

GEOHERMAL HEAT RECOVERY

GENERATE UP TO 150 KWE FROM MICRO-GEOHERMAL



ElectraTherm's Organic Rankine Cycle (ORC) solutions convert sources of low-temperature "micro" geothermal heat into clean electricity. A simple, robust, space-effective, and cost-effective design along with the ability to reliably generate clean electricity from sources as low as 160°F makes the system ideal for many geothermal sources previously deemed unfeasible for power generation such as near-surface hot springs, co-produced fluids, and repurposed oil / gas wells.

- // Provides up to 150 kWe.
- // Developed in cooperation with the DOE.
- // Easy installation with remote operation.
- // Global support from BITZER.
- // Simple, robust design with minimal footprint.
- // Reliable and sustainable baseload power.
- // Minimal operating costs and maximum up-time.
- // Qualifies for various clean energy incentives.*

FACTORS THAT MAKE A SUCCESSFUL INSTALLATION

HEAT

Our systems utilize heat sources above 170°F converting the heat energy into electricity. Higher temperatures typically have higher power output and therefore a faster return on investment.

RUN HOURS

Some units run all the time, and some are only used intermittently. The more time an application is operational, the faster the return on investment.

VALUE OF POWER

The power generated by the Active Cooler can be sold to the grid, or offset power used onsite. This gives the Active Cooler a revenue stream. The higher the value of power, the faster the return on investment.

*Reach out to a team member to identify what incentive(s) your project may qualify for.

CASE STUDIES



Geothermal Brine

Power Output: 50 kWe

Hot Water Temperature: 105°C

Hot Water Flow Rate: 10 l/s

Commissioned on a geothermal well in Romania, the ORC unit produces 50 kW_e - making it an ideal small-scale geothermal "power plant". The system provides electricity for export in addition the district heating system.



Geothermal Steam

Power Output: 60 kWe

Hot Water Temperature: 110°C

Hot Water Flow Rate: 12 l/s

This geothermal application utilizes a community geothermal district heating system. The excess heat captured by the ElectraTherm unit has enough thermal energy to produce a continuous 60 kW of clean electricity.



Geothermal Brine - Mining

Power Output: 55 kWe

Hot Water Temperature: 110°C

Hot Water Flow Rate: 9.5 l/s

In collaboration with the U.S. Department of Energy, ElectraTherm installed a fully-packaged ORC system designed for unattended operation at a remote mine in Nevada.

ABOUT ELECTRATHERM

ElectraTherm is a global leader in Organic Rankine Cycle (ORC) heat recovery. ElectraTherm has shipped over 100 ORC units to over 13 countries, clocking over 2,000,000 hours of operation. Supported by a group of dedicated partners and backed by BITZER, the world's largest independent manufacturer of refrigeration compressors, the ElectraTherm team continues to develop industry-leading waste heat recovery systems that are good for business and the planet.

ElectraTherm By BITZER Group

4080 Enterprise Way // Flowery Branch, GA // USA

Tel +1 (678) 267-7700 // sales@electratherm.com

www.electratherm.com

