

# VERTICAL FLOW COOLING TOWERS



The ICE CT-RF (round, counter flow) and CT-SF (square, cross-flow) Series Cooling Towers are light compact and designed for long life even under the most severe environmental weather conditions.

The fiberglass-reinforced polymer construction and energy-efficient design reduce both maintenance and operating costs.

These units are designed to consistently produce chilled water for all industrial processes requiring +85°F fluid temperature.

Budzar also has in-depth experience at sizing equipment for unusual or specialized applications.

Budzar Industries specializes in process fluid heat transfer systems. Since 1975, Budzar Industries has earned a reputation for quality and ingenuity in the design, engineering, and manufacturing of temperature control systems. Today, Budzar systems can be found throughout the world bringing accurate temperature measurement and control to the production of: chemicals, petroleum, plastics, rubber, paper, power, steel, food, and pharmaceuticals.

engineering  
**PRECISION**

**COMPARE THESE  
FEATURES**

- CT-RF Cooling Towers incorporate an induced draft counter-flow design with an axial flow fan mounted on the top of the tower to draft air out.
- The CT-SF Cooling Towers incorporate an efficient cross-flow design with an axial flow fan mounted on the top of the tower to draft air out.
- Both the CT-RF and the CT-SF are constructed with Fiberglass reinforced polyester which is composed of fiberglass mat laminated from unsaturated polyester resin. The high structural strength of the material protects the unit against impact and cracking. A gel coat is then applied to form a smooth surface.
- Both the CT-RF and the CT-SF have Tower Support Framework that consists of Hot-Dip galvanized steel to resist corrosion and rust (stainless steel is optional). The base legs on the CT-RF are incorporated with the water basin in a single unit to withstand wind pressure and vibration
- The Motor Support Framework for the CT-RF and the CT-SF series is made of Hot-Dip galvanized steel to resist corrosion and rust. (stainless steel is available as well)
- The CT-RF Series has Air Inlet Louvers with PVC plastic mesh that fit on the air inlet to prevent foreign material from falling into the basin or water splashing out of the basin
- The CT-SF Series has FRP louvers that are fitted on the air inlet to prevent foreign material from falling into the basin or water splashing out of the basin
- The Filling on both the CT-RF and the CT-SF series is made from a rigid PVC sheet which is embossed and corrugated in a honeycomb configuration that provides maximum air-to-water contact for highest thermal efficiency



 **BUDZAR**  
INDUSTRIES, INC.

process  
**TEMPERATURE**  
control

# VERTICAL FLOW COOLING TOWERS

## CT-RF (Round, Counter Flow)

	CT-009-1-R-F	CT-012-1-R-F	CT-023-1-R-F	CT-029-1-R-F	CT-047-1-R-F	CT-081-1-R-F	CT-145-1-R-F
Fan Motor HP	0.25	0.5	0.75	1	2	3	5
Fan Diameter	23	30	30	35	47	58	70
Air Vol (CFM)	3,400	4,900	7,700	10,500	14,700	24,700	43,000
Nom. W.F. (GPM)	28	35	70	87	140	244	437
Nom Tons @ 78°F WBT*	9	12	23	29	47	81	145
Nom Tons @ 75°F WBT*	12	15	30	37	60	104	186
Water In (WI)	1.5	2	2	3	3	4	6
Water Out (WO)	1.5	2	2	3	3	4	6
Over Flow (OF)	1	1	1	1	1	1.5	1.5
Drain (DN)	1	1	1	1	1	1	1.5
Float Valve (FV)	.75	.75	.75	.75	.75	.75	.75
Quick Fill (QF)	-	-	-	-	-	-	0.75
Weight Dry (lbs)	135	200	330	380	550	1,500	2,200
Weight Op. (lbs)	310	510	730	110	1,750	3,200	4,900
D	36.625	46.25	54.125	63.625	73.625	96.5	130.75
H	70.875	74.75	87.375	82.625	102.375	122	137.75
h	7	7.5	7.5	8.25	11.375	11.625	16.5

\*Based on 95°F EWT and 85°F LWT-3 GPM/Ton

## CT-SF (Square, Cross-Flow)<sup>1</sup>

	CT-117-1-S-F	CT-220-1-S-F	CT-293-1-S-F	CT-441-2-S-F	CT-584-2-S-F	CT-1027-1-S-F	CT-1468-1-S-F
Fan Motor HP	7.5 x 1	10 x 1	15 x 1	10 x 2	15 x 2	15 x 4	15 x 5
Fan Diameter	58 x 1	93 x 1	93 x 1	93 x 2	93 x 2	93 x 4	93 x 5
Air Vol (CFM)	39,000	73,000	94,000	146,000	188,000	330,000	471,000
Nom. W.F. (GPM)	352	661	880	1,322	1,762	3,082	4,404
Nom Tons @ 75°F WBT*	117	220	293	441	587	1,027	1,468
Nom Tons @ 78°F WBT*	150	282	376	565	752	1,317	1,882
Water In (WI)	3 x 2	5 x 2	5 x 2	5 x 4	5 x 4	5 x 8	5 x 10
Water Out (WO)	5	6	8	10	10	10 x 2	10 x 3
Over Flow (OF)	2	3	3	3	3	3 x 2	3 x 3
Drain (DN)	1.5	2	2	2	2	2 x 2	2 x 3
Float Valve (FV)	.75	1	1	1	1	1 x 2	1 x 3
Quick Fill (QF)	.75	1	1	1	1	1 x 2	1 x 3
Weight Dry (lbs)	2,000	3,550	4,850	6,900	9,500	16,100	24,100
Weight Op. (lbs)	4,000	7,050	9,250	14,000	18,300	31,100	46,100
L	70.125	102.375	113.375	204.75	226.75	409.5	566.875
W	137	172.375	172.375	172.375	172.375	172.375	172.375
H	135.375	169.25	185	169.25	185	185	185

\*Based on 95°F EWT and 85°F LWT-3 GPM/Ton

Additional sizes available for the CT-RF and the CT-SF series. Contact Budzar Industries for further information.

<sup>1</sup>CT-SF includes drift eliminators and internal water distribution piping. Without the internal water distribution piping, water connections must be brought to two separate warm water wells on the top of the tower. The internal water distribution piping provides a single point connection for water supply to the tower.

Budzar Industries reserves the right to discontinue or change specifications without notice, consistent with sound engineering practice and current industrial standards.



38241 Willoughby Pkwy., Willoughby, Ohio 44094-7582  
 (440) 918-0505 • Fax (440) 918-0606 / 918-0707  
 www.budzar.com • E-mail: sales@budzar.com



Bulletin #51  
 10/03