

# GHT COOLING SYSTEMS MODULAR CORE FAMILY

+1 855 446 1155

f-e-t.com/GHT

GHT@f-e-t.com







# **MODULAR CORE SYSTEM**

At FET's Global Heat Transfer (GHT), we take pride in designing and engineering modular cores\* that elevate end users' operational capabilities without compromising the performance for which our units are renowned.

Thanks to direct input from our valued customers, we've developed smaller cores that allow for highly customized configurations based on specific applications.

Now, you can unlock peak performance with GHT's modular core applications. Our cores combine industry-leading heat transfer efficiency with streamlined installation, reducing your total cost of ownership. You gain uninterrupted uptime in the field while minimizing footprint and weight.

### **BENEFITS**

# Optimizing Coolant Flow

**Coolers Configured for Efficiency:** Our revolutionized approach places coolers in parallel, significantly reducing resistance. The outcome? Higher coolant flow rates which directly enhance heat rejection.

# Innovative Fouling Reduction

**Specialized External Fins:** Our engineers have developed innovative external fins to prevent fouling and ensure optimal performance. Unlike louvered variants, these external fins reduce static pressures, making fan usage more efficient.

# Cost of Ownership

**Reduced Inventory:** Our innovative approach consolidates multiple coolers into a single standard part number, simplifying stock management and reducing overall costs.

# **▶** Engineered for Performance

**Built for Endurance:** Customized to your application, our products operate to specifications even under maximum ambient conditions and fouling.

### Built to Last

**Extended Cooler Life:** Designed to endure harsh conditions, our modular core features a mounting system with three degrees of freedom, which minimizes the mechanical reactionary forces caused by thermal contraction and expansion.

## Design Versatility

**Adaptable to Any Engine:** GHT's engineers designed the modular core to fit seamlessly into any engine cooling application, combining versatility with innovation.

#### Cost-Effective Maintenance

**Quick Replacements:** GHT's modular cores make replacing coolers a breeze. Their compact size means faster individual cooler changes, minimizing downtime and maximizing productivity.

f-e-t.com/ght 2

<sup>\*</sup> The product described herein is the subject of a pending patent application in the United States and other countries.



### SERVICEABILITY BENEFITS

A horizontal radiator consists of three sections stacked on top of each other. Cleaning requires a technician to pressure wash from either the top down or the bottom up. Unfortunately, this method pushes debris into the center of the radiator, where it accumulates until a failure occurs. When this happens, the only solution is to drain the radiator, remove it from the trailer, disassemble it into its sections, and power wash each section separately. After cleaning, the sections must be reassembled, reinstalled on the trailer, and refilled. This entire process can take anywhere from 18 to 40 hours, depending on the technicians' experience.

In contrast, GHT radiators feature an innovative design that allows them to be pressure washed from the outside in under an hour without needing to be removed from the trailer. This quick and easy cleaning process significantly reduces downtime and maintenance costs and is a substantial improvement over traditional horizontal radiators.

The GHT legacy Jumbotron touts a versatile system where you can take off coolers without completely removing the unit from the trailer. Our new modular core allows the user to isolate each cooler independently of the remainder of the circuit via manually actuated isolation valves. When coupled with the small size and weight of each cooler, this feature allows the user to drain each cooler without draining the entire circuit, removing the failed cooler and replacing it with little impact on the remainder of the assembly or overall downtime.

## **Modular Core Features & Benefits**

- » A patented isolation system allows removing and replacing cores in the field without draining the radiator.
- » Integrated into the cooling system connection to the manifold is a valve that enables isolation or removal and replacement of an individual cooler on the job site.
- » The easy removal and replacement of the cores in the field without a third-party cleaning service enables offsite cleaning without shutting down operations.
- » Additionally, a single modular core can interchange with any other radiator core, simplifying inventory management and field swaps.





## **POWERTRON**<sup>TM</sup>

At GHT, we excel in engineering products that balance weight, durability, and heat transfer optimization. We are constantly innovating and evolving with the industry. The Powertron is the latest example from GHT.

Building on the success of the Jumbotron, the Powertron is specifically designed to operate in natural gas-driven applications where heat rejection requirements are significantly higher than those of traditional diesel. Combined with our innovative modular core technology, the Powertron is your best choice for this demanding application.



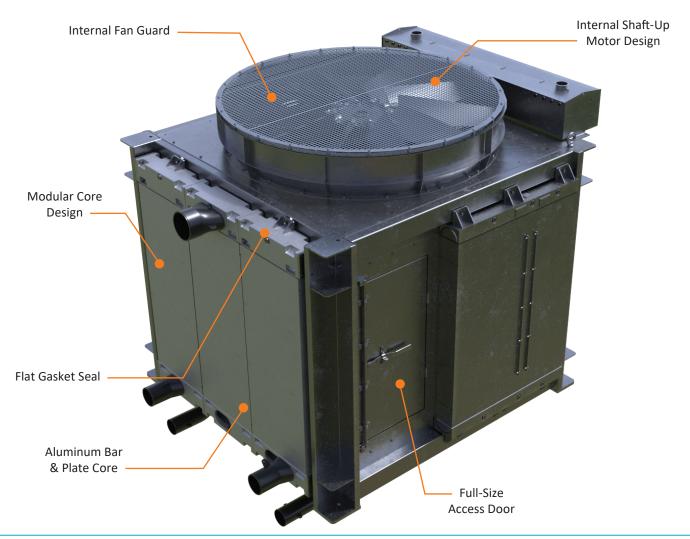


## JUMBOTRON™ MC

The Jumbotron, GHT's signature product offering, has successfully demonstrated reliable performance in diverse climates ranging from the frigid Canadian Arctic to the scorching Texas heat. With the addition of our modular core technology, the Jumbotron MC will continue to lead the market in dual-fuel and diesel-driven applications.

- The Belleville Washer Mount allows each modular core to move with three degrees of freedom, significantly reducing mechanical stresses from thermal expansion and contraction and leading to a longer-lasting cooler.
- Rated up to 140°F / 60°C ambient conditions.
- Patented Airflow Improvement Kit boosts airflow by up to 20%, enhancing ambient cooling capacity and noise reduction.
- Patented Cooler Isolation Mounts allow charge air coolers to float within the steel frame, reducing wear and tear.

- An optional Sound Reduction Kit is available.
- Hydraulic Installation Kit includes an upgraded motor with a 42,500-hour lifespan, an anti-cavitation valve, a flushing valve, and pre-installed hydraulic hoses for easy installation.
- All oil cooler ports are located at the bottom for quicker, simpler, and safer maintenance.
- Unlike horizontal radiators, you can remove each Jumbotron cooler individually without disassembling the entire frame.
- Applications Power Generation, Frac



5



## **VERTICAL RADIATORS**

Our units are designed for easy servicing, whether on-site or in the shop. Cleaning can be performed directly on the unit without removing or disconnecting any components.

Moreover, our innovative cooling solutions ensure that all GHT radiators operate efficiently, even under extreme conditions. By integrating advanced heating transfer technology, we minimize the risk of overheating and extend the operational lifespan of the units. This commitment to excellence guarantees optimal performance and reduces maintenance costs and downtime, providing our clients with a reliable and cost-effective solution.

6

## **Remote Drive Options**

- » Customization: We offer a variety of VFD-compatible electric motors with different area classifications. Whether you aim to maximize efficiency, save power, or minimize footprint, we have you covered.
- » Hydraulic Motors and OHLA Options: Our product range includes hydraulic motors tailored to your specific needs.
- » Precision Structure: We construct the supporting structure to meet the exacting standards of the oil & gas industry.

## **Direct Drive Options**

- » On-Engine Sucker or Blower Fans: We supply radiator packages with these fan options.
- » Jackshaft Units: Our jackshaft units include the entire fan drive system down to the stub shaft.







## WHY CHOOSE GHT RADIATORS?



- ▶ **45+ Years of Expertise:** With over four decades of experience as an OEM provider, we have mastered the art of building high-quality radiators.
- Durable Construction: Designed and built to endure harsh conditions and high vibrations, our radiators minimize downtime.
- Holistic Solutions: We offer comprehensive solutions beyond radiators, tailored to meet your performance, environmental, and emission requirements.

# **Applications Served**

At GHT, we specialize in creating robust cooling systems for diverse industries. Our project managers meticulously review each application to ensure precise sizing for optimal performance. Our proprietary thermal rejection software ensures that every cooling system we supply is tailor-made for your unique needs.

#### **POWER GENERATION**

Diesel Engines
Dual Fuel (Diesel/Gas)
Gas Reciprocating Engines
Hydrogen Engines

#### OIL & GAS

Frac / E-Frac Operations
Frac Pumping Units
Blenders
Turbine-Powered Cooling Systems
Drilling
Production
Vapor Recovery Units (VRUs)

#### **GAS COMPRESSION**

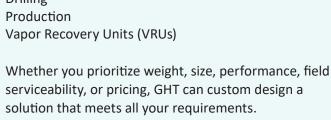
Gas Cooling Air Cooling

# RENEWABLES

Oil Cooling

## **MINING**

Engine Cooling Ancillary Equipment





# **COOLING SOLUTIONS**



## **OUR CORE VALUES**

## No One Gets Hurt

The safety of our employees and customers is our first priority coupled with a healthy respect for the environment.

# **Integrity**

In everything we do, in every interaction, both internally and externally, we strive to operate with the utmost integrity and mutual respect.

## **Customer Focused**

Our products enhance our customer's performance and we listen to their needs and work with them to solve their challenges.

## **Good Place To Work**

We are committed to creating a workplace that fosters innovation, teamwork and pride. Every team member is integral to our success and is treated equally and fairly.

## FET | Global Heat Transfer (U.S.)

- 14446 Smith Road Humble, TX 77396
- +1 855 446 1155

# FET | Global Heat Transfer (Canada)

- 4755 Eleniak Road Edmonton, AB T6B-2N1
- +1 780 448 3600

# FET | Global Heat Transfer (Permian Basin)

- 4501 S. County Rd. 1310 Odessa, TX 79765
- +1 432 789 1541
- f-e-t.com/GHT
- GHT@f-e-t.com