



HEATSTRESS  
GLOBAL



**QOOLPAX®**  
PCM COOLING

## Care, Activation & User Guide

QOOLPAX® supports occupational heat stress mitigation programmes in high-heat operational environments where cooling systems reliant on airflow and moisture evaporation are less effective.



**REUSABLE & RECHARGEABLE**  
Multi-task and reusable PCM cooling system



**NO AIRFLOW REQUIRED**  
A low-airflow, rechargeable PPE system



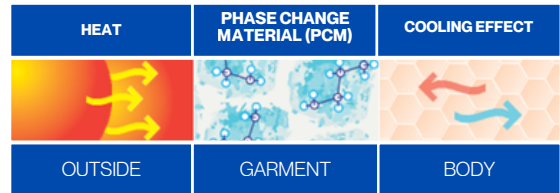
**TEMPERATURE-STABLE COOLING**  
Constant 2-3 hours cooling depending on task conditions



**ARC FLASH PROTECTION**  
Options for integration into FR, antistatic, and Arc Flash PPE

# ADVANCED PCM COOLING FOR HIGH-HEAT ENVIRONMENTS

Unlike evaporative cooling systems that rely on airflow and moisture evaporation, QOOLPAX® PCM technology absorbs and regulates excess body heat through a controlled phase transition process, providing stable cooling performance even within encapsulated or low-airflow PPE systems.



## CARE & STORAGE

QOOLPAX® should be used as part of a broader heat stress management programme including hydration, work/rest cycles, supervision and environmental monitoring

- Discontinue use if discomfort occurs or if inserts become damaged
- Do not machine wash or tumble dry inserts
- Do not puncture, cut, or damage inserts
- Store inserts flat in a cool, dry place
- Avoid prolonged exposure to sunlight or heat
- Do not place heavy objects on top of inserts during storage
- Keep away from sharp objects and open flames



For continuous cooling operations, organisations should consider insert rotation programmes allowing one set to recharge while another is in use.

## HOW IT WORKS

QOOLPAX® PCM technology absorbs and regulates excess body heat through a controlled phase transition process, providing stable cooling performance even within encapsulated or low-airflow PPE systems.

### PCM Starts Cold

Before wearing, the PCM packs, place in a freezer, icebox, or a cool environment for approximately 35 minutes to "activate" them. This means they absorb cold and store it, just like ice does.

### Heat Absorption

Once the vest is on, your body naturally gives off heat. The PCM inside the vest absorbs this excess heat from your body.

### Temperature Regulation

Unlike ice (which gets too cold and uncomfortable), PCM stays at a steady temperature (either 18°C or 28°C). This keeps you cool but not freezing, making it comfortable for 2 to 3 hours of wear.

### Slow, Long-Lasting Cooling

As you continue wearing the vest, the PCM slowly changes state from a solid to a liquid pulling heat away from your body. This process helps keep your body at a safe and comfortable temperature for a longer period.

### Warming Up & Recharging

Once the PCM has fully liquified and absorbed enough heat, it stops cooling. At this point, you need to recharge it by putting it back into a cooling environment to reset ready to activate again.



## IDEAL FOR

Field-suited for utilities, oil & gas, petrochemical, infrastructure, shutdown / turnaround operations, logistics, and high-heat industrial environments.

- Confined space operations with limited airflow
- Environments requiring sealed PPE systems
- Workers operating in encapsulated PPE
- Field personnel exposed to sustained heat loads
- High-heat environments where evaporative cooling is less effective

## READ MORE

Scan here for our Cooling Technologies FAQ

