

# ROUND TUBE PLATE FIN HEAT EXCHANGERS NORTH AMERICA



Heatcraft operates several advanced manufacturing facilities across North America, including three state-of-the-art heat exchanger facilities in Grenada, MS (at two locations) and Juarez, MX. These facilities leverage cutting-edge technologies to produce high-efficiency, precision-engineered products for global markets.
Specializing in a wide range of solutions for industries such as HVAC/R, Heatcraft's focus on innovation and quality ensures they meet the increasing demand for high-performance thermal management solutions across various sectors.



# OUR BRAND. OUR STORY.

The name Heatcraft® is a globally recognized brand known for its extensive contributions to the HVAC/R industry. With a legacy of over 65 years, Heatcraft® has become a leader in providing highly specialized and diverse metal products for a wide range of applications, including commercial, industrial, residential, transportation, refrigeration, precision, and replacement markets. Our product offerings have evolved to meet the demands of nearly every heat transfer application. Utilizing a variety of long-life materials such as copper, aluminum, and stainless steel. Heatcraft® designs and manufactures custom heat transfer products tailored to customer specifications. Our solutions' core is advanced coil technology, which reflects our commitment to innovation and quality. Building on our manufacturing expertise, Heatcraft® operates a cutting-edge coatings facility in Juarez, Mexico, along with two ElectroFin® coating locations in Jacksonville, TX, and Louisville, KY, enabling us to deliver custom solutions that meet the unique needs of our global customers. Known for our technological advancements and product excellence, Heatcraft® continues to set the standard for performance and reliability in the HVAC/R market.



# **CUSTOM HEAT TRANSFER SOLUTIONS**

We design, manufacture, and test heat transfer products for a wide variety of applications and markets. We're at work in practically every corner of the world, delivering the solutions our customers need where they need them. Whether you are looking for one custom-designed heat exchanger or a million, we can help. Whatever your goal, we have the knowledge and tools to support you.



We take FORM, FIT, and FUNCTION to the next level. Our Heatcraft® heat transfer brand is well-recognized globally for quality construction, exact fit, and long-life operation. Our team of experts are skilled engineers and craftsmen who have the experience, capabilities, and facilities to turn your order quickly and efficiently.



# FOR ALL APPLICATIONS **HEAT EXCHANGERS**



#### COMMERCIAL

ROOFTOP, HVAC UNITS, COMMERCIAL HVAC UNITS, HEAT PUMPS, CHILLERS, HOSPITALS, CLEAN ROOMS, MULTI-FAMILY AND COMPLEX RESIDENTIAL, LAUNDRY AND DRY-CLEANING

#### REFRIGERATION

AISLE COOLERS, CHILLERS, COMMERCIAL REFRIGERATORS, REACH-IN COOLERS, FREEZER CASES, REFRIGERATED TRUCKS AND TRAILERS, BOTTLE AND BEVERAGE COOLERS, COMMERCIAL ICE MAKERS

#### PRECISION

DATA CENTERS, SERVER FARMS, CELL TOWERS, MRI, HOSPITAL SURGERY ROOMS, SECURE ENVIRONMENTS, CHILLERS, PHARMACEUTICAL, LABORATORIES

#### MOBILE

RECREATIONAL VEHICLE (RV), TRANSIT BUS, FARM AND AGRICULTURE EQUIPMENT, OFF-HIGHWAY EQUIPMENT, MINING EQUIPMENT, AIRPORT SHUTTLES

#### **INDUSTRIAL**

OIL, GAS, AND CHEMICAL PLANTS, POWER GENERATION AND TRANSMISSION, PAPER AND PULP MILLS

#### RESIDENTIAL

FURNACE, WATER HEATER, GEOTHERMAL HEAT PUMP, APPLIANCES

#### **ENGINEERING SUPPORT**

We provide full-service engineering, including thermal engineering, mechanical design, prototyping, and pilot production. Our engineers evaluate your specifications, tolerances, and applications to estimate system performance accurately and then offer recommendations to enhance further system performance – accelerating the product development cycle.

#### QUALITY CRAFTMANSHIP

At Heatcraft Coils, we are committed to the continuous improvement of all processes, beginning with the very best in raw materials. We set rigorous vendor standards to maintain the quality of materials used in the fabrication of our heat transfer products. From order entry to shipping, and from prototype design to production manufacturing, our focus on quality is unyielding.

#### **MATERIAL & CONFIGURATION OPTIONS**

Our standard copper and aluminum heat exchangers are available in a wide range of tube sizes, tube patterns, and fin corrugations, which combine to form a large portfolio of unique fin surfaces. Each is produced under a stringent set of quality and testing standards.

#### **CUSTOM DESIGNS**

We work closely with our customers to optimize product design and improve operational efficiency for any application. No matter the challenge or application, we have the expertise and resources to find the right solution for you.

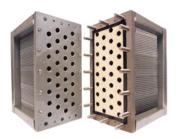
#### **CUSTOMER CENTRIC**

At Heatcraft Coils, we put our customers at the center of everything we do. Our heat transfer solutions are tailored to meet your specific needs, ensuring efficiency, reliability, and performance. We're committed to delivering products that help your operations run smoothly and cost-effectively, always with a goal of not only meeting but exceeding your expectations.

# **COIL TYPES**













#### FLUID

Heatcraft® Fluid Coils are customized to meet the specific needs of your application, offering flexible manufacturing options such as various fin types, densities, circuitry, casings, and materials. These coils can incorporate drainable circuity and designs, enhancing ease of maintenance and streamlining the coil drainage process. Available in standard, module, booster, and cleanable versions, they provide versatile solutions for a wide range of applications.

#### **STEAM**

Heatcraft® Steam Coils are used in industrial air heating, processing, and HVAC applications and are available in distributing and non-distributing options. They utilize steam's latent heat, released when steam condenses from vapor to liquid. Designed for efficient condensate management, these coils prevent water hammer and ensure even steam distribution. Available for both high and low-pressure applications, they provide an effective way to heat air.

#### MODULAR

Heatcraft® Modu-Coil (modular coils) offer alternative replacement solutions where one-piece coils are more significant than the space needed to maneuver them into their operation location. This unique construction allows each module to fit in elevators and tight spaces, thus making the coil's transportation and installation easier.

#### **CONDENSER**

Heatcraft® Condenser Coils are used for de-superheating, reheating, and traditional condensing in HVAC and refrigeration applications. They cool superheated vapor from the compressor to saturation, condense it into liquid, and then sub-cool it to a desired temperature below saturation.

#### **EVAPORATOR**

Heatcraft® Evaporator Coils are engineered for efficient operation with all refrigerants, offering excellent performance for comfort cooling, process cooling, and dehumidification. Our direct expansion coils maximize heat transfer efficiency in all operating conditions.

#### M.A.R.C. UNIT

Heatcraft® Modular Auxiliary Removable Coil Unit (M.A.R.C. Unit) is a cased coil that can accommodate any coil type we manufacture. Its seams are sealed with silicone and weather stripping for a leak-free case. Unlike other cased coil units, the M.A.R.C. unit allows the coil to be removed through an access panel.

## CUSTOM COIL COMPONENTS

We prioritize using premium materials in our commercial products, guaranteeing exceptional quality and performance. By upholding rigorous supplier standards, we ensure that every component, whether for commercial applications or custom designs, meets the highest industry benchmarks for durability and reliability.

#### TUBE CAPABILITIES

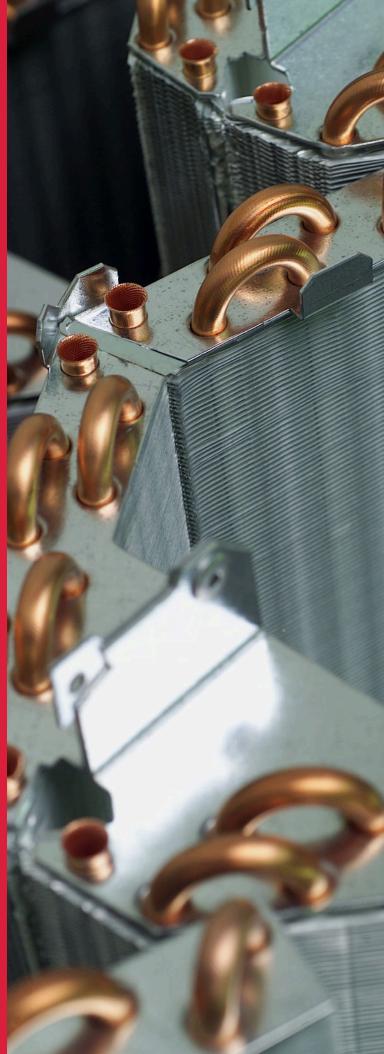
DIAMETER (mm)	THICKNESS	MATERIAL
3/8"	0.016" 0.020" 0.030"	Copper, Rifled Copper Copper Copper
1/2"	0.016" 0.022" 0.030"	Copper, Rifled Copper Copper Copper
5/8"	0.020" 0.025" 0.035" 0.045"	Copper Copper, Cupro-Nickel, Stainless Steel Copper, Cupro-Nickel Copper, Cupro-Nickel
1"	0.035"	Copper

#### FIN CAPABILITIES

MATERIAL	STYLE
ALUMINUM	Flat, New Ripple (Corrugated), Sine Wave, Raised Lance
COPPER	Flat, New Ripple (Corrugated), Sine Wave
STAINLESS STEEL	Flat, New Ripple (Corrugated), Sine Wave

#### SURFACE TREATMENTS

ElectroFin® Heresite® Insitu®





### **OEM COIL COMPONENTS**

**OEM** coil components are essential for efficient heat transfer and system performance across various industries. Crafted with highquality materials and precision manufacturing, these components ensure reliability and durability in applications like HVAC and industrial equipment, delivering long-lasting performance through trusted **OEM** partnerships.

#### **TUBE CAPABILITIES**

TUBE	ТҮРЕ	MATERIAL
Copper	0.197 (5mm) 0.250 0.276 (7mm) 0.3125 0.375 0.500	Smooth Rifled
Aluminum	0.276 (7mm) 0.312 0.375	Axial Groove
29-4C Stainless Steel	0.375 0.500	Smooth

#### **FIN CAPABILITIES**

FIN	STYLE	
ALUMINUM	Flat, New Ripple (Corrugated), Hi-F (Sinewave), Louvered, Raised Lance	
COPPER	Flat, New Ripple (Corrugated), Hi-F (Sinewave)	

#### SURFACE TREATMENTS

**Epoxy Coating ElectroFin®** Insitu®

# CERTIFICATIONS

#### **AHRI CERTIFIED**

Many of our custom commercial coil products include an AHRI Certification. In the world of custom products, it is not always reasonable to prototype coils and tweak designs to meet performance characteristics. AHRI certification means independent third-party verification of our CoilCalc NG design software regularly, ensuring the coil you receive performs as predicted.

#### **UL RECOGNIZED**

Heatcraft® OEM products are UL Recognized within the program's scope. Coils are UL-listed so that when OEM Manufacturers use them, the component does not have to be re-qualified.

#### **ASME CERTIFIED**

ASME certification is available upon request for select models. This certification verifies that the product's mechanical design complies with the specified design pressures and temperatures, ensuring its reliability and safety.

#### **CANADIAN REGISTERED**

CRN Registration for units operating in Canada is available upon request. We offer a Category H provincial quality program certificate for all provinces, which aligns with ASME requirements without formal review and stamp, thus providing a more cost-effective solution.









# SOFTWARE

#### HEATCRAFT® COILCALC NG



#### HEATCRAFT® DESIGNTOOLS



Heatcraft® CoilCalc Next Generation (NG) is our custom coil selection program, designed to meet the evolving requirements for Heatcraft's® commercial coils through ongoing development and improvements. The user can generate a complete submittal package, including performance data, coil schedule, and certified approval drawings. CoilCalc's certified ratings are application ratings resulting from our tests according to test codes in agreement with AHRI standard rating methods for Standard 410.

Heatcraft® Designtools is a coil rating program for Heatcraft® OEM custom coils. The user works from a clean sheet of paper by selecting every aspect of the coil and providing the air and tube side operating conditions, which the program then uses to rate the performance of the user-specified coil. The program allows full access to the extensive variety of fin configurations, tube sizes, and available tube materials to the user to optimize the heat exchanger for their application. While the results from this program are based on wind tunnel testing, we always recommend a prototype build to ensure that the heat exchanger configured in your unit meets the performance requirement.

