



**KC**  
KUFNER & CINEL  
WEARABLE TECHNOLOGIES

COOLSTREAM™  
**Stay  
Cool.  
Perform.**

Active liquid cooling for people who  
work, move and perform in extreme heat.

PCM cooling packs · micro-pump circulation  
· 3 speed settings

THE CHALLENGE

# The World Is Overheating.

Heat is no longer only a discomfort issue.  
It is a safety and productivity challenge.

**546,000**

heat-related deaths per year  
globally — and rising

**\$1.09T**

lost labour productivity  
in 2024 alone (Lancet)

**640B**

potential work hours lost  
to heat exposure in 2024

**23M+**

occupational injuries per year  
linked to excessive heat (ILO)

2024 was the hottest year ever recorded. As temperatures above 40°C become more frequent, personal cooling becomes a practical protection strategy.

THE TECHNOLOGY

# How CoolStream™ Works.

## 1 PCM Ice Packs

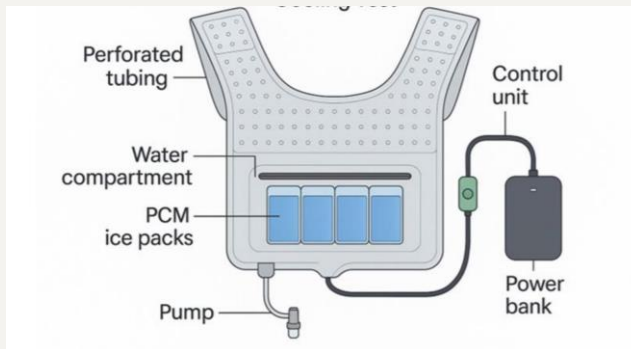
Reusable PCM packs store cooling energy and release it gradually over several hours.

## 2 Pump & Control

A compact micro-pump moves chilled water through the inner cooling structure.

## 3 3-Speed Settings

Three speed settings balance cooling power and runtime for changing conditions.



SETTING	CIRCULATION	WATER TEMP.	DURATION
MAX	Continuous	10–15 °C	2–3 hours
MEDIUM	30s on / 2min off	15–20 °C	3–4 hours
LOW	30s on / 3min off	20–25 °C	5–8 hours

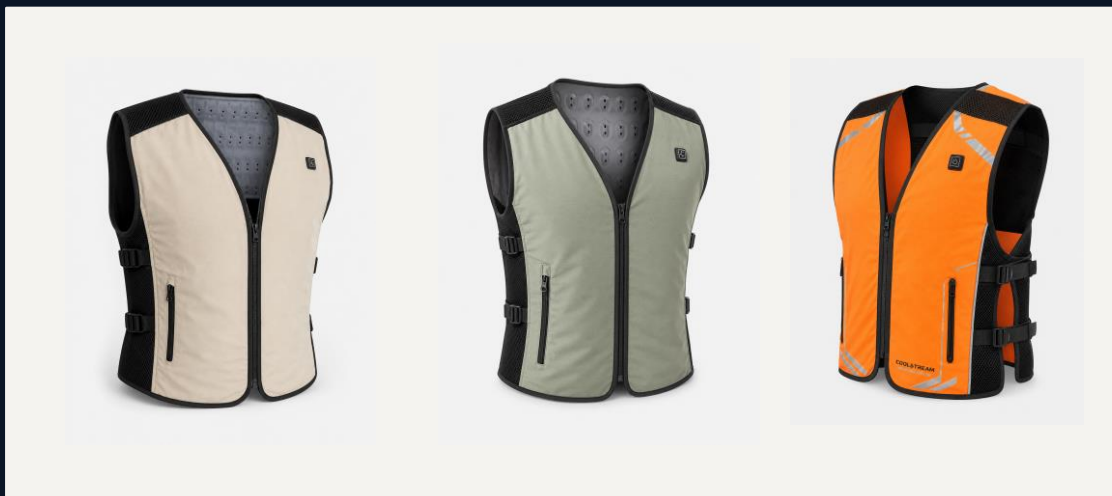
PRODUCT SPECS

# Engineered for Real Conditions.

WEIGHT BREAKDOWN

Vest	480 g
Ice Packs (x2)	140 g
Water	500 g
<b>TOTAL</b>	<b>1,120 g</b>

*Typical total system weight: approximately 1.2 kg.*



FULLY CUSTOMIZABLE, MADE TO ORDER

Fabric, colour & fit: tailored to brand, task and climate

Control button: 3 speeds, optional logo and custom position

Ice packs: water or gel PCM, size defined by application

Insulation layer: foam or aluminium for extended performance

Pump housing: sound-dampened and garment-integrated placement

# One Core. Two Shapes.

CoolStream is available in two core forms, ensuring seamless integration into any protective garment.

*Y-shaped for vests and jackets with a front opening. Circular cutout for pullover and overhead garments.*



Y-Shaped Form



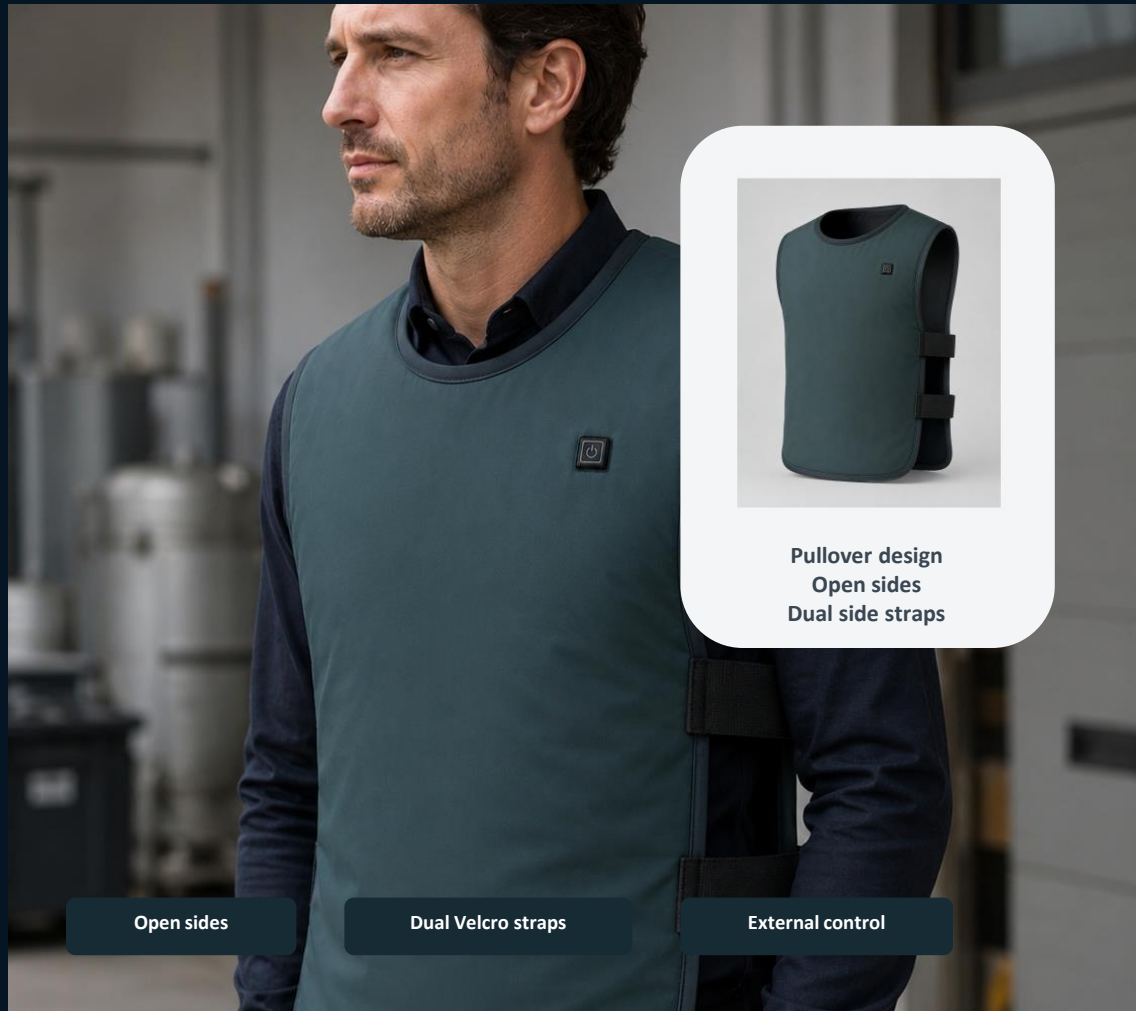
Circular Cutout

BASIC COOLSTREAM VEST

# Simple. Lightweight. Customizable.

The simplest and most scalable CoolStream configuration: a pullover vest with open sides, two clean Velcro side straps and an external control button.

*Silent pump option available.  
Colours, fabrics and edging can be adapted to each customer.*



Pullover design  
Open sides  
Dual side straps

Open sides

Dual Velcro straps

External control

# Mission- Critical Cooling.

Heat reduces alertness, endurance and decision-making when personnel cannot step away from duty. CoolStream is designed for integration under or over tactical equipment.

*Developed for field use: silent pump, adjustable cooling and up to 8 hours on low setting.*



# Ground Crew. Full Power.

Apron teams work on hot concrete, near aircraft and under strict time pressure. CoolStream provides personal cooling without fixed infrastructure during long outdoor shifts.



# Every Hole. Every Degree.

Golf and resort operations are expanding in some of the world's hottest destinations. CoolStream can be integrated into club uniforms, caddie wear or guest apparel without losing the premium look.

*Custom colours, club livery and branded components available.*



# The Coolest Hotel in The Desert.

In luxury hospitality, heat affects both service quality and guest comfort. CoolStream can support outdoor teams while also becoming a premium cooling amenity for terraces, beach clubs and resort experiences.

*Staff and guest versions can be adapted to each property.*



# The Worker Cannot Wait.

Outdoor and industrial teams need cooling that moves with them. CoolStream can be adapted for construction, logistics, utilities and manufacturing where heat exposure reduces performance and increases safety pressure.

*Dual side straps keep the vest stable while leaving the hips free for movement and ventilation.*





# One Cooling Platform.

CoolStream™ is more than one vest. It is a modular liquid-cooling architecture for heat-exposed tasks, uniforms and environments.

*One technology for many heat-exposed worlds.*

## Operations

airports · ports · logistics · delivery · warehousing

## Field Work

construction · infrastructure · agriculture · utilities

## Protection

military · police · security · fire & rescue recovery

## Premium Use

golf · resorts · hospitality · events · outdoor staff

## Special Development

working dogs · horses · transport & recovery cooling

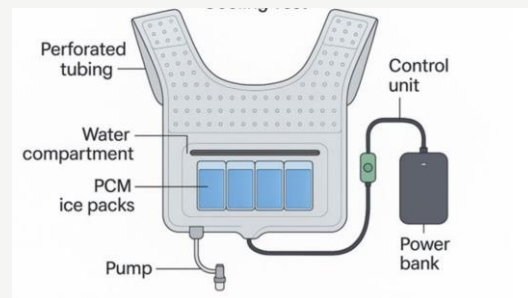
# Beyond the Vest.

The same cooling principle can be adapted into different garments, liners and contact surfaces, depending on where cooling is needed and how the product is worn.

*This makes CoolStream™ a platform, not a single product.*

Current focus: wearable cooling for people.

Future extensions: pads, blankets, car seat covers and dog coats.



## Adaptable output formats

### Cooling vests

lightweight garments for people exposed to heat

### Uniform liners

integration inside existing workwear, uniforms or PPE

### Seat & back pads

cooling surfaces for vehicles, stations or rest areas

### Animal vests/blankets

future development for working dogs and horses

### Transport & recovery

cooling after work, sport, transport or heat exposure

*Based on KC's closed-loop water circulation concept: pump, control, PCM cooling packs and garment-integrated cooling channels.*

# Animals Feel Heat Too.

*Most credible first applications: working dogs, rescue dogs, police K9 units and high-value horses during transport, rest or recovery.*



Working dogs



Horses

# Global. Flexible. Tailored.

KC partners with a global network of specialist manufacturers, from uniforms and workwear to technical sportswear and luxury tailoring.

*Tailored to climate, safety and brand requirements.  
Built in the right fabrics, fit and performance for  
each use.*



Adventure & Outdoor



Uniform & Protection



Luxury Tailoring



# Let's Talk

# CoolStream™

Custom cooling configurations for your industry, garment and climate.  
Made to order with global development and production support.

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