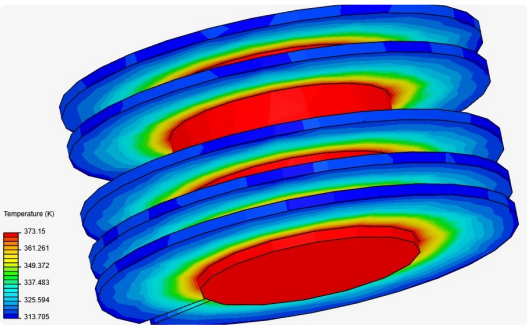
THERMAL – Thermal Radiator Equipment (TRE)

TRE (Thermal Radiator Equipment) encompasses T2E's full line of custom-engineered finned and bare-tube industrial radiators designed for heating, cooling, and conditioning ambient air or process gases using steam, hot water, chilled water, glycol, or thermal oil.

Backed by deep expertise in gas-liquid heat transfer, our radiators are tailored for vertical or horizontal airflow, include an integrated demister where required, and are engineered for easy cleaning, durability, and thermal-shock resistance.





Applications & Engineering Know-How:

- Air heating for industrial dryers (spray dryers, fluid beds) and thermal processes;
- Air dehumidification equipped with an integrated demister (mist eliminator);
- Industrial cooling, process HVAC, food, dairy, chemical, and automotive industries;
- Direct integration with filter housings, desiccant wheels (silica), air mixers, and UV sterilization banks;
- Available as an integrated assembly with our ASS Acoustic Silencer Solution;
- Specific mechanical design practices to prevent thermal cracking and water hammer in steam radiators.

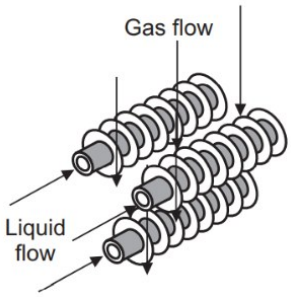
Quality & Custom Engineering:

- 100% custom-engineered to fit exact duct and plant dimensions — no rigid off-the-shelf limitations;
- Certified materials and qualified welders;
- Every TRE is released after liquid penetrant testing (PT) and hydrostatic pressure testing.

> **Note on Heat Recovery:** Although heat recovery units also use radiator technology, they require dedicated ROI optimization. For energy recovery projects, please refer to our TRR (Thermal Recovery Radiators) series.

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Safety & Maintenance Instructions:

Utility Isolation:	Before performing any maintenance or inspection, ensure the equipment is shut down and locked out from all water, steam, process fluid, and power sources.
Pressure & Vacuum Relief:	Heat exchangers may operate under pressure or vacuum. Gradually and completely relieve internal pressure before opening any connections or flanges. Never tighten unions while the unit is operating.
Temperature Check:	The equipment may operate at high temperatures. Allow the unit to cool down to safe handling levels before servicing.
Overpressure Protection:	Never exceed the specified design pressure or temperature. Whenever overpressure risks exist (improper valve closure, pump shutoff head, etc.), properly sized safety relief devices must be installed.
Gasket Maintenance:	Periodic inspection and annual replacement of all gaskets (or shorter intervals depending on process media) is recommended to prevent leaks. Periodic hydrostatic tests must be performed by qualified personnel.

⚠ During operation and maintenance of thermal equipment, proper PPE is mandatory: safety helmet, safety glasses, thermal/mechanical gloves, safety boots, and hearing protection.

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