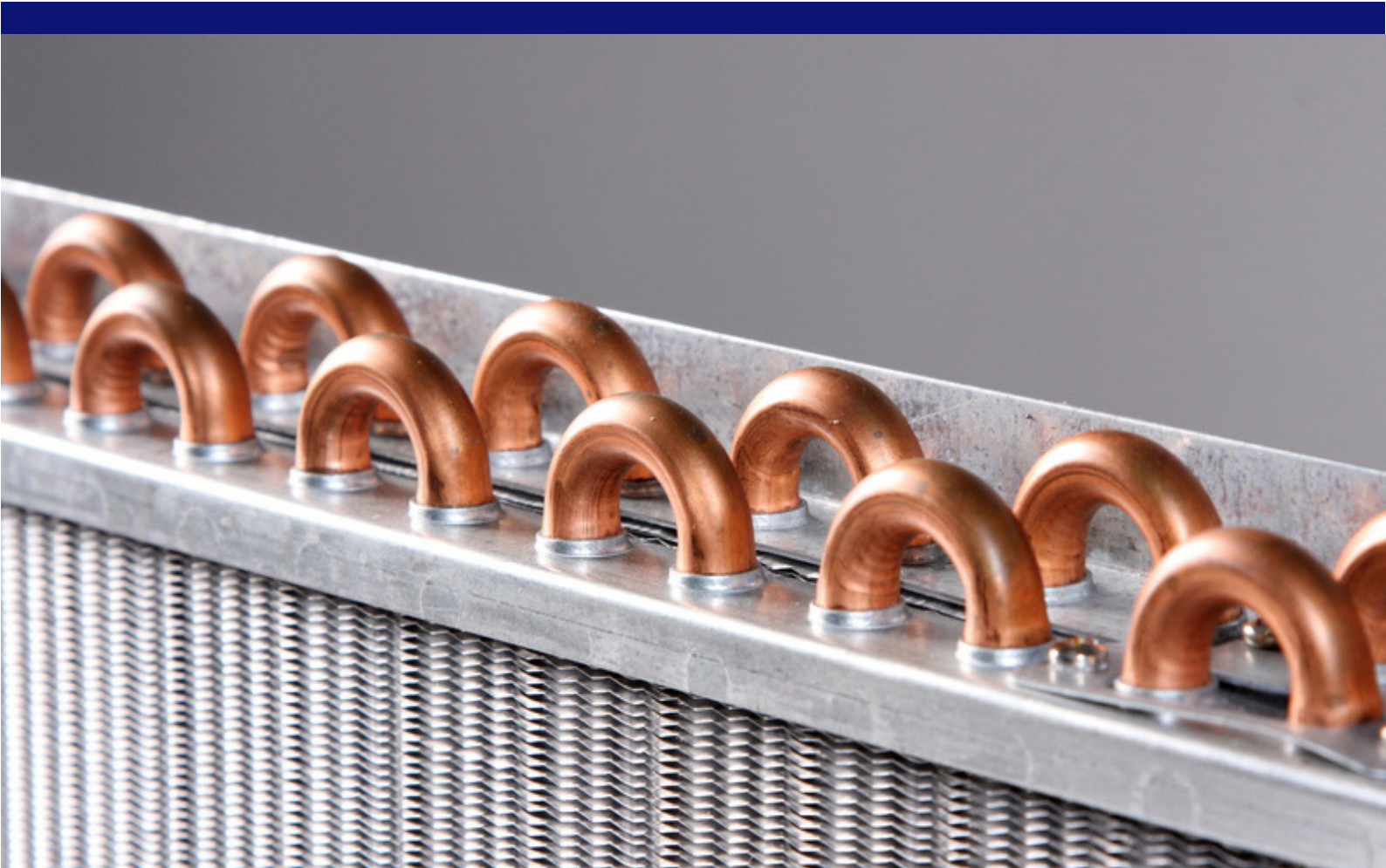


Applied Engineering Solutions



CoilLab Software Catalogue



Table Of Contents

Procedure of Download Desktop Windows application software :	3
Applications with Chilled water, Water heating, Evaporator, Condenser, Evaporative Condenser, and Steam Coil	4
SI & Imp measurement.....	4
Simulation (Standard) & Design (Option) Modes.....	5
Design (Option)	5
Simulation (Standard).....	6
Simulation (Standard) & Design (Option) Modes.....	6
Chilled Water input/output data and coil configuration.....	7
Coil Configuration Coding.....	8
Multi tube size.....	8
Outer and Inner tube sizes based on selected pipe size and the user can change	9
the inner / outer tube size if needed	9
On Coil temeprature DB/WB or DB and RH.....	9
Water in/out or Water in , water flow	10
Altitude from sea level	10
To Specify the required air flow through the Coil	11
Multi Fluids.....	11
To specify Coil length and width. Coil pitches, vertical and horizontal will be specified accordong to the pipe size	12
To select circuit type or number of ciruits	12
To select Fins material	13
To select Fins type	13
To specify Fin thickness.....	14
To specify number of fins	14
To Specify tube material	15
To specify tube shape	15
To specify number of rows	16
Press calculate to have output complete details.....	16
Save and Retrieve data	17
Print a report under your logo.....	17
To explore autoCAD drawing with complete coil details	18
Pricing sheet of the Coil	18
Psychrometric chart	19
Coil Circuiting Drawing.....	19
Evaporator Coil with a lot of refrigerants.....	20
Evaporative Condenser.....	21
Water Heating Coil.....	22
Steam Coil	22
Standard & Optional Features	23

Procedure of Download Desktop Windows application software :

01 Receive the link for the software setup – Desktop windows application

02 Download the link

03 Open the file as administrator by press right click

04 To download the software on any drive E, F, D, ... but not to C drive

05 Press ok until reach finish

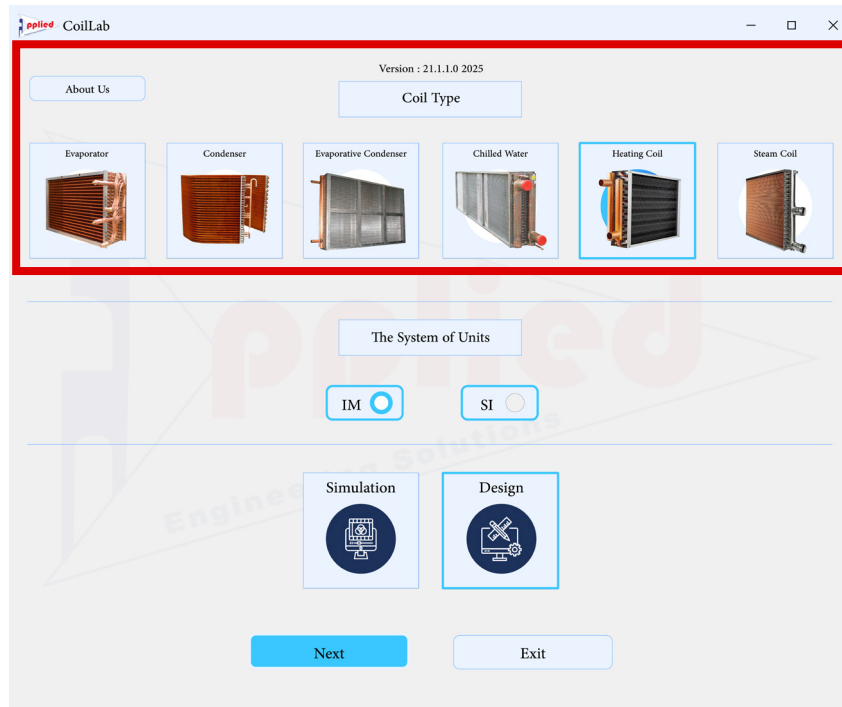
06 Open the software from the icon on the PC desktop

07 Copy the ID in the dialog box in “Your Serial Number is:”

08 Send the ID as txt to us then we will activate the software

09 Will send you access and Crystal files to download it and setup it End

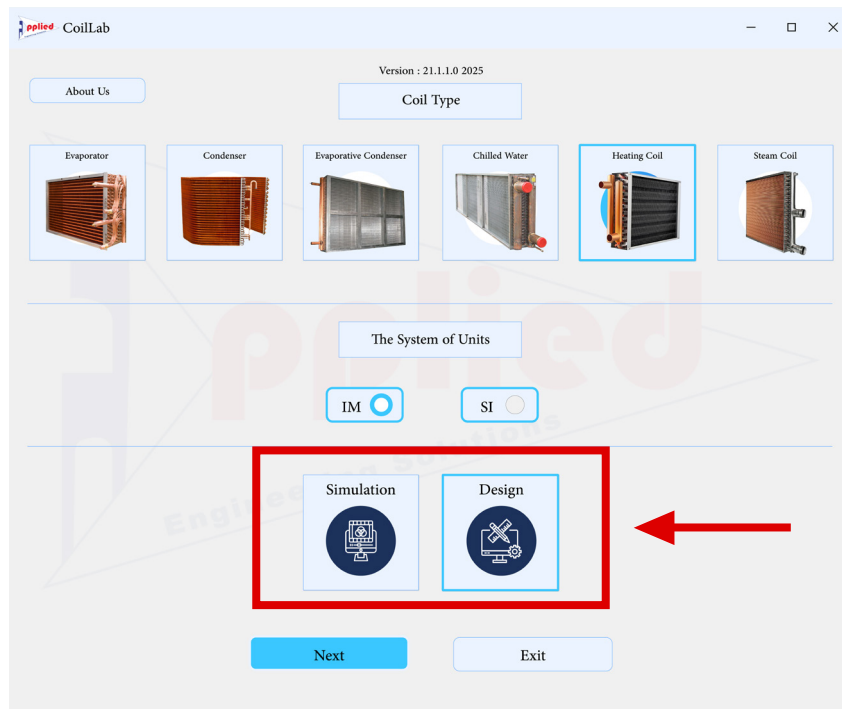
Applications with Chilled water, Water heating, Evaporator, Condenser, Evaporative Condenser, and Steam Coil



SI & Imp measurement



Simulation (Standard) & Design (Option) Modes



Design (Option)

Evaporator 21.1.1.0

INPUT DATA

Qty: 1

Refrigerant Type: R410A

Coil Size: 3/8

Outer Diameter: 0.01003 m

Inner Diameter: 0.009423 m

Evaporating Temp.: 7 °C

Suction Temp.: 12 °C

Dry on Coil Temp.: 26.7 °C

Wet on Coil Temp.: 19.4 °C

Relative Humidity: 50.71 %

Condensing Temp.: 50 °C

Subcooling Temp.: 5 °C

Liquid Temp.: 45 °C

Altitude: 0 m

Coil Length: 1.6256 m

Coil Height: 0.7112 m

Tube Per Row: 28

Air Fouling Factor: 1.8E-06 m²/K/W

Ref. Fouling Factor: 1.8E-05 m²/K/W

Case Material: Stainless Steel

Header Material: Copper/Pipe

Required Capacity Range: 60000 W

5 %

Tube Vertical Distance: 0.0254 m

Tube Horizontal Distance: 0.022 m

Auto Circuit: Full circuit

Manual Circuit #: 28

Fins Material: Aluminum

Fins Type: Wavy

Fins Thickness: 0.00015 m

Fins Per m: 472

Tube Material: Copper

Tube Shape: Smooth

Rows #: 4

Air Flow Rate: 8000 m³/hr

Face Velocity: 2 m/s

Connection Location "R" or "L": R

Connections Direction: Horizontal

Refrigerant Circuit: 1

Liq Header Location: R

Distributor Connection: Vertical

Dropped Tubes: 0

Change Suction Header Size: 200

Change Liquid Header Size: 200

Change Suction Connection Size: 200

Change Liquid Connection Size: 200

OUTPUT DATA

Total Capacity: 57685.29 W

Sensible Capacity: 37339.39 W

Off Coil Dry Bulb Temp: 12.78 °C

Off Coil Wet Bulb Temp: 11.7 °C

Refrigerant Pressure Drop: 3.1334 kPa

Air Pressure Drop: 65 Pa

Off Coil RH: 88.46 %

On Coil Humidity: 11.62 g/kg

Off Coil Humidity: 8.34 g/kg

Air Velocity: 1.92 m/s

Circuit Length: 6.5 m

Suction Header Diameter: 42 mm

Suction Connection: 35 mm

Liquid Header Diameter: 22 mm

Liquid Connection: 19 mm

Refrigerant Mass Flow: 1104.05 kg/h

Fluid Velocity: 2.72 m/s

LMTD: 11.35 °C

Overall Heat coefficient: 897.01 W/m².K

Internal Volume Across Coil: 13.3 L

Calculate Save New Calc

Psychrometric Print < Back Distributor

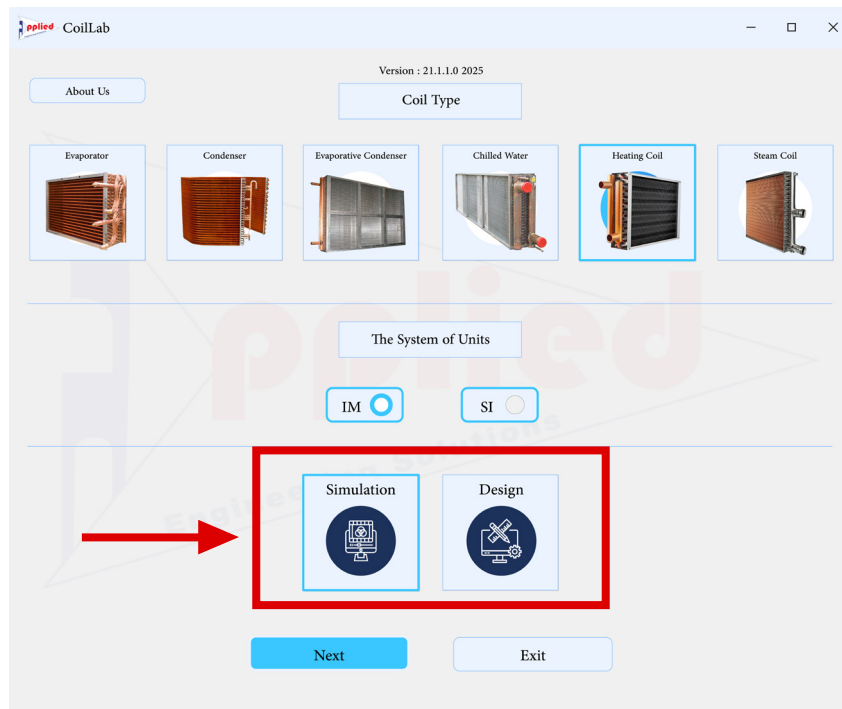
Price

Drawing Retrieve Data

Manufacturing Draw

	Capacity	Sensible Capacity	Fluid PD	Static PD	Rows No	Fins Per Length	Auto Circuit	Measur
>	57685.29	37339.39	3.1334	65	4	354	Full circuit	SI
	58387.47	37613.15	1.138	65	4	354	Double circuit	SI

Simulation (Standard) & Design (Option) Modes



Simulation (Standard)

Evaporator 21.1.1.0

6 30 Cu 15 AL 28 4 1626 472 E 14 112 42 R

INPUT DATA		OUTPUT DATA	
Qty:	1	Total Capacity	56279.52 W
Refrigerant Type:	R407C	Sensible Capacity	36815.09 W
Coil Size:	3/8	Off Coil Dry Bulb Temp	12.98 °C
Outer Diameter:	0.01003 m	Off Coil Wet Bulb Temp	11.9 °C
Inner Diameter:	0.009423 m	Refrigerant Pressure Drop	25.5325 kPa
Evaporating Temp.:	7 °C	Air Pressure Drop	80 Pa
Suction Temp.:	12 °C	Off Coil RH	88.6 %
Dry on Coil Temp:	26.7 °C	On Coil Humidity	11.62 g/kg
Wet on Coil Temp.:	19.4 °C	Off Coil Humidity	8.46 g/kg
Relative Humidity:	50.71 %	Air Velocity	1.92 m/s
Condensing Temp.:	50 °C	Circuit Length	13 m
Subcooling Temp.:	5 °C	Suction Header Diameter	42 mm
Liquid Temp.:	45 °C	Suction Connection	35 mm
Altitude:	0 m	Liquid Header Diameter	22 mm
Coil Length:	1.6256 m	Liquid Connection	19 mm
Coil Height:	0.7112 m	Refrigerant Mass Flow	1101.33 kg/h
Tube Per Row:	28	Fluid Velocity	9.07 m/s
Air Fouling Factor:	1.8E-06 m ² /K/W	LMTD	11.51 °C
Ref. Fouling Factor:	1.8E-05 m ² /K/W	Overall Heat coefficient	876.09 W/m ² .K
Case Material:	Stainless Steel	Internal Volume Across Coil	13.3 L
Header Material:	CopperPipe		
Tube Vertical Distance:	0.0254 m		
Tube Horizontal Distance:	0.022 m		
Auto Circuit:	Half circuit		
Manual Circuit #:	1.4		
Fins Material:	Aluminum		
Fins Type:	Wavy		
Fins Thickness:	0.00015 m		
Fins Per m:	472		
Tube Material:	Copper		
Tube Shape:	Smooth		
Rows #:	4		
Air Flow Rate:	8000 m ³ /hr		
Face Velocity:	2 m/s		
Connection Location "R" or "L":	R		
Connections Direction:	Horizontal		
Refrigerant Circuit:	1		
Liq Header Location:	R		
Distributor Connection:	Vertical		
Dropped Tubes:	0		
Change Suction Header Size:	200		
Change Liquid Header Size:	200		
Change Suction Connection Size:	200		
Change Liquid Connection Size:	200		

Calculate Save New Calc

Psychrometric Print < Back Distributor

Price:

Drawing Retrieve Data

Manufacturing Draw

Chilled Water input/output data and coil configuration

 Chilled Water

←

INPUT DATA

Qty:

Coil Size:

Outer Diameter: m

Inner Diameter: m

On Coil Dry Bulb Temp.: °C

☒ Wet on Coil Temp.: °C
☐ Relative Humidity: %

Calculation Depends On:

☒ Water in/out: ☐ Flow Rate

Water In Temp.: °C

Water Out Temp.: °C

Water Flow Rate: l/s

Altitude: m

Air Flow Rate: m³/h

Fluid Type: %

Coil Length: m

Coil Width: m

Tube Vertical Distance: m

Tube Horizontal Distance: m

☐ Auto Circuit :
☒ Manual Circuit #:

Fins Material:

Fins Type:

Fins Thickness: m

Fins Per Length:

Tube Material:

Tube Shape:

Rifled Tube Affect Percentage: %

Rows #:

Header Direction:

☐ Change Header Size:

OUTPUT DATA

Capacity	75117.24	W
Sensible Capacity	43589.5	W
Off Coil Dry Bulb Temp	13.58	°C
Off Coil Wet Bulb Temp	12.2	°C
Water Pressure Drop	12	kPa
Static Pressure	90	Pa
Off Coil Relative Humidity	85.1	%
Off Coil Humidity	8.51	g/kg
Air Flow Rate	11043.47	m ³ /h
Water Out Temp.	12.7	°C
Water Flow Rate	3.27	l/s
Circuit Length	6.5	m
Water Volume Across Coil	13.3	L
Coil Header	35	mm
Coil Connection	28	mm
Air Velocity	2.65	m/s

Coil Configuration Coding

Chilled Water

INPUT DATA Qty: 1

6 30 Cu 12 Cu 28 4 1626 394 CW 28 112 35 R

Coil Size: 3/8

Outer Diameter: 0.01003 m

Inner Diameter: 0.009423 m

On Coil Dry Bulb Temp.: 26.7 °C

Wet on Coil Temp.: 19.4 °C

Relative Humidity: 50.36 %

Calculation Depends On:

Water in/out: Flow Rate

Water in Temp: 7.2 °C

Water Out Temp.: 12.7 °C

Water Flow Rate: 2 l/s

Altitude: 0 m

Air Flow Rate: 11043.47 m³/h

Fluid Type: Water 100 %

Coil Length: 1.6256 m

Coil Width: 0.7112 m

Tube Vertical Distance: 0.0254 m

Tube Horizontal Distance: 0.022 m

Auto Circuit: Full circuit

Manual Circuit #: 28

Fins Material: Copper

Fins Type: Wavy

Fins Thickness: 0.00012 m

Fins Per Length: 394

Tube Material: Copper

Tube Shape: Smooth

Riffled Tube Affect Percentage: 10 %

Rows #: 4

Header Direction: R

Change Header Size: 10

OUTPUT DATA

Capacity: 75117.24 W

Sensible Capacity: 48589.5 W

Off Coil Dry Bulb Temp: 13.58 °C

Off Coil Wet Bulb Temp: 12.2 °C

Water Pressure Drop: 12 kPa

Static Pressure: 90 Pa

Off Coil Relative Humidity: 85.1 %

Off Coil Humidity: 8.51 g/kg

Air Flow Rate: 11043.47 m³/h

Water Out Temp.: 12.7 °C

Water Flow Rate: 3.27 l/s

Circuit Length: 6.5 m

Water Volume Across Coil: 13.3 L

Coil Header: 35 mm

Coil Connection: 28 mm

Air Velocity: 2.65 m/s

Calculate Save New Calculation

Print Cad Drawing Price Psych.

Circuit Drawing Back Exit

Retrieve Data

Multi tube size

Chilled Water 21.0.4.0

INPUT DATA Qty: 1

Coil Size: 3/8

Outer Diameter: 5/16

Inner Diameter: 3/8 A

On Coil Dry Bulb Temp.: 5/8

Wet on Coil Temp.: 5/8 B

Relative Humidity: 5/8 C

Calculation Depends On:

Water in/out: Flow Rate

Water in Temp: 7.2 °C

Water Out Temp.: 12.7 °C

Water Flow Rate: 2 l/s

Altitude: 0 m

Air Flow Rate: 11043.47 m³/h

Fluid Type: Water 100 %

Air Fouling Factor: 1.8E-06 m².K/W

Water Fouling Factor: 1.8E-05 m².K/W

Coil Length: 1.6256 m

Coil Height: 0.7112 m

Tube Vertical Distance: 0.0254 m

Tube Horizontal Distance: 0.022 m

Auto Circuit: Full circuit

Manual Circuit #: 28

Fins Material: Aluminum

Fins Type: Wavy

Fins Thickness: 0.00015 m

Fins Per Length: 275

Tube Material: Copper

Tube Shape: Smooth

Riffled Tube Affect Percentage: 10 %

Rows #: 4

Header Direction: R

Change Header Size: 200

Connections Direction: Horizontal

Outer and Inner tube sizes based on selected pipe size and the user can change the inner / outer tube size if needed

Chilled Water

Qty: 1

6 30 Cu 12 Cu 28 4 1626 394 CW 28 112 35 R

INPUT DATA

Coil Size: 3/8

Outer Diameter: 0.01003 m

Inner Diameter: 0.009423 m

On Coil Dry Bulb Temp.: 26.7 °C

Wet on Coil Temp.: 19.4 °C

Relative Humidity: 50.36 %

Calculation Depends On:

Water in/out: ☒ Flow Rate ☐

Water in Temp: 7.2 °C

Water Out Temp.: 12.7 °C

Water Flow Rate: 2 l/s

Altitude: 0 m

Air Flow Rate: 11043.47 m³/h

Fluid Type: Water 100 %

Coil Length: 1.6256 m

Coil Width: 0.7112 m

Tube Vertical Distance: 0.0254 m

Tube Horizontal Distance: 0.022 m

Auto Circuit: ☒ Full circuit ☐ Manual Circuit #: 28

Fins Material: Copper

Fins Type: Wavy

Fins Thickness: 0.00012 m

Fins Per Length: 394

Tube Material: Copper

Tube Shape: Smooth

Riffled Tube Affect Percentage: 10 %

Rows #: 4

Header Direction: R

Change Header Size: 10

OUTPUT DATA

Capacity: 75117.24 W

Sensible Capacity: 48589.5 W

Off Coil Dry Bulb Temp: 13.58 °C

Off Coil Wet Bulb Temp: 12.2 °C

Water Pressure Drop: 12 kPa

Static Pressure: 90 Pa

Off Coil Relative Humidity: 85.1 %

Off Coil Humidity: 8.51 g/kg

Air Flow Rate: 11043.47 m³/h

Water Out Temp.: 12.7 °C

Water Flow Rate: 3.27 l/s

Circuit Length: 6.5 m

Water Volume Across Coil: 13.3 L

Coil Header: 35 mm

Coil Connection: 28 mm

Air Velocity: 2.65 m/s

Calculate Save New Calculation

Print Cad Drawing Price Psych.

Circuit Drawing Back Exit

Retrieve Data

On Coil temperature DB/WB or DB and RH

Chilled Water

Qty: 1

6 30 Cu 12 Cu 28 4 1626 394 CW 28 112 35 R

INPUT DATA

Coil Size: 3/8

Outer Diameter: 0.01003 m

Inner Diameter: 0.009423 m

On Coil Dry Bulb Temp.: 26.7 °C

Wet on Coil Temp.: 19.4 °C

Relative Humidity: 50.36 %

Calculation Depends On:

Water in/out: ☒ Flow Rate ☐

Water in Temp: 7.2 °C

Water Out Temp.: 12.7 °C

Water Flow Rate: 2 l/s

Altitude: 0 m

Air Flow Rate: 11043.47 m³/h

Fluid Type: Water 100 %

Coil Length: 1.6256 m

Coil Width: 0.7112 m

Tube Vertical Distance: 0.0254 m

Tube Horizontal Distance: 0.022 m

Auto Circuit: ☒ Full circuit ☐ Manual Circuit #: 28

Fins Material: Copper

Fins Type: Wavy

Fins Thickness: 0.00012 m

Fins Per Length: 394

Tube Material: Copper

Tube Shape: Smooth

Riffled Tube Affect Percentage: 10 %

Rows #: 4

Header Direction: R

Change Header Size: 10

OUTPUT DATA

Capacity: 75117.24 W

Sensible Capacity: 48589.5 W

Off Coil Dry Bulb Temp: 13.58 °C

Off Coil Wet Bulb Temp: 12.2 °C

Water Pressure Drop: 12 kPa

Static Pressure: 90 Pa

Off Coil Relative Humidity: 85.1 %

Off Coil Humidity: 8.51 g/kg

Air Flow Rate: 11043.47 m³/h

Water Out Temp.: 12.7 °C

Water Flow Rate: 3.27 l/s

Circuit Length: 6.5 m

Water Volume Across Coil: 13.3 L

Coil Header: 35 mm

Coil Connection: 28 mm

Air Velocity: 2.65 m/s

Calculate Save New Calculation

Print Cad Drawing Price Psych.

Circuit Drawing Back Exit

Retrieve Data

Water in/out or Water in , water flow

Chilled Water

Qty: 1

6 30 Cu 12 Cu 28 4 1626 394 CW 28 112 35 R

INPUT DATA

Coil Size: 3/8

Outer Diameter: 0.01003 m

Inner Diameter: 0.009423 m

On Coil Dry Bulb Temp.: 26.7 °C

☒ Wet on Coil Temp.: 19.4 °C

☐ Relative Humidity: 50.36 %

Calculation Depends On:

☒ Water in/out: ☐ Flow Rate

Water in Temp: 7.2 °C

Water Out Temp.: 12.7 °C

Water Flow Rate: 2 l/s

Altitude: 0 m

Air Flow Rate: 11043.47 m³/h

Fluid Type: Water

Coil Length: 1.6256 m

Coil Width: 0.7112 m

Tube Vertical Distance: 0.0254 m

Tube Horizontal Distance: 0.022 m

☒ Auto Circuit: Full circuit

☐ Manual Circuit #: 28

Fins Material: Copper

Fins Type: Wavy

Fins Thickness: 0.00012 m

Fins Per Length: 394

Tube Material: Copper

Tube Shape: Smooth

Riffled Tube Affect Percentage: 10 %

Rows #: 4

Header Direction: R

☐ Change Header Size

OUTPUT DATA

Capacity: 75117.24 W

Sensible Capacity: 48589.5 W

Off Coil Dry Bulb Temp: 13.58 °C

Off Coil Wet Bulb Temp: 12.2 °C

Water Pressure Drop: 12 kPa

Static Pressure: 90 Pa

Off Coil Relative Humidity: 85.1 %

Off Coil Humidity: 8.51 g/kg

Air Flow Rate: 11043.47 m³/h

Water Out Temp.: 12.7 °C

Water Flow Rate: 3.27 l/s

Circuit Length: 6.5 m

Water Volume Across Coil: 13.3 L

Coil Header: 35 mm

Coil Connection: 28 mm

Air Velocity: 2.65 m/s

Calculate Save New Calculation

Print Cad Drawing Price Psych.

Circuit Drawing Back Exit

Retrieve Data

Altitude from sea level

Chilled Water

Qty: 1

6 30 Cu 12 Cu 28 4 1626 394 CW 28 112 35 R

INPUT DATA

Coil Size: 3/8

Outer Diameter: 0.01003 m

Inner Diameter: 0.009423 m

On Coil Dry Bulb Temp.: 26.7 °C

☒ Wet on Coil Temp.: 19.4 °C

☐ Relative Humidity: 50.36 %

Calculation Depends On:

☒ Water in/out: ☐ Flow Rate

Water in Temp: 7.2 °C

Water Out Temp.: 12.7 °C

Water Flow Rate: 2 l/s

Altitude: 50 m

Air Flow Rate: 11043.47 m³/h

Fluid Type: Water

Coil Length: 1.6256 m

Coil Width: 0.7112 m

Tube Vertical Distance: 0.0254 m

Tube Horizontal Distance: 0.022 m

☒ Auto Circuit: Full circuit

☐ Manual Circuit #: 28

Fins Material: Copper

Fins Type: Wavy

Fins Thickness: 0.00012 m

Fins Per Length: 394

Tube Material: Copper

Tube Shape: Smooth

Riffled Tube Affect Percentage: 10 %

Rows #: 4

Header Direction: R

☐ Change Header Size

OUTPUT DATA

Capacity: 75117.24 W

Sensible Capacity: 48589.5 W

Off Coil Dry Bulb Temp: 13.58 °C

Off Coil Wet Bulb Temp: 12.2 °C

Water Pressure Drop: 12 kPa

Static Pressure: 90 Pa

Off Coil Relative Humidity: 85.1 %

Off Coil Humidity: 8.51 g/kg

Air Flow Rate: 11043.47 m³/h

Water Out Temp.: 12.7 °C

Water Flow Rate: 3.27 l/s

Circuit Length: 6.5 m

Water Volume Across Coil: 13.3 L

Coil Header: 35 mm

Coil Connection: 28 mm

Air Velocity: 2.65 m/s

Calculate Save New Calculation

Print Cad Drawing Price Psych.

Circuit Drawing Back Exit

Retrieve Data

To Specify the required air flow through the Coil

Chilled Water

Qty: 1

6 30 Cu 12 Cu 28 4 1626 394 CW 20 112 35 R

Coil Size: 3/8

Outer Diameter: 0.01003 m

Inner Diameter: 0.009423 m

On Coil Dry Bulb Temp.: 26.7 °C

Wet on Coil Temp.: 19.4 °C

Relative Humidity: 50.35 %

Calculation Depends On:

Water in/out: Flow Rate

Water in Temp: 7.2 °C

Water Out Temp.: 12.7 °C

Water Flow Rate: 2 l/s

Altitude: 50 m

Air Flow Rate: 11050 m³/h

Fluid Type: Water 100 %

Coil Length: 1.6256 m

Coil Width: 0.7112 m

Tube Vertical Distance: 0.0254 m

Tube Horizontal Distance: 0.022 m

Auto Circuit: Full circuit

Manual Circuit #: 28

Fins Material: Copper

Fins Type: Wavy

Fins Thickness: 0.00012 m

Fins Per Length: 394

Tube Material: Copper

Tube Shape: Smooth

Riffed Tube Affect Percentage: 10 %

Rows #: 4

Header Direction: R

Change Header Size: 10

OUTPUT DATA

Capacity: 75117.24 W

Sensible Capacity: 40569.5 W

Off Coil Dry Bulb Temp: 13.55 °C

Off Coil Wet Bulb Temp: 12.2 °C

Water Pressure Drop: 12 kPa

Static Pressure: 90 Pa

Off Coil Relative Humidity: 85.1 %

Off Coil Humidity: 8.51 g/kg

Air Flow Rate: 11043.47 m³/h

Water Out Temp.: 12.7 °C

Water Flow Rate: 3.27 l/s

Circuit Length: 6.5 m

Water Volume Across Coil: 13.3 L

Coil Header: 35 mm

Coil Connection: 28 mm

Air Velocity: 2.65 m/s

Calculate Save New Calculation

Print Cad Drawing Price Psych.

Circuit Drawing Back Exit

Retrieve Data

Multi Fluids

Chilled Water 21.0.4.0

Qty: 1

Coil Size: 3/8

Outer Diameter: 0.01003 m

Inner Diameter: 0.009423 m

On Coil Dry Bulb Temp.: 26.7 °C

Wet on Coil Temp.: 19.4 °C

Relative Humidity: 50.71 %

Calculation Depends On:

Water in/out: Flow Rate

Water in Temp: 7.2 °C

Water Out Temp.: 12.7 °C

Water Flow Rate: 2 l/s

Altitude: 0 m

Air Flow Rate: 11043.47 m³/h

Fluid Type: Water 100 %

Air Fouling Factor: Ethylene

Water Fouling Factor: Sodium Chloride

Coil Length: 1.6256 m

Coil Height: 0.7112 m

Tube Per Row: 20

Tube Vertical Distance: 0.0254 m

Tube Horizontal Distance: 0.022 m

Auto Circuit: Full circuit

Manual Circuit #: 28

Fins Material: Aluminum

Fins Type: Wavy

Fins Thickness: 0.00015 m

Fins Per Length: 275

Tube Material: Copper

Tube Shape: Smooth

Riffed Tube Affect Percentage: 10 %

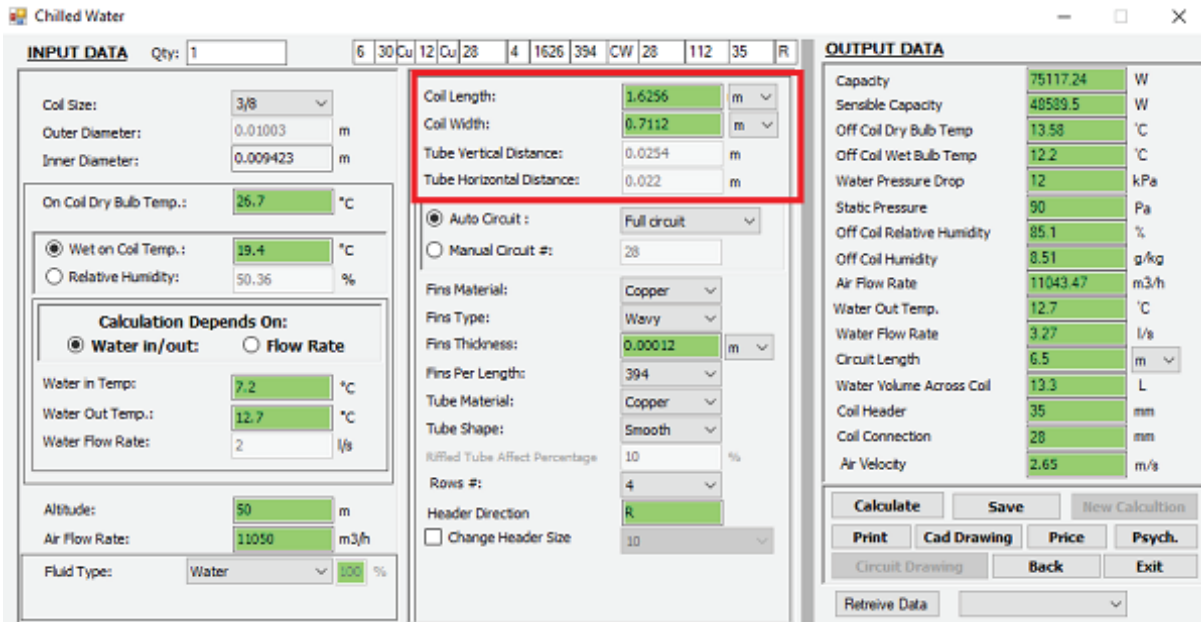
Rows #: 4

Header Direction: R

Change Header Size: 200

Connections Direction: Horizontal

To specify Coil length and width. Coil pitches, vertical and horizontal will be specified according to the pipe size



Chilled Water

Qty: 1

6 30 Cu 12 Cu 28 4 1626 394 CW 28 112 35 R

INPUT DATA

Coil Size: 3/8

Outer Diameter: 0.01003 m

Inner Diameter: 0.009423 m

On Coil Dry Bulb Temp.: 26.7 °C

Wet on Coil Temp.: 19.4 °C

Relative Humidity: 50.36 %

Calculation Depends On:

Water in/out: ☒ Water in/out: ☐ Flow Rate

Water in Temp: 7.2 °C

Water Out Temp.: 12.7 °C

Water Flow Rate: 2 l/s

Altitude: 50 m

Air Flow Rate: 11050 m3/h

Fluid Type: Water 100 %

Coil Length: 1.6256 m

Coil Width: 0.7112 m

Tube Vertical Distance: 0.0254 m

Tube Horizontal Distance: 0.022 m

Auto Circuit: ☒ Full circuit

Manual Circuit #: 28

Fins Material: Copper

Fins Type: Wavy

Fins Thickness: 0.00012 m

Fins Per Length: 394

Tube Material: Copper

Tube Shape: Smooth

Riffled Tube Affect Percentage: 10 %

Rows #: 4

Header Direction: R

Change Header Size: 10

OUTPUT DATA

Capacity: 75117.24 W

Sensible Capacity: 48589.5 W

Off Coil Dry Bulb Temp: 13.58 °C

Off Coil Wet Bulb Temp: 12.2 °C

Water Pressure Drop: 12 kPa

Static Pressure: 90 Pa

Off Coil Relative Humidity: 85.1 %

Off Coil Humidity: 8.51 g/kg

Air Flow Rate: 11043.47 m3/h

Water Out Temp.: 12.7 °C

Water Flow Rate: 3.27 l/s

Circuit Length: 6.5 m

Water Volume Across Coil: 13.3 L

Coil Header: 35 mm

Coil Connection: 28 mm

Air Velocity: 2.65 m/s

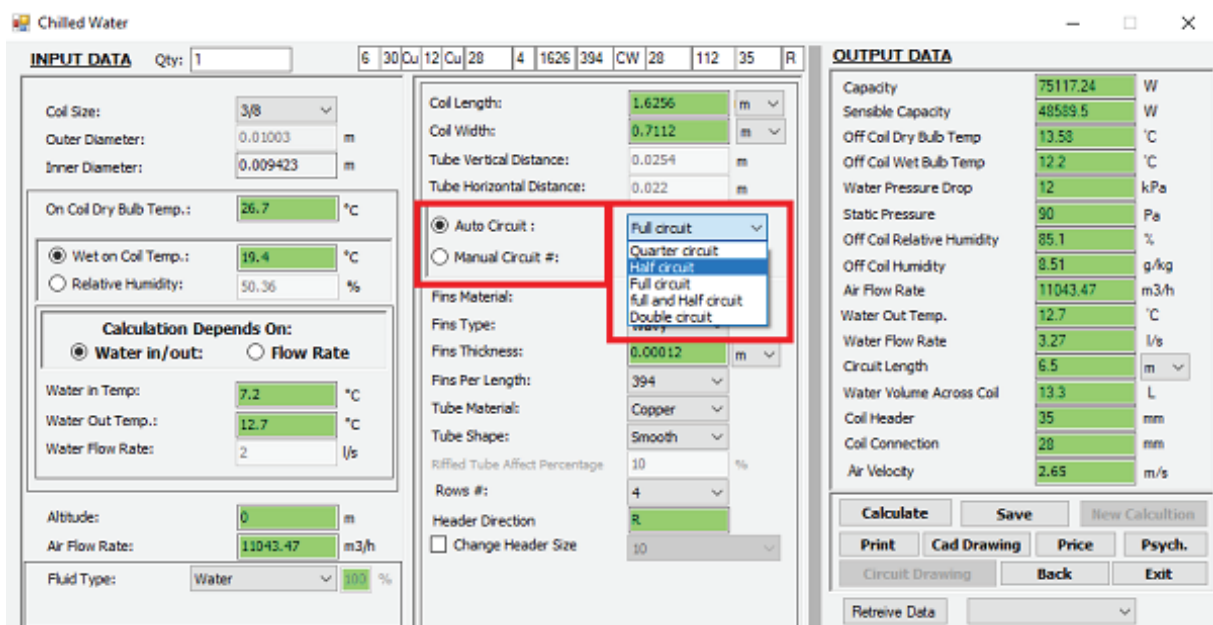
Calculate Save New Calculation

Print Cad Drawing Price Psych.

Circuit Drawing Back Exit

Retrieve Data

To select circuit type or number of circuits



Chilled Water

Qty: 1

6 30 Cu 12 Cu 28 4 1626 394 CW 28 112 35 R

INPUT DATA

Coil Size: 3/8

Outer Diameter: 0.01003 m

Inner Diameter: 0.009423 m

On Coil Dry Bulb Temp.: 26.7 °C

Wet on Coil Temp.: 19.4 °C

Relative Humidity: 50.36 %

Calculation Depends On:

Water in/out: ☒ Water in/out: ☐ Flow Rate

Water in Temp: 7.2 °C

Water Out Temp.: 12.7 °C

Water Flow Rate: 2 l/s

Altitude: 0 m

Air Flow Rate: 11043.47 m3/h

Fluid Type: Water 100 %

Coil Length: 1.6256 m

Coil Width: 0.7112 m

Tube Vertical Distance: 0.0254 m

Tube Horizontal Distance: 0.022 m

Auto Circuit: ☒ Full circuit

Manual Circuit #: 28

Fins Material: Copper

Fins Type: Wavy

Fins Thickness: 0.00012 m

Fins Per Length: 394

Tube Material: Copper

Tube Shape: Smooth

Riffled Tube Affect Percentage: 10 %

Rows #: 4

Header Direction: R

Change Header Size: 10

OUTPUT DATA

Capacity: 75117.24 W

Sensible Capacity: 48589.5 W

Off Coil Dry Bulb Temp: 13.58 °C

Off Coil Wet Bulb Temp: 12.2 °C

Water Pressure Drop: 12 kPa

Static Pressure: 90 Pa

Off Coil Relative Humidity: 85.1 %

Off Coil Humidity: 8.51 g/kg

Air Flow Rate: 11043.47 m3/h

Water Out Temp.: 12.7 °C

Water Flow Rate: 3.27 l/s

Circuit Length: 6.5 m

Water Volume Across Coil: 13.3 L

Coil Header: 35 mm

Coil Connection: 28 mm

Air Velocity: 2.65 m/s

Calculate Save New Calculation

Print Cad Drawing Price Psych.

Circuit Drawing Back Exit

Retrieve Data

To select Fins material

Chilled Water

INPUT DATA Qty: 1 6 30 Cu 12 Cu 28 4 1626 394 CW 28 112 35 R

Coil Size: 3/8
Outer Diameter: 0.01003 m
Inner Diameter: 0.009423 m

On Coil Dry Bulb Temp.: 26.7 °C
Wet on Coil Temp.: 19.4 °C
Relative Humidity: 50.36 %

Calculation Depends On:
Water in/out: Flow Rate

Water in Temp: 7.2 °C
Water Out Temp.: 12.7 °C
Water Flow Rate: 2 l/s

Altitude: 50 m
Air Flow Rate: 11050 m3/h
Fluid Type: Water 100 %

Coil Length: 1.6256 m
Coil Width: 0.7112 m
Tube Vertical Distance: 0.0254 m
Tube Horizontal Distance: 0.022 m

Auto Circuit: Full circuit
Manual Circuit #: 28

Fins Material: Copper
Fins Type: Copper
Fins Thickness: 0.127 mm
Fins Per Length: 394
Tube Material: Copper
Tube Shape: Smooth
Rifled Tube Affect Percentage: 10 %
Rows #: 4
Header Direction: R
Change Header Size: 10

OUTPUT DATA

Capacity	75117.24	W
Sensible Capacity	48589.5	W
Off Coil Dry Bulb Temp	13.58	°C
Off Coil Wet Bulb Temp	12.2	°C
Water Pressure Drop	12	kPa
Static Pressure	90	Pa
Off Coil Relative Humidity	85.1	%
Off Coil Humidity	8.51	g/kg
Air Flow Rate	11043.47	m3/h
Water Out Temp.	12.7	°C
Water Flow Rate	3.27	l/s
Circuit Length	6.5	m
Water Volume Across Coil	13.3	L
Coil Header	35	mm
Coil Connection	28	mm
Air Velocity	2.65	m/s

Calculate Save New Calculation
Print Cad Drawing Price Psych.
Circuit Drawing Back Exit
Retrieve Data

To select Fins type

Chilled Water

INPUT DATA Qty: 1 6 30 Cu 12 Cu 28 4 1626 394 CW 28 112 35 R

Coil Size: 3/8
Outer Diameter: 0.01003 m
Inner Diameter: 0.009423 m

On Coil Dry Bulb Temp.: 26.7 °C
Wet on Coil Temp.: 19.4 °C
Relative Humidity: 50.36 %

Calculation Depends On:
Water in/out: Flow Rate

Water in Temp: 7.2 °C
Water Out Temp.: 12.7 °C
Water Flow Rate: 2 l/s

Altitude: 50 m
Air Flow Rate: 11050 m3/h
Fluid Type: Water 100 %

Coil Length: 1.6256 m
Coil Width: 0.7112 m
Tube Vertical Distance: 0.0254 m
Tube Horizontal Distance: 0.022 m

Auto Circuit: Full circuit
Manual Circuit #: 28

Fins Material: Copper
Fins Type: Wavy
Fins Thickness: 0.127 mm
Fins Per Length: 394
Tube Material: Copper
Tube Shape: Smooth
Rifled Tube Affect Percentage: 10 %
Rows #: 4
Header Direction: R
Change Header Size: 10

OUTPUT DATA

Capacity	75117.24	W
Sensible Capacity	48589.5	W
Off Coil Dry Bulb Temp	13.58	°C
Off Coil Wet Bulb Temp	12.2	°C
Water Pressure Drop	12	kPa
Static Pressure	90	Pa
Off Coil Relative Humidity	85.1	%
Off Coil Humidity	8.51	g/kg
Air Flow Rate	11043.47	m3/h
Water Out Temp.	12.7	°C
Water Flow Rate	3.27	l/s
Circuit Length	6.5	m
Water Volume Across Coil	13.3	L
Coil Header	35	mm
Coil Connection	28	mm
Air Velocity	2.65	m/s

Calculate Save New Calculation
Print Cad Drawing Price Psych.
Circuit Drawing Back Exit
Retrieve Data

To specify Fin thickness

Chilled Water

INPUT DATA Qty: 1

6 30 Cu 12 Cu 28 4 1626 394 CW 28 112 35 R

Coil Size: 3/8

Outer Diameter: 0.01003 m

Inner Diameter: 0.009423 m

On Coil Dry Bulb Temp.: 26.7 °C

Wet on Coil Temp.: 19.4 °C

Relative Humidity: 50.36 %

Calculation Depends On:

Water in/out: 7.2 °C

Water Out Temp.: 12.7 °C

Water Flow Rate: 2 l/s

Altitude: 50 m

Air Flow Rate: 11050 m³/h

Fluid Type: Water 100 %

Coil Length: 1.6256 m

Coil Width: 0.7112 m

Tube Vertical Distance: 0.0254 m

Tube Horizontal Distance: 0.022 m

Auto Circuit: Full circuit

Manual Circuit #: 28

Fins Material: Copper

Fins Type: Wavy

Fins Thickness: 0.00012 m

Fins Per Length: 394

Tube Material: Copper

Tube Shape: Smooth

Ruffled Tube Affect Percentage: 10 %

Rows #: 4

Header Direction: R

Change Header Size: 10

OUTPUT DATA

Capacity: 75117.24 W

Sensible Capacity: 48509.5 W

Off Coil Dry Bulb Temp: 13.58 °C

Off Coil Wet Bulb Temp: 12.2 °C

Water Pressure Drop: 12 kPa

Static Pressure: 90 Pa

Off Coil Relative Humidity: 85.1 %

Off Coil Humidity: 8.51 g/kg

Air Flow Rate: 11043.47 m³/h

Water Out Temp.: 12.7 °C

Water Flow Rate: 3.27 l/s

Circuit Length: 6.5 m

Water Volume Across Coil: 13.3 L

Coil Header: 35 mm

Coil Connection: 28 mm

Air Velocity: 2.65 m/s

Calculate Save New Calculation

Print Cad Drawing Price Psych.

Circuit Drawing Back Exit

Retrieve Data

To specify number of fins

Chilled Water 21.0.4.0

INPUT DATA Qty: 1

Coil Size: 3/8

Outer Diameter: 0.01003 m

Inner Diameter: 0.009423 m

On Coil Dry Bulb Temp.: 26.7 °C

Wet on Coil Temp.: 19.4 °C

Relative Humidity: 50.71 %

Calculation Depends On:

Water in/out: 7.2 °C

Water Out Temp.: 12.7 °C

Water Flow Rate: 2 l/s

Altitude: 0 m

Air Flow Rate: 11043.47 m³/h

Fluid Type: Water 100 %

Air Fouling Factor: 1.8E-06 m².K/W

Water Fouling Factor: 1.8E-05 m².K/W

Coil Length: 1.6256 m

Coil Height: 0.7112 m

Tube Per Row: 20

Tube Vertical Distance: 0.0254 m

Tube Horizontal Distance: 0.022 m

Auto Circuit: Full circuit

Manual Circuit #: 28

Fins Material: Aluminum

Fins Type: Wavy

Fins Thickness: 0.00015 m

Fins Per Length: 275

Tube Material: 157

Tube Shape: 196

Ruffled Tube Affect Percentage: 236

Rows #: 275

Header Direction: 315

Change Header Size: 354

Connections Direction: 394

433

472

511

551

590

630

669

710

748

790

To Specify tube material

Chilled Water 21.0.4.0

INPUT DATA Qty: 1

Coil Size: 3/8
Outer Diameter: 0.01003 m
Inner Diameter: 0.009423 m

On Coil Dry Bulb Temp.: 26.7 °C
Wet on Coil Temp.: 19.4 °C
Relative Humidity: 50.71 %

Calculation Depends On:
Water in/out: ☒ Flow Rate: ☐

Water In Temp: 7.2 °C
Water Out Temp.: 12.7 °C
Water Flow Rate: 2 l/s

Altitude: 0 m
Air Flow Rate: 11043.47 m³/h

Fluid Type: Water
Air Fouling Factor: 1.8E-06 m².K/W
Water Fouling Factor: 1.8E-05 m².K/W

Coil Length: 1.6256 m
Coil Height: 0.7112 m
Tube Per Row: 20
Tube Vertical Distance: 0.0254 m
Tube Horizontal Distance: 0.022 m

Auto Circuit: Full circuit
Manual Circuit #: 28

Fins Material: Aluminum
Fins Type: Wavy
Fins Thickness: 0.00015 m
Fins Per Length: 275

Tube Material: Copper
Copper
Aluminum
Steel
SS 304
SS 316

Tube Shape: ☒ R
Rifled Tube Affect Percentage: 0 %
Rows #: 4
Header Direction: R
Change Header Size: 200
Connections Direction: Horizontal

To specify tube shape

Chilled Water

INPUT DATA Qty: 1

Coil Size: 3/8
Outer Diameter: 0.01003 m
Inner Diameter: 0.009423 m

On Coil Dry Bulb Temp.: 26.7 °C
Wet on Coil Temp.: 19.4 °C
Relative Humidity: 50.36 %

Calculation Depends On:
Water in/out: ☒ Flow Rate: ☐

Water In Temp: 7.2 °C
Water Out Temp.: 12.7 °C
Water Flow Rate: 2 l/s

Altitude: 50 m
Air Flow Rate: 11050 m³/h

Fluid Type: Water
Air Fouling Factor: 1.8E-06 m².K/W
Water Fouling Factor: 1.8E-05 m².K/W

Coil Length: 1.6256 m
Coil Width: 0.7112 m
Tube Vertical Distance: 0.0254 m
Tube Horizontal Distance: 0.022 m

Auto Circuit: Full circuit
Manual Circuit #: 28

Fins Material: Copper
Fins Type: Wavy
Fins Thickness: 0.00012 m
Fins Per Length: 394

Tube Material: Copper
Tube Shape: Smooth
Smooth
Rifled

Rifled Tube Affect Percentage: 0 %
Rows #: 4
Header Direction: R
Change Header Size: 10

OUTPUT DATA

Capacity	75117.24	W
Sensible Capacity	48509.5	W
Off Coil Dry Bulb Temp	13.58	°C
Off Coil Wet Bulb Temp	12.2	°C
Water Pressure Drop	12	kPa
Static Pressure	90	Pa
Off Coil Relative Humidity	85.1	%
Off Coil Humidity	8.51	g/kg
Air Flow Rate	11043.47	m ³ /h
Water Out Temp.	12.7	°C
Water Flow Rate	3.27	l/s
Circuit Length	6.5	m
Water Volume Across Coil	13.3	L
Coil Header	35	mm
Coil Connection	28	mm
Air Velocity	2.65	m/s

Calculate Save New Calculation
Print Cad Drawing Price Psych.
Circuit Drawing Back Exit
Retrieve Data

To specify number of rows

Chilled Water 21.0.4.0

Qty: 1

INPUT DATA

Coil Size: 3/8
Outer Diameter: 0.01003 m
Inner Diameter: 0.009423 m

On Coil Dry Bulb Temp.: 26.7 °C

Wet on Coil Temp.: 19.4 °C
Relative Humidity: 50.71 %

Calculation Depends On:
Water in/out: ☒ Flow Rate ☐

Water in Temp: 7.2 °C
Water Out Temp.: 12.7 °C
Water Flow Rate: 2 l/s

Altitude: 0 m
Air Flow Rate: 11043.47 m3/h

Fluid Type: Water 100 %
Air Fouling Factor: 1.8E-06 m2.K/W
Water Fouling Factor: 1.8E-05 m2.K/W

Coil Length: 1.6256 m
Coil Height: 0.7112 m
Tube Per Row: 20

Tube Vertical Distance: 0.0254 m
Tube Horizontal Distance: 0.022 m

Auto Circuit: Full circuit
Manual Circuit #: 28

Fins Material: Aluminum
Fins Type: Wavy
Fins Thickness: 0.00015 m
Fins Per Length: 275
Tube Material: Copper
Tube Shape: Smooth
Riffed Tube Affect Percentage: 10 %

Rows #: 4

Header Direction:
☐ Change Header Size

Connections Direction:
☐ Change Header Size

OUTPUT DATA

Capacity
Sensible Capacity
Off Coil Dry Bulb Temp
Off Coil Wet Bulb Temp
Water Pressure Drop
Air Pressure Drop
Off Coil Relative Humidity
Off Coil Humidity
Air Flow Rate
Water Out Temp.
Water Flow Rate
Circuit Length
Water Volume Across Coil
Coil Header
Coil Connection
Air Velocity
Fluid Velocity

Calculate Print

Press calculate to have output complete details

Chilled Water

Qty: 1

INPUT DATA

Coil Size: 3/8
Outer Diameter: 0.01003 m
Inner Diameter: 0.009423 m

On Coil Dry Bulb Temp.: 26.7 °C

Wet on Coil Temp.: 19.4 °C
Relative Humidity: 50.36 %

Calculation Depends On:
Water in/out: ☒ Flow Rate ☐

Water in Temp: 7.2 °C
Water Out Temp.: 12.7 °C
Water Flow Rate: 2 l/s

Altitude: 0 m
Air Flow Rate: 11043.47 m3/h

Fluid Type: Water 100 %

Coil Length: 1.6256 m
Coil Width: 0.7112 m
Tube Vertical Distance: 0.0254 m
Tube Horizontal Distance: 0.022 m

Auto Circuit: Full circuit
Manual Circuit #: 28

Fins Material: Copper
Fins Type: Wavy
Fins Thickness: 0.00012 m
Fins Per Length: 394
Tube Material: Copper
Tube Shape: Smooth
Riffed Tube Affect Percentage: 10 %

Rows #: 4

Header Direction: R
☐ Change Header Size

OUTPUT DATA

Capacity 75117.24 W
Sensible Capacity 48589.5 W
Off Coil Dry Bulb Temp 13.58 °C
Off Coil Wet Bulb Temp 12.2 °C
Water Pressure Drop 12 kPa
Static Pressure 90 Pa
Off Coil Relative Humidity 85.1 %
Off Coil Humidity 8.51 g/kg
Air Flow Rate 11043.47 m3/h
Water Out Temp. 12.7 °C
Water Flow Rate 3.27 l/s
Circuit Length 6.5 m
Water Volume Across Coil 13.3 L
Coil Header 35 mm
Coil Connection 28 mm
Air Velocity 2.65 m/s

Calculate Save New Calculation

Print Cad Drawing Price Psych.

Circuit Drawing Back Exit

Retrieve Data

Save and Retrieve data

Chilled Water

Qty: 1

6 30 Cu 12 Cu 28 4 1626 394 CW 28 112 35 R

INPUT DATA

Coil Size: 3/8

Outer Diameter: 0.01003 m

Inner Diameter: 0.009423 m

On Coil Dry Bulb Temp.: 26.7 °C

Wet on Coil Temp.: 19.4 °C

Relative Humidity: 50.36 %

Calculation Depends On:

Water in/out: ☒ Water in/out: ☐ Flow Rate

Water in Temp.: 7.2 °C

Water Out Temp.: 12.7 °C

Water Flow Rate: 2 l/s

Altitude: 50 m

Air Flow Rate: 11050 m³/h

Fluid Type: Water 100 %

Coil Length: 1.6256 m

Coil Width: 0.7112 m

Tube Vertical Distance: 0.0254 m

Tube Horizontal Distance: 0.022 m

Auto Circuit: Full circuit

Manual Circuit #: 28

Fins Material: Copper

Fins Type: Wavy

Fins Thickness: 0.00012 m

Fins Per Length: 394

Tube Material: Copper

Tube Shape: Smooth

Ruffled Tube Affect Percentage: 10 %

Rows #: 4

Header Direction: R

Change Header Size: 10

OUTPUT DATA

Capacity: 75108.84 W

Sensible Capacity: 48616.39 W

Off Coil Dry Bulb Temp: 13.58 °C

Off Coil Wet Bulb Temp: 12.2 °C

Water Pressure Drop: 12 kPa

Static Pressure: 90 Pa

Off Coil Relative Humidity: 85.1 %

Off Coil Humidity: 8.51 g/kg

Air Flow Rate: 11050 m³/h

Water Out Temp.: 12.7 °C

Water Flow Rate: 3.27 l/s

Circuit Length: 6.5 m

Water Volume Across Coil: 13.3 L

Coil Header: 35 mm

Coil Connection: 28 mm

Air Velocity: 2.65 m/s

Calculate Save New Calculation

Print Cad Drawing Price Psych.

Circuit Drawing Back Exit

Retrieve Data

Print a report under your logo

ReportViewForm

SAP CRYSTAL REPORTS

Main Report

Coil Simulation Software

Chilled water

Project Name: dddd

Date: 28/06/2020

Input Data

Coil Size :	3/8	Altitude :	50	m
Outer Diameter :	0.01003	Tube Vertical Distance :	0.0254	m
Inner Diameter :	0.009423	Tube Horizontal Distance :	0.022	m
Dry On Coil Temp. :	26.7	Circuit # :	28	
Wet On Coil Temp. :	19.4	Fins Material :	Copper	
Relative Humidity :	50.36	Fins Type :	Wavy	
Water in Temp. :	7.2	Tube Material :	Copper	
Water Out Temp. :	12.7	Tube Shape :	Smooth	
		Rows # :	4	
Fluid Type :	Water	Fins Per Length :	394	
Coil Length :	1.6256	Fins Thickness :	0.00012	m
Coil Width :	0.7112	Air Flow Rate :	11050	m ³ /h

OUTPUT DATA

Capacity: 75108.84 W

Sensible Capacity: 48616.39 W

Off Coil Dry Bulb Temp: 13.58 °C

Off Coil Wet Bulb Temp: 12.2 °C

Water Pressure Drop: 12 kPa

Static Pressure: 90 Pa

Off Coil Relative Humidity: 85.1 %

Off Coil Humidity: 8.51 g/kg

Air Flow Rate: 11050 m³/h

Water Out Temp.: 12.7 °C

Water Flow Rate: 3.27 l/s

Circuit Length: 6.5 m

Water Volume Across Coil: 13.3 L

Coil Header: 35 mm

Coil Connection: 28 mm

Air Velocity: 2.65 m/s

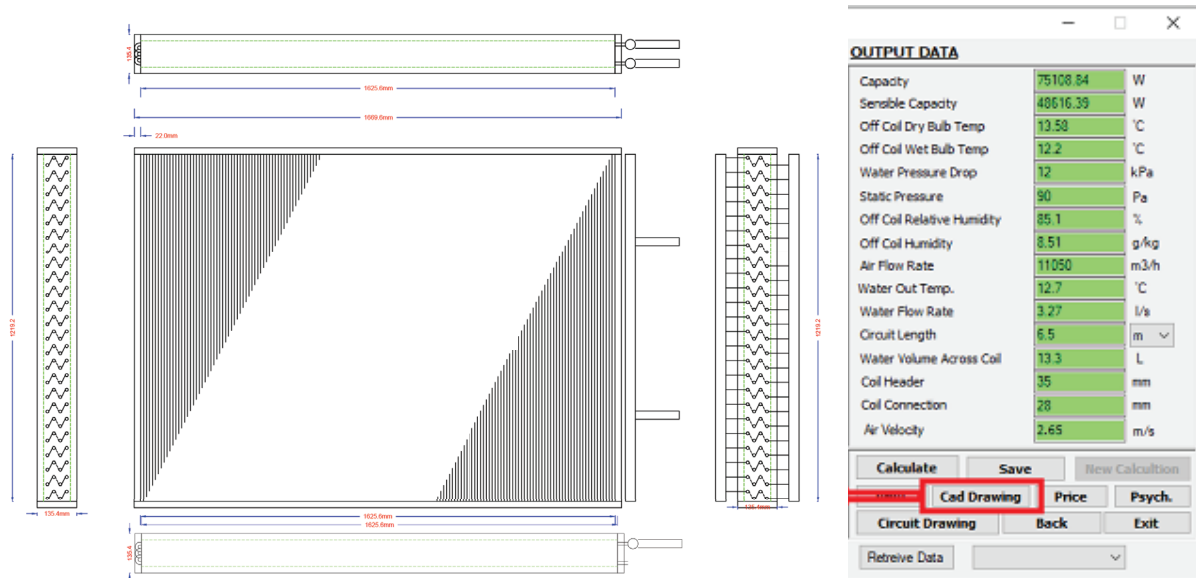
Calculate Save New Calculation

Print Cad Drawing Price Psych.

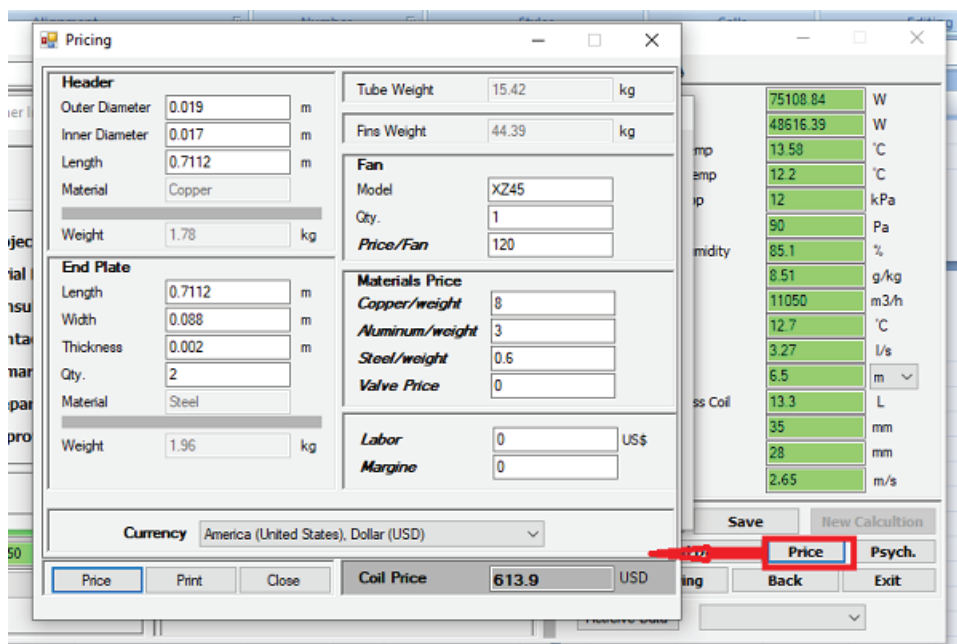
Circuit Drawing Back Exit

Retrieve Data

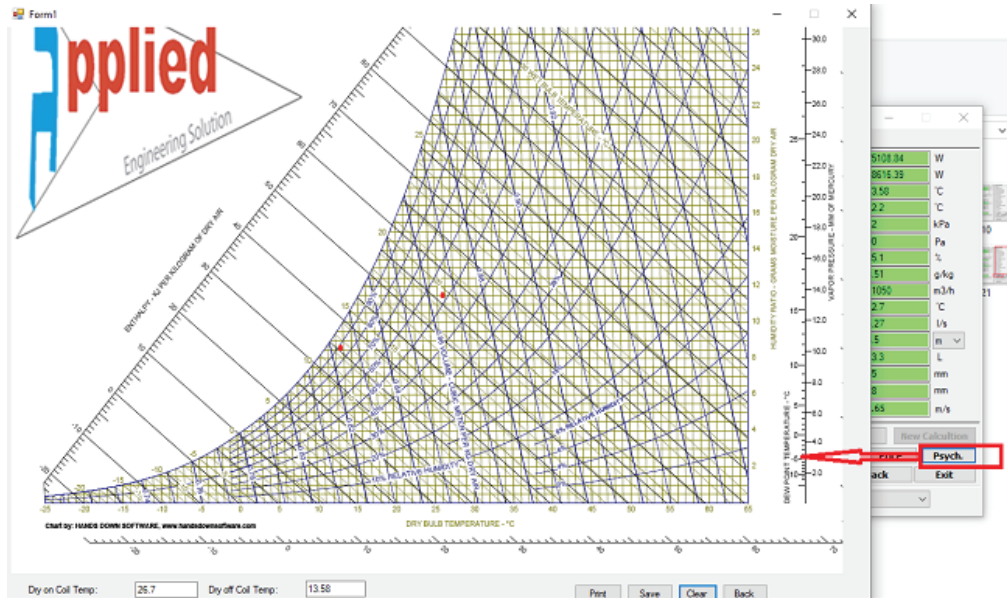
To explore autoCAD drawing with complete coil details



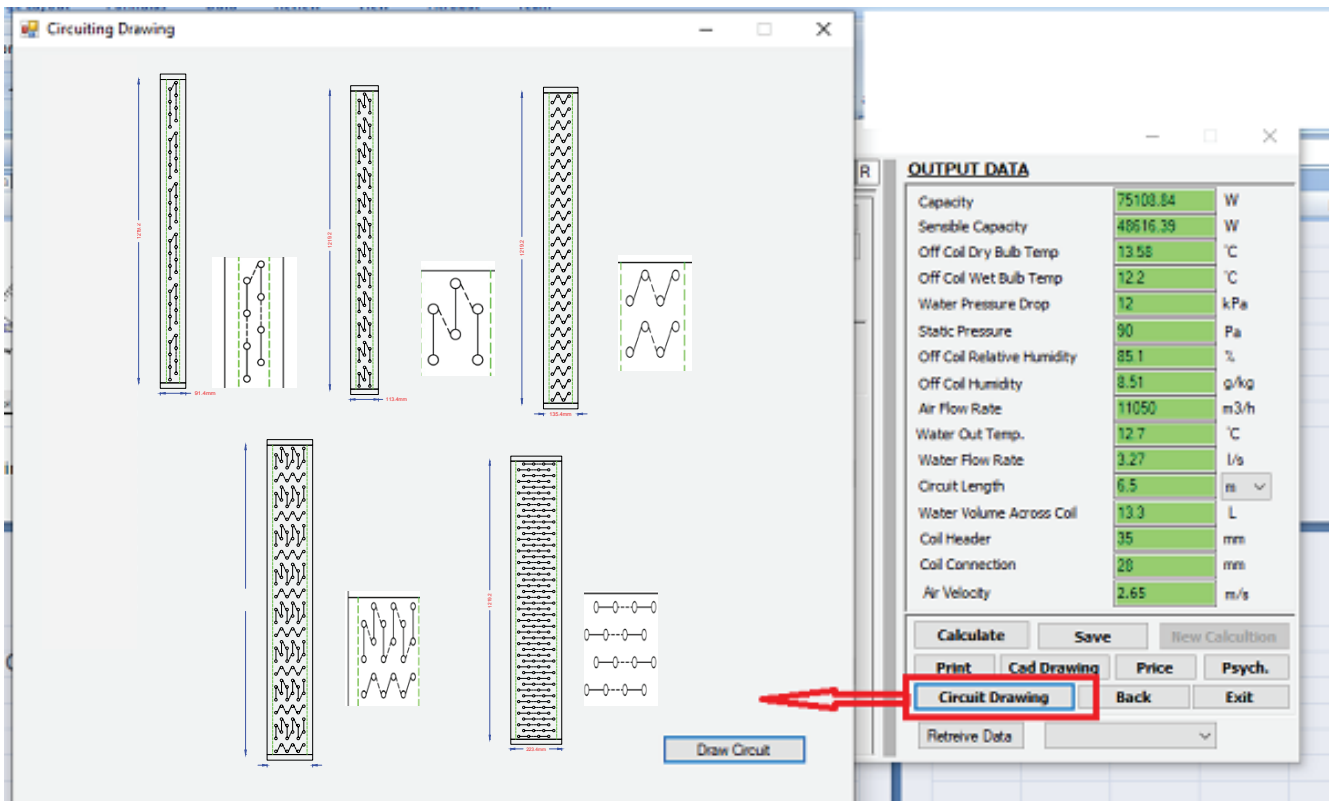
Pricing sheet of the Coil



Psychrometric chart



Coil Circuitering Drawing



Evaporator Coil with a lot of refrigerants

Evaporator 21.0.4.0

INPUT DATA

Qty:	1	
Refrigerant Type:	R22	
Coil Size:	R22	
Outer Diameter:	R134A	m
Inner Diameter:	R407C	m
Evaporating Temp.:	R410A	°C
Suction Temp.:	R404A	°C
Dry on Coil Temp:	R507A	°C
☒ Wet on Coil Temp.: ☐ Relative Humidity:	R32	°C
	R1234yf	°C
	R407A	°C
	R1234ze	°C
	R407F	°C
	R448A	°C
	R449A	°C
	R450A	°C
	R513A	°C
	R744	%
	R1270	°C
	R290	°C
	R452A	°C
	R454B	°C
	R515B	°C
	R717	°C
Condensing Temp.:	45	°C
Subcooling Temp.:	0	m
Liquid Temp.:		
Altitude:		

Evaporative Condenser


Evaporative Condenser

INPUT DATA

Qty:
Refrigerant Type:
Coil Size:
Outer Diameter: m
Inner Diameter: m
On Coil Dry Bulb Temp.: °C
☒ On Coil Wet Bulb °C
☐ Relative Humidity %
Discharge Temp.: °C
Condensing Temp.: °C
Altitude: m
Coil Length: m
Coil Width: m
Tube Vertical Distance: m
Tube Horizontal Distance: m
☐ Auto Circuit :
☒ Manual Circuit #:
Fins Material:
Fins Type:
Fins Thickness: m
Fins Per Length:
Tube Material:
Tube Shape:
Rows #:
Air Quantity: m³/h
Manifold Location "R" or "L"

OUTPUT DATA

Capacity W
Off Coil Dry Bulb Temp.: °C
Fluid Pressure Drop kPa
Static Pressure Pa
Air Velocity m/s
Circuit Length m
Discharge Header Diameter mm
Discharge Connection mm
Liquid Header Diameter mm
Liquid Connection mm
Refrigerant Mass Flow kg/h
☐ Change Dis Header Size
☐ Change Liquid Header Size

Water Heating Coil

Water Heating

Qty: 1

6 30 Cu 12 Cu 28 4 1626 236 WH 12 112 R

Coil Tube Size: 3/8

Outer Diameter: 0.01003 m

Inner Diameter: 0.009423 m

Dry on Coil Temp.: 26.7 °C

Wet on Coil Temp.: 19.4 °C

Calculation Depends On:

☒ Water in/out: ☐ Flow Rate

Water in Temp.: 50 °C

Water Out Temp.: 40 °C

Water Flow Rate: 0.84 L/s

Altitude: 0 m

Air Flow Rate: 11044.8 m³/h

Fluid Type: Water 100 %

Coil Length: 1.6256 m

Coil Width: 0.7112 m

Tube Vertical Distance: 0.0254 m

Tube Horizontal Distance: 0.0254 m

☐ Auto Circuit: Quarter circuit

☒ Manual Circuit #: 12

Fins Material: Copper

Fins Thickness: 0.00012 m

Fins Per Length: 236

Fins Type: Wavy

Tube Material: Copper

Tube Shape: Smooth

Rifled Tube Affect Percentage: 10 %

Rows #: 4

Header Direction: R

☐ Change Header Size: 10

OUTPUT DATA

Total Capacity: 62962.17 W

Off Coil Dry Bulb Temp.: 43.7 °C

Water out Temp.: 40 °C

Water Flow Rate: 1.51 L/s

Circuit Length: 15.17 m

Air Flow Rate: 11044.8 m³/h

Static Pressure: 53 Pa

Water Pressure Drop: 68 kPa

Water Volume Across Coil: 13.3 L

Coil Header: 22 mm

Coil Connection: 19 mm

Air Velocity: 2.65 m/s

Calculate Save Cad Drawing

Print Price New Calculation

Circuit Drawing Back Exit

Retrieve Data

Steam Coil

Steam Coil

Qty: 1

6 30 Cu 12 Cu 28 4 1626 236 WH 12 112 R

Coil Tube Size: 3/8

Outer Diameter: 0.01003 m

Inner Diameter: 0.009423 m

Dry on Coil Temp.: 26.7 °C

Wet on Coil Temp.: 19.4 °C

Calculation Depends On:

☒ Superheat

Steam in Temp.: 150 °C

Steam Out Temp.: 110 °C

Steam Pressure: 15 Bar

Altitude: 0 m

Air Flow Rate: 11044.8 m³/h

Coil Length: 1.6256 m

Coil Width: 0.7112 m

Tube Vertical Distance: 0.0254 m

Tube Horizontal Distance: 0.0254 m

☐ Auto Circuit: Quarter circuit

☒ Manual Circuit #: 12

Fins Material: Copper

Fins Thickness: 0.00012 m

Fins Per Length: 236

Fins Type: Wavy

Tube Material: Copper

Tube Shape: Smooth

Rifled Tube Affect Percentage: 10 %

Rows #: 4

Header Direction: R

☐ Change Header Size: 10

OUTPUT DATA

Total Capacity: 314084.18 W

Off Coil Dry Bulb Temp.: 111.5 °C

Steam out Temp.: 110 °C

Circuit Length: 15.17 m

Air Flow Rate: 11044.8 m³/h

Static Pressure: 53 Pa

Water Volume Across Coil: 13.3 L

Coil Header: 28 mm

Coil Connection: 22 mm

Air Velocity: 2.65 m/s

Calculate Save

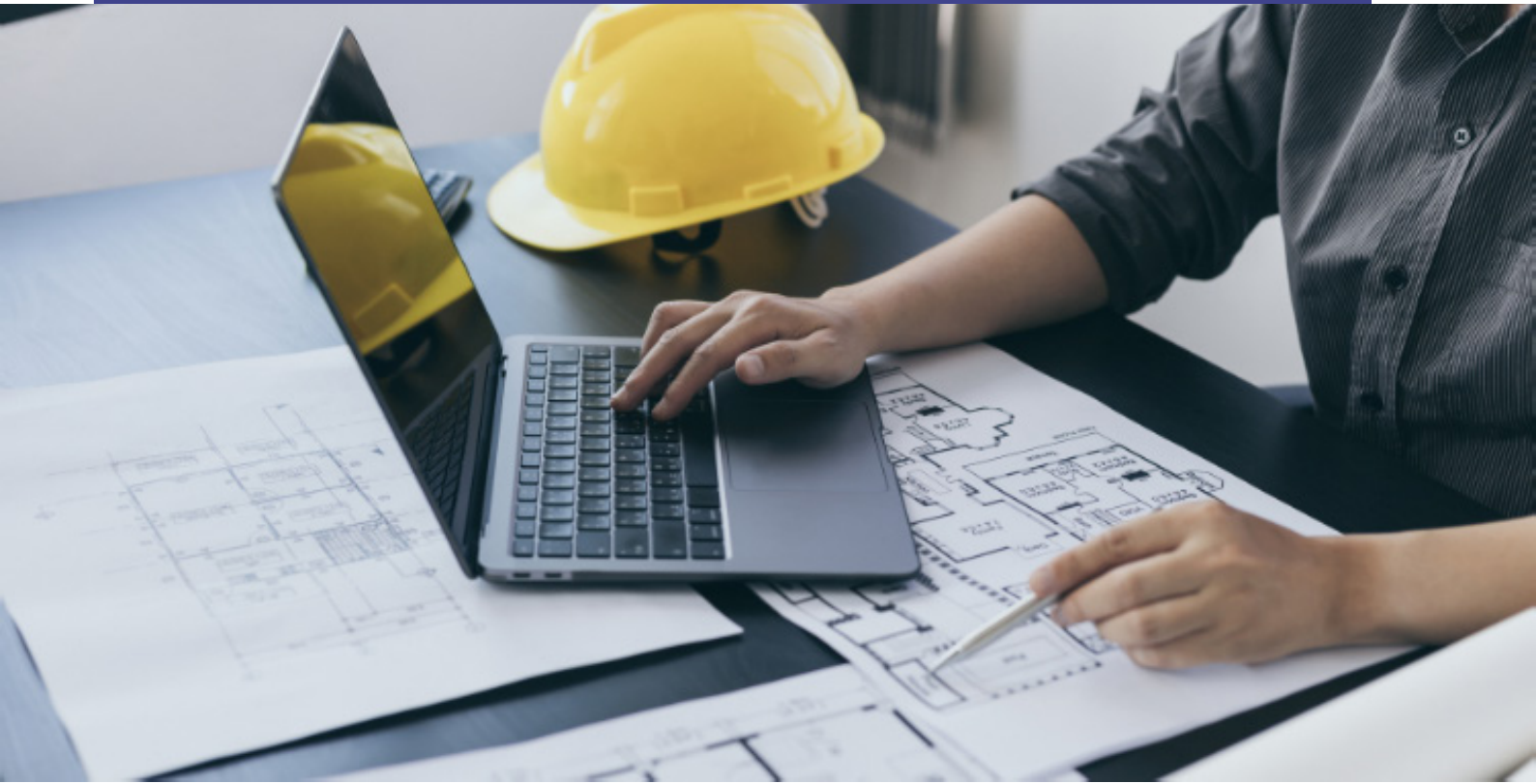
Print Price New Calculation

Circuit Drawing Back Exit

Retrieve Data

Standard & Optional Features

Specification	Standard	Optional
Chilled water	upon request	
Water heating	upon request	
Evaporator	upon request	
Condenser	upon request	
Evaporative Condenser	upon request	
Steam Coil	upon request	
Simulation feature	✓	
Design feature		✓
AutoCAD drawing with circuting with standard frame		✓
Custom Frame for the submittal drawing		✓
Manufacturing drawing and BOQ		✓
Price Sheet and quotaiothn form		✓
DLL for the Coil Software		✓
Custom output report		✓
Save & Retrieve	✓	
Cataloge performance data		✓



Contact Us :



+962 7 9973 3254

+962 7 9080 8137



www.applied-eng.com
sales@applied-eng.com



Applied Engineering

