



# SHAPE UP PRIME SURFACE PERFORMANCE

Product Literature  
PLATECOIL®



PLATECOIL®  
PRIME SURFACE HE



## Engineering Shapes PLATECOIL® Efficiency

PLATECOIL®Prime Surface Heat Exchangers combine efficiency and functionality to deliver more efficient, economical and uniform heating and cooling to any application.

Backed by ISO 9001-certified design and manufacturing processes, these highly versatile HEs adhere to the highest standards for design, manufacture and testing in the industry. And with success stories spanning 60-plus years, PLATECOIL versatility finds its way into new applications and industries each year.

Tranter is the prime surface engineering specialist. Our designers, engineers and tool and die specialists apply expertise to both one-off, special fabrications and high-volume engineered subsystems. After all, Tranter is known as the most customer-focused plate

### Better Thermal Control Than:

- Pipecoil
- Dimple sheet
- Half pipe
- Gridcoil



*PLATECOIL can be furnished as clamp-on jackets and pre-engineered bases/mixer components for fabricating jacketed reactors or upgrading existing vessels quickly and easily.*

*Anywhere you use pipecoil, PLATECOIL® units will save space and fuel.*



heat exchanger manufacturer on the market. No matter your market, application or process, if inefficient heat transfer is costing you time, money and energy, it's time to reshape your future with a PLATECOIL solution.

## The PLATECOIL Advantage

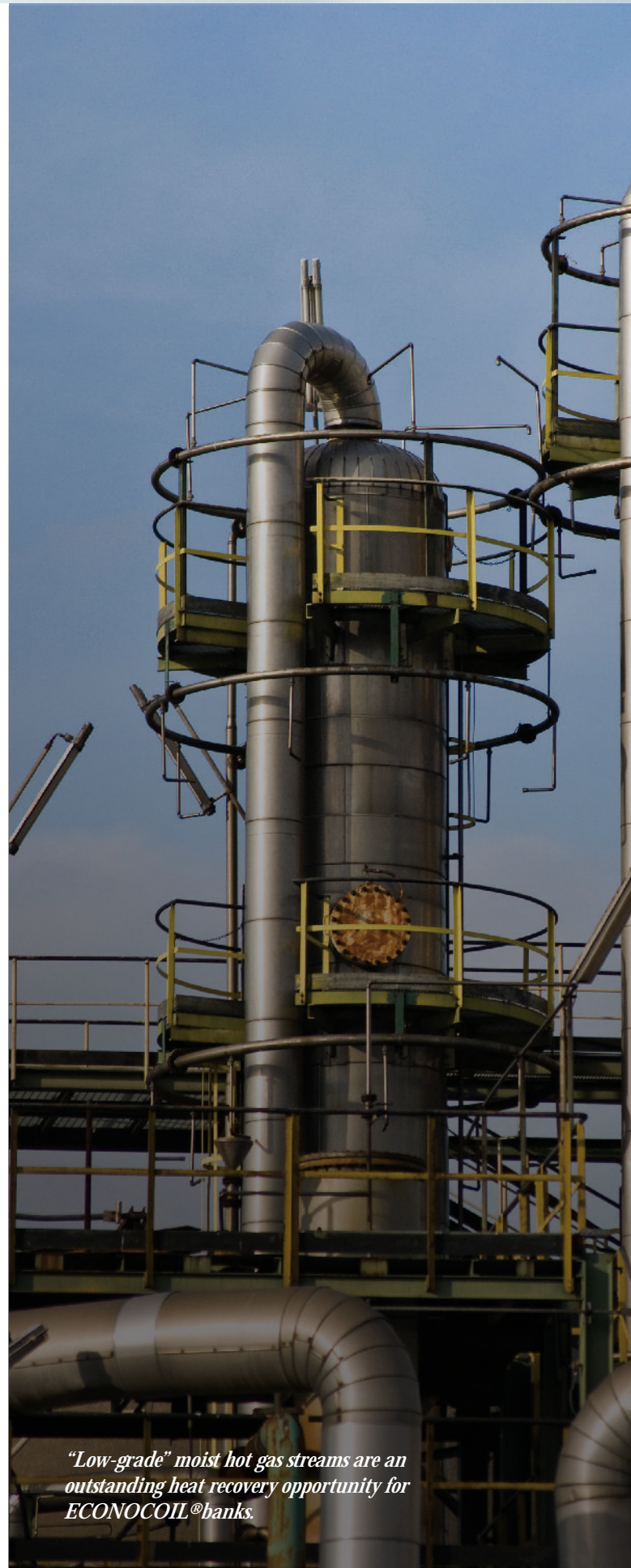
Essentially two die-formed sheets welded together, PLATECOIL panels comprise a series of passages through which a heating or cooling media flows. Highly uniform heating or cooling enables PLATECOIL panels and banks to improve efficiency and energy economy. Additionally, easy access to panels and robust cleaning surfaces reduce maintenance burdens.

Processors worldwide have used PLATECOIL to:

- Eliminate sparging for reduced water and steam consumption
- Capture waste energy from moist, wet due gases at temperatures as low as 67°C (150°F)
- Recycle low-grade heat energy from drains
- Improve economic performance in existing tanks and vessels using clamp-on retrofits

### Wide-Ranging PLATECOIL Applications

- Jacketed tanks and vessels
- Clamp-on upgrades
- Immersion heaters and coolers
- Heat recovery banks
- Suction heaters
- Bayonet heaters
- Cryogenic shrouds
- Drum warmers
- Pipe coolers
- Freeze-dry condenser banks
- Shipboard heaters and coolers
- Cascade coolers
- Refrigeration coolers
- Storage tank heaters
- Shelves
- Fluidized beds
- Gas cylinder heaters
- Sanitary/hygienic processing



*“Low-grade” moist hot gas streams are an outstanding heat recovery opportunity for ECONOCOIL® banks.*















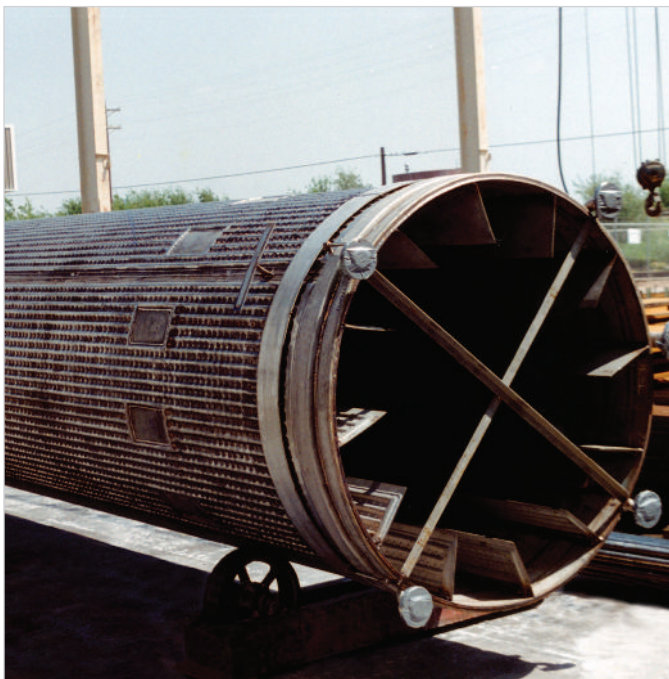
### Bayonet Heaters

PLATECOIL bayonet heaters are an energy-efficient, water-saving alternative to steam sparging for heating process vessels. Available in a range of sizes, they provide a large amount of efficient primary heating surface in a single unit. They can also be used to maintain desired temperatures in bulk storage tanks.



### Cryogenic Shrouds

PLATECOIL panels are often incorporated into large and small test chambers, surfaces for helium cryopumping and bell jar covers. Tranter's "cryogenic edge" uses a unique treatment for pressure containment and to facilitate sensitive, required mass spectrometer leak testing.



### Rotary and Fluidized Bed Dryers

PLATECOIL panels can be fabricated as shells or banks for direct contact or convection drying of solid materials such as biomass, feedstuffs or food byproducts, confections and many other solid materials. Their outstanding heat transfer rates, combined with use of heated baffles and paddles, improve drying efficiency compared to other technologies.



### Heavy Wall Vessels and Platens

Single-embossed units can be furnished highly flat on one side, with no weld marks or discolorations, as heavy vessel walls or direct-contact platens. They can be MIG spot-welded or continuously welded to ASME Code requirements. Embossings can be provided on heads or internal wall sections using MIG welding.



### Water Bath Vaporizers, Lyophilizers and Freeze Dryers

PLATECOIL can be configured as heated shelves within vacuum chambers, cabinets or ovens. Or, they can be fabricated as refrigerated surfaces in vacuum chambers to promote sublimation. Their heat transfer rates are highly controllable for precision processing. Their die-formed construction provides long life and trouble-free operation.



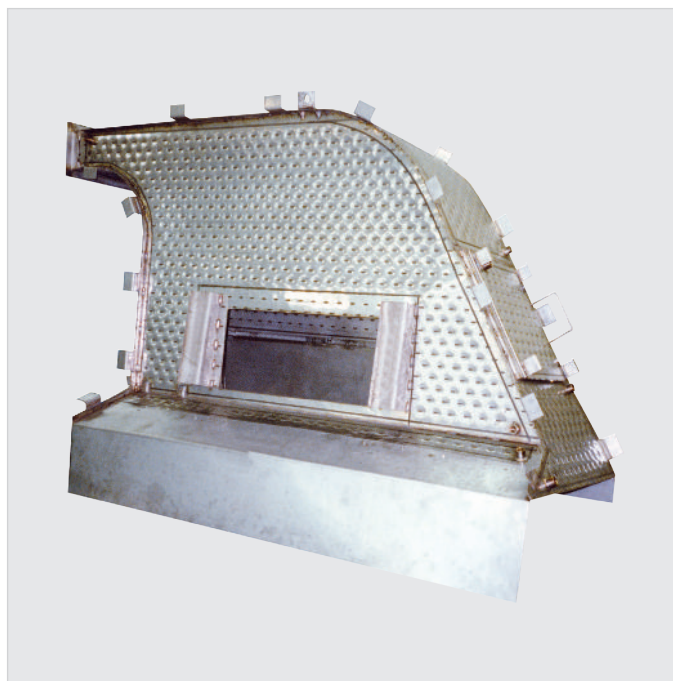
### Fluidized Bed Coolers

Cooling, drying or heating of solids is accomplished by PLATECOIL fluidized bed heat exchangers. Solid products such as molten confections are passed between PLATECOIL units in a vertically-installed bank, which employs water for cooling.



### Pipe Cooling or Pump Inlet Cooling

Pipe sections, chutes and inlet housings can be fabricated from or jacketed with PLATECOIL to cool liquids or gases. In this way, PLATECOIL can protect process equipment, rapidly halt reactions or stop flashing and phase changes.



### Sulfur Recovery

Flue sections, chutes and housings in gasification processes can be fabricated from or jacketed with steam-heated ECONOCOIL to prevent condensation and solidification of sulfur before quenching. In this way, ECONOCOIL reduces maintenance burdens and improves throughput.



## Reshape Your Future With PLATECOIL

Discover how Tranter's world-class prime surface heat exchangers can optimize your direct heat transfer processes. Just complete and submit our rapid response information request form on-line at [www.tranter.com](http://www.tranter.com). We'll contact you immediately about your specific needs. Or request a copy of the PLATECOIL Shapes Book, containing photos and illustrations of existing applications and potential configurations that could meet your needs. We can also supply you with our PLATECOIL Data Manual that contains performance and configuration details.

Any way you look at it, PLATECOIL Prime Surface Heat Exchangers will bring new and better solutions to your direct heat transfer processes.



*the PLATECOIL Shapes Book and PLATECOIL Data Manual are available upon request.*

### Need Two-Channel or Indirect Heating?

Tranter has you covered here, too. Look at our SUPERCHANGER® Plate & Frame units, our SUPERMAX® Shell & Plate, or our Spiral Heat Exchanger and MAXCHANGER®Welded Plate Heat Exchangers. Wherever you have heat to transfer, Tranter can do it more efficiently through plates.

**Tell Us About Your Needs:  
[www.tranter.com](http://www.tranter.com)**



*Plate technology for space-efficient processing efficiency. From left: SUPERCHANGER®Plate & Frame, MAXCHANGER®Welded Plate, PLATECOIL®Prime Surface and SUPERMAX®Shell & Plate.*



At the forefront of heat exchanger technology for more than 85 years

Tranter top quality, high-performance, proprietary products are on the job in demanding industrial and commercial installations around the world. Backed by our comprehensive experience and worldwide presence, Tranter offers you exceptional system performance, applications assistance and local service. Tranter is close to its customers, with subsidiary companies, agents, distributors and representatives located worldwide. Contact us for a qualified discussion of your needs.



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