

## Sustainable Cooling Meets 3D Printing: MAGNOTHERM & Forward AM

### OVERVIEW

**MAGNOTHERM is on a mission to transform the cooling industry with its revolutionary magnetic cooling technology.** Unlike conventional gas-compression refrigerators that rely on harmful refrigerants, MAGNOTHERM's beverage cooler leverages the magnetocaloric effect to provide a sustainable and energy-efficient alternative. To bring this cutting-edge solution to life, the team turned to **Forward AM's resins, utilizing Creality 3D printers** for both prototyping and end-use components.

**Material:**

Ultracur3D® RG 1100 B

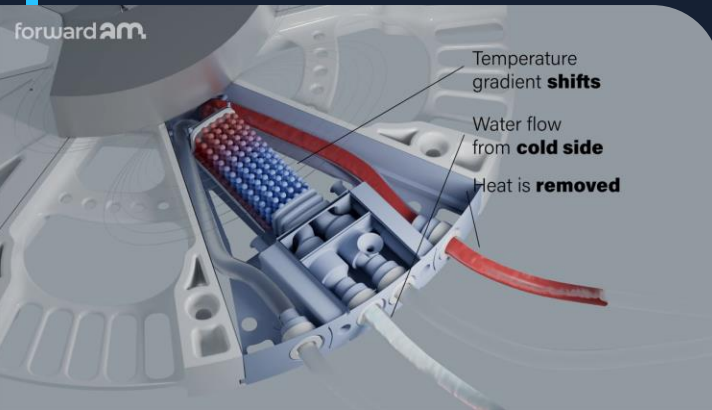
**3D Printer:**

Creality 3D

**Industry:**

Sustainable Energy

**KPIs:** 100+ AMRs  
printed monthly



## THE APPLICATION & CHALLENGE

The Active Magnetic Regenerator (AMR) required:

- **Strength & Durability** – To endure magnetic cycles.
- **Complex Geometries** – Integrated channels impossible with CNC machining.
- **Chemical Resistance** – Stability in ethanol and water.

## THE SOLUTION

Using Creality 3D printers and Forward AM's photopolymers, MAGNOTHERM produced:

- **Intricate fluid channels** for efficient cooling.
- **Integrated check valves** for simplified assembly.
- **Durable, chemical-resistant structures** for longevity.

*“Forward AM’s Ultracur3D® RG 1100 B plays a crucial role in bringing our vision to reality, delivering high-performance components that support a cleaner, more energy-efficient future in refrigeration.”*

**Jeffrey Pickett – Co-Founder & CPO at MAGNOTHERM**

[Read the full story](#) - [www.forward-am.com](http://www.forward-am.com) - [sales@forward-am.com](mailto:sales@forward-am.com)