICAL AIDS: washable, breathable, moisture regulating, modular, attractive and comfortable support stockings, wheelchair covers, hip and knee-caps ...

CLOTHING FOR NURSES AND PATIENTS: thermo-physiological comfort, hygiene, self-cleaning, corporate image and personal identification, fit and special sizes, ergonomics

BEDDING: monitoring of sleeping disorders, comfort, bedsore prevention, hygiene (washable mattress protection cover and linen, anti-odour...)

HYGIENE: functionalised textiles to increase hygiene, prevention of bacterial contamination, eco-friendly decontamination and waste treatment, reduction of fine dust and allergens

INTERIOR TEXTILES: improved thermal and acoustic comfort, walking comfort and safety, better cleaning

ASSISTIVE TEXTILES: e-textiles for the monitoring of vital parameters, controled drugs release, remote diagnosis, alert, access control, fall detection, communication

research & development

SMART TEXTILES incorporating textile sensors for remote patient monitoring
SMART CARPETS for occupant monitoring ensuring more safety and indepence to the patient
TEXTICAMENTS with controled drugs release and cosmetotextiles
ENZYMATIC FUNCTIONALISATION of native collagen structures to be used as scaffolds in tissue engineering
NANO-FIBROUS mesh with well-defined nano-topography using cellulose for vertebral disc repair
3D-BIODEGRADABLE matrix allowing the graft of autologous ovarian tissue or isolated follicles in patients with impaired fertility following a gonadotoxic treatment
FUNCTIONALISED mattresses (probiotica, anti-odour...) INCORPORATION of smart materials (PCM, thermo-responsive materials, barrier functions...) AROMA and light therapy WOUND healing bandages ENHANCED comfort of hygiene-related textiles ULTRA-HYGIENIC wipes