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Elastocaloric material heats up when exposed to a mechanical force field (F). When this heat is released into the environment and the force field is removed, the material supercools and extracts the same amount of heat from the environment again. The effect is reversible. In cyclical operation, the elastocaloric effect can be used to set up a heat pump or cooling machine.



Elastocaloric Cooling

USA

Thermoelastic cooling, or elastocaloric cooling, is a cutting-edge solid state based alternative cooling technology to the state-of-the-art vapor compression cooling systems that dominate the world today.

Elastocaloric coolin

Maximizing energy ef

Reducing carbon emis

Cooling technology

9 INDUSTRY, INNOVATION
AND INFRASTRUCTURE

