

RIME I COOLING VEST

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Background

- Heatwaves threaten the productivity, health, and lives of workers worldwide
- This crisis will only worsen as climate change continues
- Many solutions don't work in high humidity, which is particularly dangerous

Design Requirements

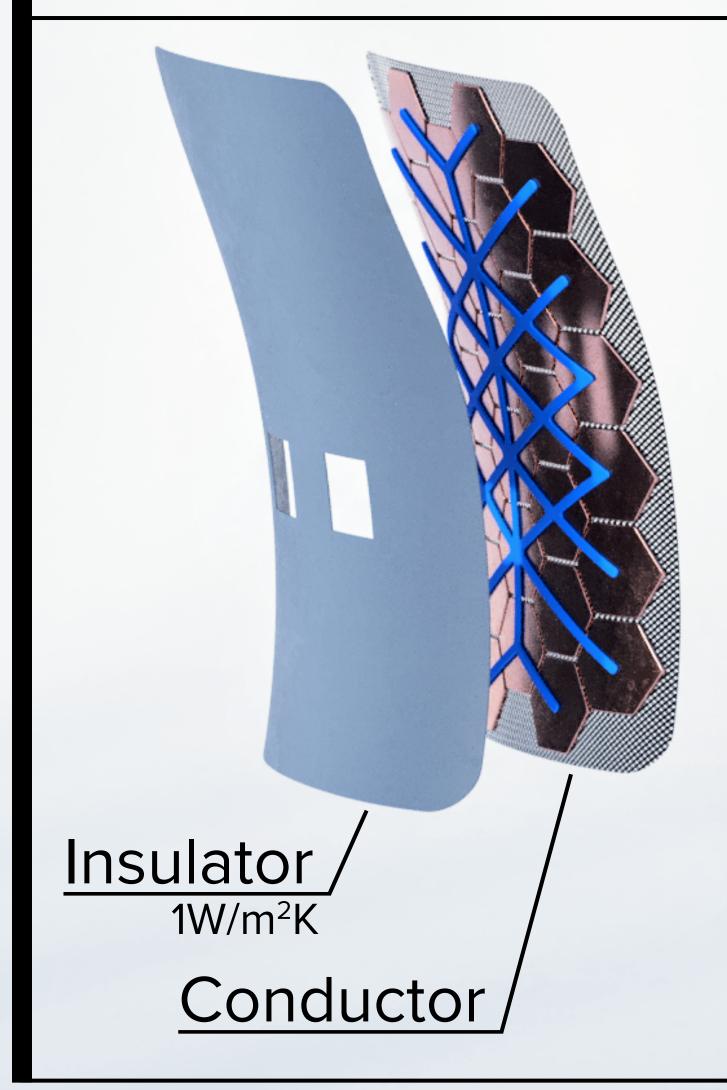
- Effectively cools user, even in high humidity
- Adjustable to a wide range of body types
- Safe, easy to use, lightweight, and comfortable under clothes

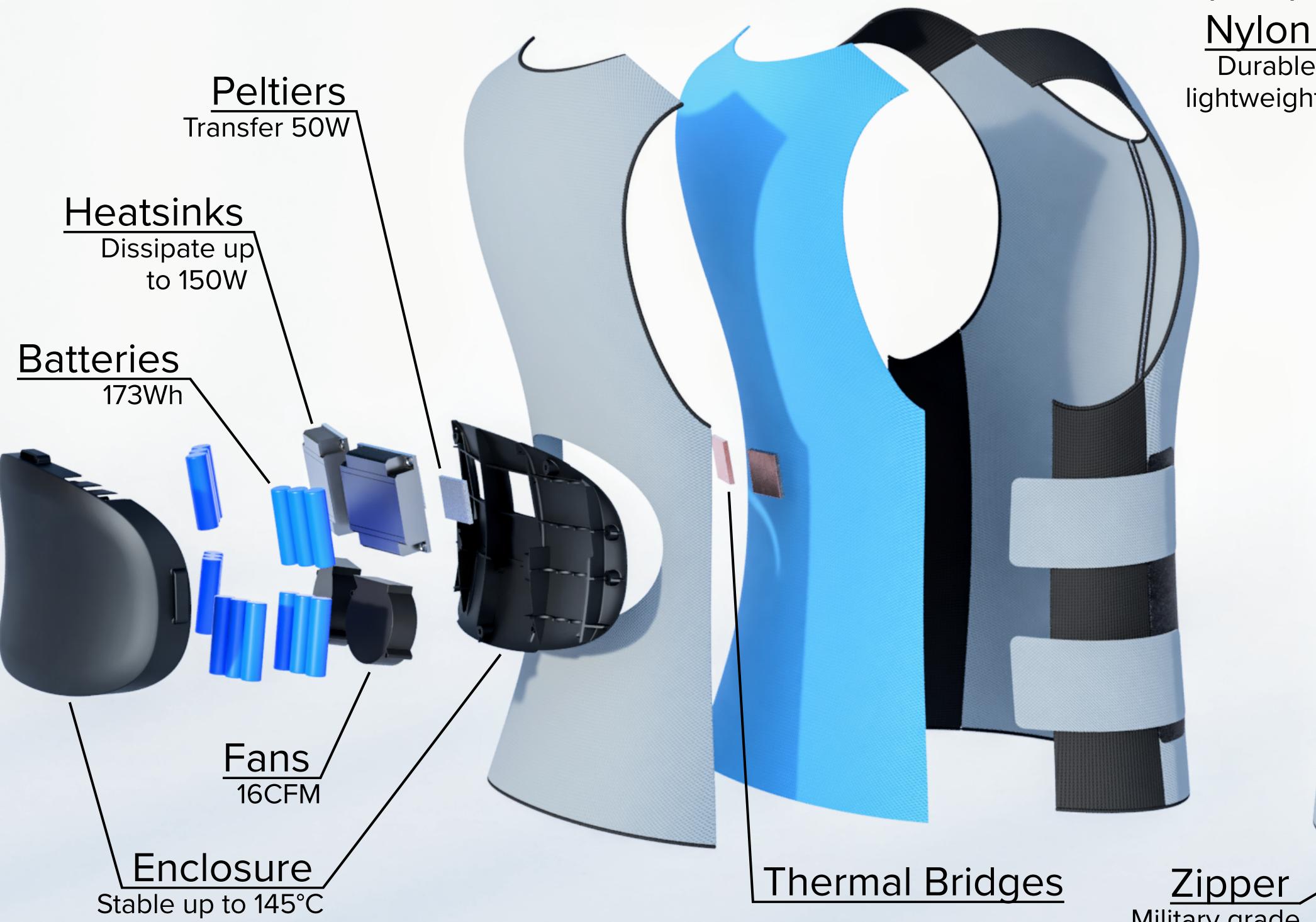
Ripstop

Lasts at least two hours

Adjustable Straps

Future Iteration





Durable, lightweight Military grade

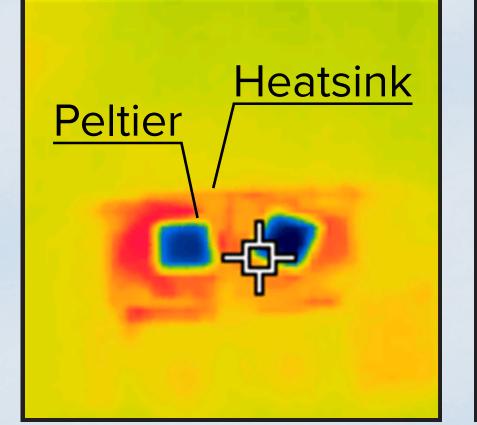
Adjustable Straps Accomodate

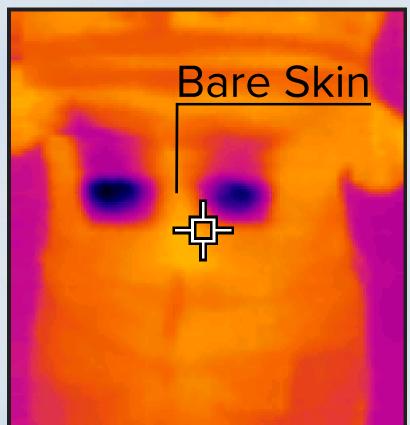
wide size range

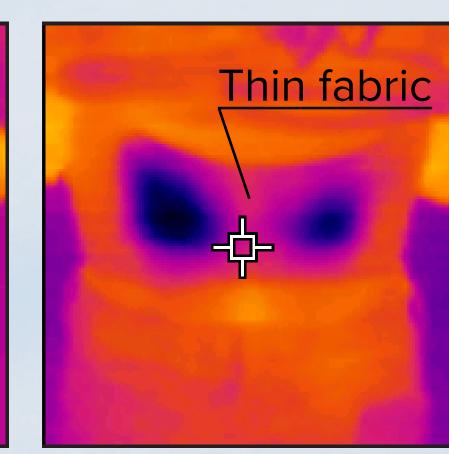
Test Results

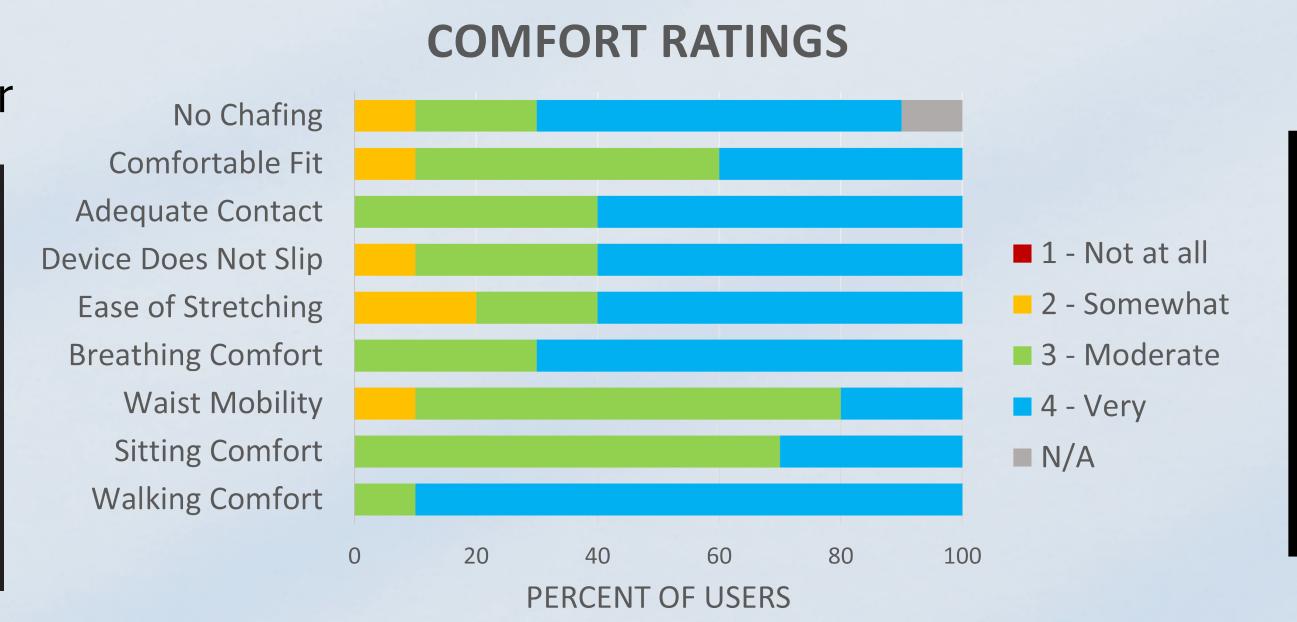
- Thermoelectric system transfers targeted 50W of heat

- Current prototype removes 40% of target heat from user









Conclusions

- Potential markets include mining, construction, humanitarian, and military

Elastic

Soft, compliant

- Textile manufacturing requires significant expertise
- Distributing cooling over a wider area is a central focus of future iteration, as is battery life