

DeltaCool™ Fan Coil

Cooling and Dehumidification

Manage the temperature and humidity in your indoor or greenhouse growing environment for healthier crops.

How Chilled Water Cooling Works

Chilled water cooling from Delta T Solutions is a hydronic process that circulates chilled water through a loop piping system. Circulator pumps force the water through a heat exchanger, and a fan draws warm air out and cools it as it passes over cold coils. By modulating the water temperature to the coil, exact cooling and humidity control can be achieved — a capability especially important for growing healthy cannabis crops.

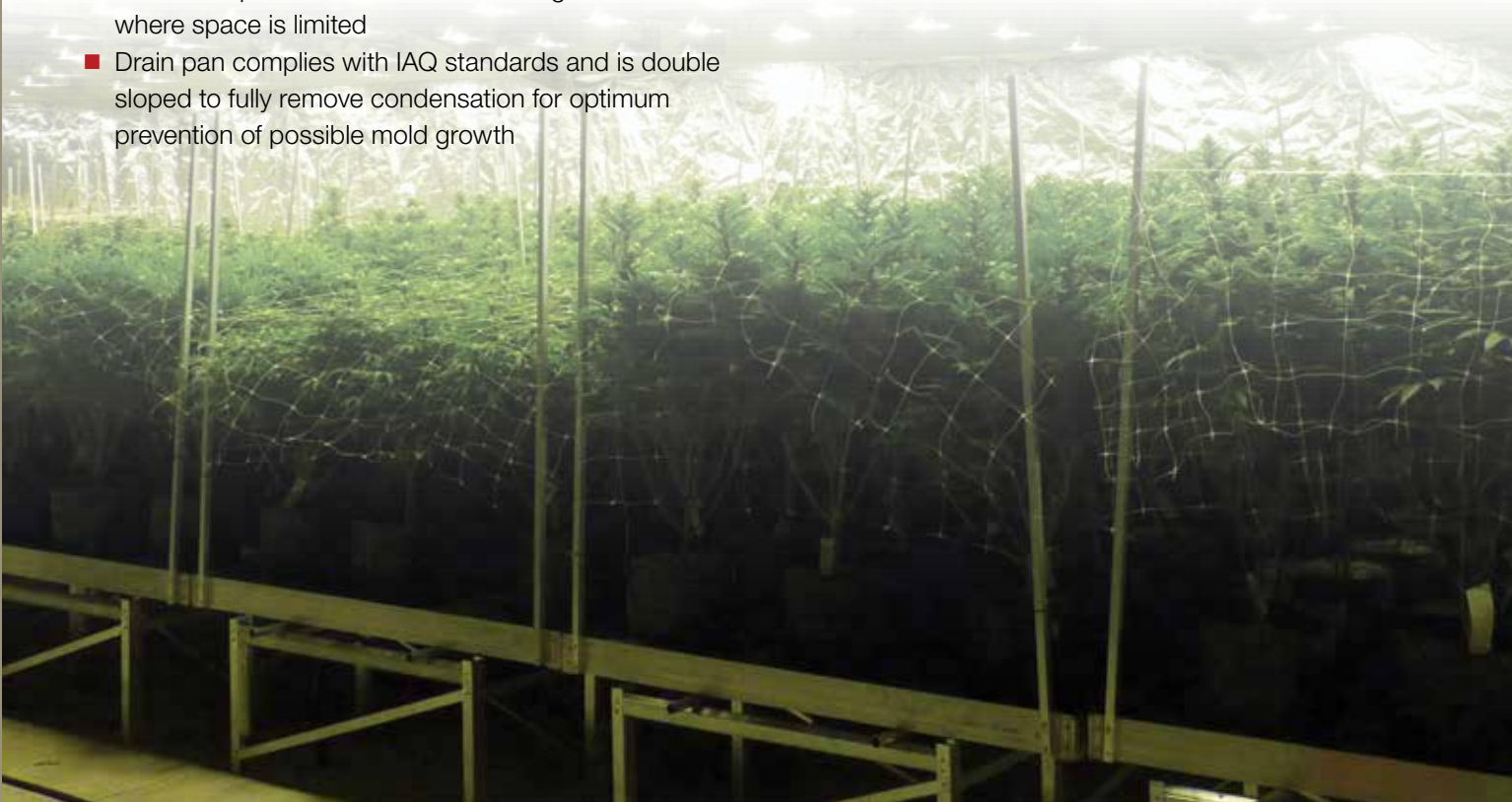
Fan Coil Advantages

By operating the DeltaCool™ Fan Coil, indoor and greenhouse growers gain the following advantages:

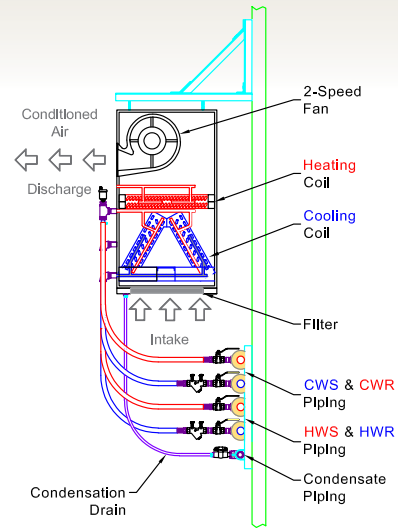
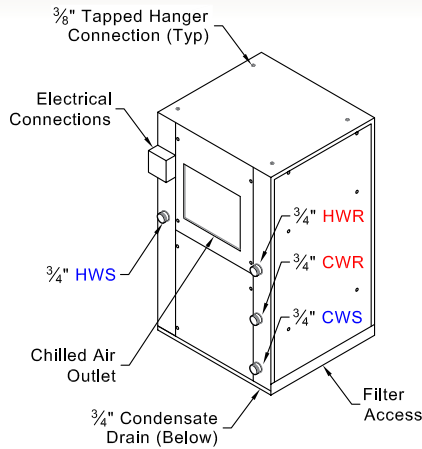
- Precise space air temperature control without removal of humidity from air (sensible cooling approach)
- Two sizes available: 2.5- and 5-ton models
- Low operating cost due to efficient design
- Easy access to fan and coil via removable air-discharge side, end and front panels
- Overhead suspension points for hanging help to conserve space and are ideal for ceiling installations where space is limited
- Drain pan complies with IAQ standards and is double sloped to fully remove condensation for optimum prevention of possible mold growth

Fan Coil Specifications

- Galvanized steel construction
- Front air discharge with bottom air inlet
- 5-ton unit has twin direct-drive fans (twin air discharge ports)
- 5-ton unit capacity: 1 hp (two PCS-type motors at 1/2 hp each)
- 2.5-ton unit capacity: 1/2 hp, 208/230 V
- Two-pipe cooling-only model – coil drain connections are on the bottom of the unit
- Coil connections will accept 1" mpt / drain @ 1/2" mpt
- Bottom air intake with mesh-type filter (low MERV / low apd)
- Stainless steel drain pan, positively sloped
- 1/2" fiberglass insulation



2.5-TON DELTACOOL™ FAN COIL COOLING AND DEHUMIDIFICATION

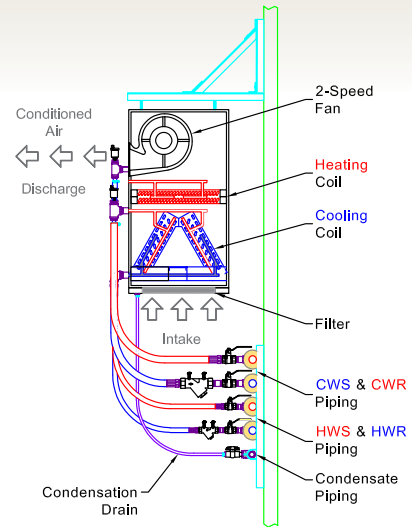
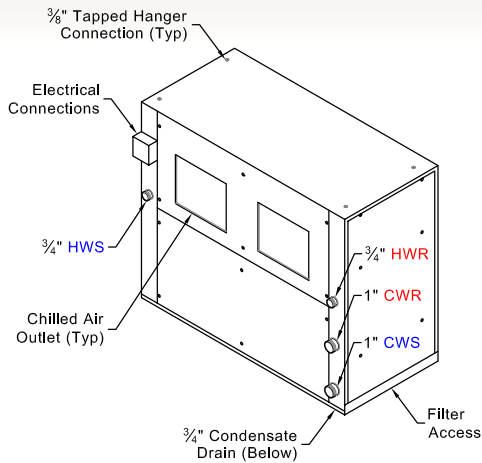


Specifications				
Model Size	Dimensions	Fans (Qty.)	Motors	Net Weight
2.5-ton	28"W x 40"H x 22"D	1	Qty. 1 (208-230V/60/1)	125 lbs.
2.5-ton with Heat Coil	28"W x 40"H x 22"D	1	Qty. 1 (208-230V/60/1)	135 lbs.

Model	Nom. Size (Tons)	Inlet Conditions			Coil Performance				Exit Conditions	
		ACFM	Air Dry Bulb	%RH	Total Btuh	Sensible btuh	GPM	"Fluid Press Drop Ft H2O"	Air Dry Bulb	Fluid Temp
SGHO-030 Full Speed 48°F EWT	2.5	1586	75	47.70%	30083	30083	6	7.8	57.1	58
		1586	75	50.00%	30629	29186	6	7.8	56.7	58.2
		1586	75	60.00%	34182	25804	6	7.8	59.6	59.4
SGHO-030 Half Speed 48°F EWT	2.5	790	75	42.20%	18533	18533	6	7.8	52.9	54.2
		790	75	50.00%	20780	17372	6	7.8	54.2	54.9
		790	75	60.00%	24749	16327	6	7.8	55.4	56.3
SGHO-030 Full Speed 42°F EWT	2.5	1586	75	40.00%	36626	36626	6	7.8	53.2	54.2
		1586	75	50.00%	39842	32928	6	7.8	55.4	55.3
		1586	75	60.00%	44392	29798	6	7.8	57.2	56.8
SGHO-030 Half Speed 42°F EWT	2.5	790	75	40.00%	24118	21702	6	7.8	49.1	50
		790	75	50.00%	27974	20472	6	7.8	50.5	51.3
		790	75	60.00%	32670	19652	6	7.8	51.4	52.9

Heating Capacity (MBH)														
Model	Size (Tons)	EAT	CFM	GPM	PD (Ft-H2O)	Entering Water Temperature								
						120°F	130°F	140°F	150°F	160°F	170°F	180°F	190°F	200°F
SGHO-030 Half Speed	2.5	65°F	800	2.2	0.6	8.4	10	11.5	13.2	14.8	16.4	18	19.5	21.1
SGHO-030 Full Speed	2.5	65°F	1600	2.2	0.6	11.9	14.1	16.4	18.7	21	23.3	25.6	27.9	30.2

5-TON DELTACOOL™ FAN COIL COOLING AND DEHUMIDIFICATION



Specifications				
Model Size	Dimensions	Fans (Qty.)	Motors	Net Weight
5-ton	48"W x 40"H x 22"D	2	Qty. 2 (208-230V/60/1)	225 lbs.
5-ton with Heat Coil	48"W x 40"H x 22"D	2	Qty. 2 (208-230V/60/1)	240 lbs.

Model	Nom. Size (Tons)	Inlet Conditions			Coil Performance				Exit Conditions	
		ACFM	Air Dry Bulb	%RH	Total Btuh	Sensible btuh	GPM	"Fluid Press Drop Ft H2O"	Air Dry Bulb	Fluid Temp
SGHO-060 Full Speed 48°F EWT	5	3170	75	47.70%	60166	60166	12	6.5	57.1	58
		3170	75	50.00%	61258	58372	12	6.5	56.7	58.2
		3170	75	60.00%	68364	51608	12	6.5	59.6	59.4
SGHO-060 Half Speed 48°F EWT	5	1580	75	42.20%	37066	37066	12	6.5	52.9	54.2
		1580	75	50.00%	41560	34744	12	6.5	54.2	54.9
		1580	75	60.00%	49498	32654	12	6.5	55.4	56.3
SGHO-060 Full Speed 42°F EWT	5	3170	75	40.20%	73164	73164	12	6.5	53.2	54.2
		3170	75	50.00%	79442	65738	12	6.5	55.4	55.2
		3170	75	60.00%	88498	59466	12	6.5	57.2	56.8
SGHO-060 Half Speed 42°F EWT	5	1580	75	40.00%	48148	43364	12	6.5	49.1	50
		1580	75	50.00%	55828	40888	12	6.5	50.5	51.3
		1580	75	60.00%	65184	39236	12	6.5	51.4	52.9

Heating Capacity (MBH)														
Model	Size (Tons)	EAT	CFM	GPM	PD (Ft-H2O)	Entering Water Temperature								
						120°F	130°F	140°F	150°F	160°F	170°F	180°F	190°F	200°F
SGHO-060 Half Speed	5	65°F	1600	4.4	3.3	17.5	20.7	23.9	27.2	30.3	33.6	36.9	40.1	43.4
SGHO-060 Full Speed	5	65°F	3200	4.4	3.3	25.2	29.8	34.5	39.1	43.8	48.5	53.2	58	62.7

Creating Custom Horticultural Heating & Cooling Solutions For 30 Years

DeltaCool™

Better Cooling than Traditional HVAC



▶▶ Compare the DeltaCool™ Advantages

The DeltaCool™ System provides consistent and precise cooling and humidity controls. Standard air conditioning systems cool the air by pulling moisture out of the air, resulting in inconsistent humidity levels. Maintaining proper humidity levels is critical to the health of a crop. Understanding the differences between cooling systems will ensure a successful crop.

Cooling Benefits	DeltaCool™ System	Traditional HVAC	Other Systems
Efficiency	Saves up to 35% energy usage.	Requires more energy overall.	Varies by system.
Dehumidification	Regulates water temp as it enters the fan coil to provide consistent, precise cooling & humidity control.	Continual dehumidification results in inconsistent humidity levels.	Do not modulate incoming water temperatures to fan coil.
Chiller Units	Heavy duty, industrial-grade system with standard steel piping. Generally requires one or two large tonnage units. Available in up to 250 ton units.	Use condensers instead of cold water chiller.	Residential and lightweight commercial-grade use Sch 40 PVC piping. Requires multiple smaller tonnage units with more piping.
Fan Coils	Industrial, galvanized steel construction with precise published specs. Available in 2.5- & 5-ton units.	No fan coils; expensive duct work.	Residential and lightweight commercial-grade with questionable outputs.
Horticultural Environmental Control	Integrated with DeltaCool™ system design.	Typically standard wall thermostats.	Standard HVAC control.

Contact us for more information on how your growing operation can benefit from DeltaCool™ Chilled Water Cooling Systems.

Creating Custom Horticultural Heating & Cooling Solutions For 30 Years



27711 Diaz Road, Suite B, Temecula, CA 92590 ■ 800.552.5058 ■ 760.682.0428 (fax) ■ www.deltatsolutions.com