



COOLING TOWER, INDUSTRIAL CHILLER, COMMERCIAL CHILLER HEAT EXCHANGER, COILS, COOLING SYSTEMS, AHU, FCU & HEAT TRANSFER



# **VOLGA HVAC®**

**COILS** PRODUCT PROFILE 2023













Built from the highest-grade materials for optimal performance and long-lasting reliability, our custom commercial coils are designed to match every detail of your existing coil.

BOOSTER COILS Designed for air heating applications using hot water with a variety of casing confi gurations available, including fully fl anged, slip and drive or end plates only.

rows of tubes that pass through sheets of formed fi ns bonded through tube expansion. As warm air passes across the coil and contacts the cold surface, heat transfers from the water fl owing through the tubes to the air entering the coil. Entering chilled water temperatures range from 400–550 depending on engineered specifi cations.

DX EVAPORATOR COILS

Designed to be used in air-side applications for cooling, heating and dehumidifying with various circuiting options, as well as face split and intertwined designs.

STEAM COILS

Designed for medium temperature applications where the entering temperature is approximately 550 or higher, with many material construction options to accommodate all steam pressures.

HOT WATER COILS

Tube-and-fi n heat exchangers consisting of 1–4 rows with typical entering water temperatures between 1200–180o. As cold air passes across the coil and contacts the hot fi n surface, heat transfer occurs. Construction for hot water coils is the same process as chilled water coils.

STEAM DISTRIBUTION COILS

Also known as non-freeze steam coils, they are designed for low temperature applications with entering air temperatures of 550 or lower. The design consists of one header, a tube-within-a-tube confi guration and steam jets that pass the steam from the inner tube to the outer tube. After the steam leaves the inner tube, it condensates and fl ows back to the return connection. Steam distribution coils are typically manufactured using a pitched casing for optimal condensate fl ow back to the return connection.

ONDENSER COILS

Built to rigorous specifi cations for effi cient heat transfer that's ideal for outdoor use. We place an emphasis on brazed connections to combat thermal expansion, as well as harsh environments. All feeds have oversized tube sheet holes to allow unrestricted expansion and contraction of the copper tubes, increasing the reliability of our condenser coils. Designed for use with all refrigerants, including HFCs and HCFCs









#### **Chilled Water Coils**

Tube-and-fin heat exchangers usually consisting of 4–12 rows of tubes that pass through sheets of formed fins bonded through tube expansion with entering water temperatures ranging from  $40^{\circ}$ -55°.

Tubes	Fins	Headers	Casing	
Materials Copper Cupro-Nickel Stainless Steel Sizes	Materials Aluminum Copper Stainless Steel Specifications	Materials Copper Cupro-Nickel Stainless Steel	<b>Materials</b> Galvanized Steel Stainless Steel	VOIGE
3/8" 1/2" 5/8"	3/8": 10-20 FPI 1/2": 6-16 FPI 5/8": 6-14 FPI			
Wall Thickness 3/8" & 1/2" • 0.016 • 0.020 5/8" • 0.020 • 0.025 • 0.035 • 0.049	Fin Thickness			SE S

#### **Hot Water Coils**

Tube-and-fin heat exchangers consisting of 1–4 rows with typical entering water temperatures between 120°-180°. As cold air passes across the coil and contacts the hot fin surface, heat transfer occurs.

Tubes	Fins	Headers	Casing	
Materials Copper Cupro-Nickel Stainless Steel	<b>Materials</b> Aluminum Copper Stainless Steel	<b>Materials</b> Copper Cupro-Nickel Stainless Steel	<b>Materials</b> Galvanized Steel Stainless Steel	CIER VOIGA VOIGA VOIGA VOIGA VOIGA VOIGA COIGA VOIGA COIGA VOIGA COIGA COICA C
<b>Sizes</b> 3/8" 1/2" 5/8"	<b>Specifications</b> 3/8": 10-20 FPI 1/2": 6-16 FPI 5/8": 6-14 FPI			A significant grown and significant control of the promotion of the promot
Wall Thickness 3/8" & 1/2" • 0.016 • 0.020 5/8" • 0.020	Fin Thickness			GCT death and the second secon



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#### **Booster Coils**

Similar to a hot water coil but without a header. Designed for heating applications with a variety of casing configurations available, including fully flanged, slip and drive or end plates only.

Tubes	Fins	Headers	Casing	
Materials Copper Cupro-Nickel Stainless Steel	<b>Materials</b> Aluminum Copper Stainless Steel	Not available on Booster Coils	<b>Materials</b> Galvanized Steel Stainless Steel	COLGA YOLGA
<b>Sizes</b> 3/8" 1/2" 5/8"	<b>Specifications</b> 3/8": 10-20 FPI 1/2": 6-16 FPI 5/8": 6-14 FPI			A cycle to the cycle of the cyc
Wall Thickness 3/8" & 1/2" • 0.016 • 0.020 5/8" • 0.020 • 0.025 • 0.035 • 0.049	Fin Thickness Aluminum  · 0.006  · 0.008  · 0.010  Copper  · 0.006			GET SET SET SET SET SET SET SET SET SET S

#### **Condenser Coils**

 $\label{point} \textbf{Built to rigorous specifications for efficient heat transfer that's ideal for outdoor use.}$ 

We place an emphasis on brazed connections to combat thermal expansion, as well as harsh environments.

Tubes	Fins	Headers	Casing	
<b>Materials</b> Copper	<b>Materials</b> Aluminum Copper	<b>Materials</b> Copper	<b>Materials</b> Galvanized Steel Stainless Steel	AGEU,
<b>Sizes</b> 3/8" 1/2" 5/16"	Fin Thickness • 0.006 • 0.008 • 0.010			
Wall Thickness 3/8" & 1/2" • 0.016 • 0.020 5/16" • 0.016	Copper • 0.006			C   C   C   C   C   C   C   C   C   C









#### **DX Evaporator Coils**

Designed to be used in air-side applications for cooling, heating and dehumidifying with various circuiting options, as well as face split and intertwined designs.

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Tubes	Fins	Headers	Casing	

Aluminum Copper
Copper Cupro-Nickel
Stainless Steel Stainless Steel

MaterialsMaterialsCopperGalvanized SteelCupro-NickelStainless SteelStainless Steel



5/16"

Wall Thickness
3/8" & 1/2"
• 0.016
• 0.020
5/8"
• 0.020
• 0.025
• 0.035
• 0.049
5/16"

**Materials** 

Stainless Steel

Cupro-Nickel

Copper

Sizes

3/8" 1/2"

5/8"

• 0.016

5/8": 6-14 FPI

Fin Thickness
Aluminum

• 0.006

• 0.008

• 0.010

Copper

• 0.006

**Specifications** 

3/8": 10-20 FPI 1/2": 6-16 FPI

**Materials** 

## Industrial Coils

Built to withstand harsh environments, our industrial

coils are manufactured from thicker, heavier-grade materials.

Even in extreme conditions, industrial coils deliver lasting performance.







#### **Standard Steam Coils**

Designed for medium temperature applications where the entering temperature is approximately 55° or higher with many material construction options to accommodate all steam pressures.

Tubes	Fins	Headers	Casing
Materials Carbon Steel Copper Cupro-Nickel Stainless Steel	Materials Aluminum Copper Stainless Steel	<b>Materials</b> Carbon Steel Copper Cupro-Nickel Stainless Steel	<b>Materials</b> Galvanized Steel Stainless Steel
<b>Sizes</b> 5/8" 1"	<b>Specifications</b> 5/8": 6-14 FPI 1": 6-12 FPI		
<b>Wall Thickness</b> .025": 1-25 PSIG .035": 25-75 PSIG .049": 75-125 PSIG	Fin Thickness Aluminum • 0.006 • 0.008 • 0.010		
	Copper • 0.006		

#### Steam Distribution Coils

Also known as non-freeze steam coils, they are designed for low temperature applications consisting of one header, a tube-within-a-tube configuration and steam jets that pass the steam from the inner tube to the outer tube.

Tubes	Fins	Headers	Casing	
Materials Carbon Steel Copper Cupro-Nickel Stainless Steel Sizes 5/8"	Materials Aluminum Carbon Steel Copper Stainless Steel  Specifications 5/8": 6-14 FPI	Materials Carbon Steel Copper Cupro-Nickel Stainless Steel	<b>Materials</b> Galvanized Steel Stainless Steel	SECT VOIGE V
1"	1": 6-12 FPI			the first state of the first sta
<b>Wall Thickness</b> .025": 1-25 PSIG .035": 25-75 PSIG .049": 75-125 PSIG	Fin Thickness Aluminum • 0.006 • 0.008 • 0.010			DET THE STATE OF T
	Copper • 0.006			







#### VOLGA COOLING TECHNOLOGIES-USA

COOLING TOWER, INDUSTRIAL CHILLER, COMMERCIAL CHILLER HEAT EXCHANGER, COILS, COOLING SYSTEMS, AHU, FCU & HEAT TRANSFER



### **GLOBAL CCOLING TOWER FACTORY**

**MEMBER OF** 

**MOHAMMAD ALSHEHRI GROUP** 

**VOLGA COOLING TECHNOLOGIES** 

**MADE IN SAUDI ARABIA** 

### **CERTIFIED**

(CTI), (ISO 9001:2015), (ISO 45001:2018), (ASO: QCMS: 1/2020),

(ASO: CSAMS: 1/2021), (ASO: OHSMS: 1/2021) CERTIFICATES.

CONFORM/ DESIGNED VOLGA - HVAC ® FOR KSA & GCC. COUNTRIES.

2023 CTI, STANDARD - USA.

**GLOBAL COOLING TOWER FACTORY.** KSA.

**VOLGA COOLING TECHNOLOGIES.** 

USA.





























(ASO: CSAMS: 1/2021)



ISO 9001:2015



