



The Best Just Got Better

MODEL T-3000

TOWER SPECIFICATIONS



Cooling Tower Systems, Inc.

196 Lower Cherry Street Macon, GA 31201

TF: 800.752.1905

F: 478.755.8304

www.coolingtowersystems.com

info@coolingtowersystems.com



TOWER SPECIFICATIONS: MODEL T-3000 Cooling Tower Systems, Inc.

| Design and Operating Conditions | | Water Distribution System Construction Materials | |
|---|---------------------------------|--|---------------------|
| Tower Type: | Counter Flow Induced Draft | Stand Pipe: | PVC |
| Water Flow Rate (GPM): | 3,011 GPM | Sprinkler Head: | AC |
| Entering Water Temperature | 95°F | Sprinkler Pipes: | PVC |
| Leaving Water Temperature | 85°F | Mechanical Equipment | |
| Wet Bulb Temperature: | 75°F | Fan Unit: | One Unit per Tower |
| Total Fan BHP: | 30 HP | Type: | Axial Flow |
| Total Pump Head: | 20' | Manufacturer: | CTS |
| Drift Loss of Water Flow: | 0.1% | Diameter: | 141" |
| Evaporation Loss of Water Flow: | 0.93% | Blade Material: | AC |
| Design Wind Load: | 41 lbs/sq. ft. | Hub Material: | AC |
| Structural Details | | Nominal Air Volume: | 218,950 CFM |
| Overall Diameter: | 299.25" | Fan Motor | |
| Overall Height: | 202.5" | Number of motors: | One Unit per Tower |
| Dry Weight: | 10,220 lbs. | Type: | Induction |
| Operating Weight: | 27,359 lbs. | Manufacturer: | CTS |
| Basic Tower Construction Materials | | Insulation: | F Class |
| Tower Support Frame Assembly | HDGS | Rated HP: | 30 HP |
| Casing: | FRP | Voltage and phase: | 220/440V/3 |
| Casing Supporters | HDGS | Piping Connections | |
| Cold Water Basin | FRP | Primary Water Inlet Diameter | 12" |
| Filling: | PVC | Primary Water Outlet Diameter: | 12" |
| Filling Supports: | HDGS | Auto fill inlet diameter: | 2" |
| Fan Guard | HDGS | Quick fill inlet diameter: | 2" |
| Mechanical Equipment Supports: | HDGS | Overflow outlet diameter: | 4" |
| Inlet Louvers: | PVC | Drain diameter: | 3" |
| Bolts, Nuts & Washers: | STS | Water Flow (GPM): | 3,011 GPM |
| Materials Key | | | |
| FRP | Fiberglass Reinforced Polyester | STS | Stainless Steel |
| HDGS | Hot Dipped Galvanized Steel | AC | Aluminum Alloy Cast |

Cooling Tower Systems, Inc.

196 Lower Cherry Street Macon, GA 31201

TF: 800.752.1905

F: 478.755.8304

www.coolingtowersystems.com

info@coolingtowersystems.com

PARTS LIST: MODEL T-3000

| FOR ASSEMBLY DIAGRAM | | |
|----------------------|--------------------------|-----|
| Ref. No. | Description | QTY |
| 01-01 | Base Plate - A | 8 |
| 01-02 | Ring Frame | 8 |
| 01-03 | Truss Pipe - A1 | 8 |
| 01-04 | Truss Pipe - A2 | 8 |
| 01-06 | Tie Rod | 8 |
| 02-01 | Water Sump | 1 |
| 02-02 | Outlet Nozzle | 1 |
| 02-03 | Inlet Nozzle | 1 |
| 02-04 | Over Flow Nozzle | 1 |
| 02-05 | Drain Nozzle | 1 |
| 02-06 | Automatic Filler Nozzle | 1 |
| 02-08 | Float Valve Assembly | 2 |
| 02-09-01 | Over Flow | 1 |
| 02-09-02 | Over Flow Connector Pipe | 1 |
| 02-10 | Suction Strainer | 1 |
| 02-12A | Connector | 1 |
| 03-01 | Water Basin | 16 |
| 04-01 | Base Plate - B | 8 |
| 04-02 | Stiffener Ring - 1 | 8 |
| 04-03 | Truss Pipe - B1 | 8 |
| 04-04 | Truss Pipe - B2 | 8 |
| 05-01 | Casing (Diffuser) | 16 |
| 05-02 | Casing (Cylinder) | 16 |
| 05-06 | Hand Hole Cover | 1 |
| 06-01 | Stand Pipe | 1 |
| 06-02 | Stand Pipe Base | 1 |
| 06-03 | Packing | 1 |
| 07-02 | Column | 1 |
| 08-01 | Filling Supporter - A | 8 |
| 08-02 | Filling Supporter - B | 8 |
| 08-03 | Filling Supporter - C | 24 |
| 08-04 | Fill Supt. Clamping Band | 16 |
| 08-06 | Filling Supporter - E | 16 |
| 10-01-1 | Ladder (A Section - 1) | 1 |
| 10-01-2 | Ladder (A Section - 2) | 1 |
| 10-02 | Ladder (B Section) | 1 |
| 10-03 | Ladder Bracket - A | 2 |
| 10-04 | Ladder Bracket - B | 2 |
| 11-01 | Filling (Inner Section) | - |
| 11-03 | Filling (1/3 Section) | - |
| 11-06 | Filling (1/6 Section) | 12 |
| 11-08 | Filling (1/8 Section) | 16 |
| 11-09 | Filling (1/10 Section) | 20 |
| 12-01 | Sprinkler Head | 1 |
| 12-02 | Center Post | 1 |
| 12-03 | Turnbuckle | 10 |
| 12-04 | Tension Wire | 10 |
| 13-01 | Sprinkler Pipe | 10 |
| 13-02 | End Cap | 10 |
| 13-03 | Eliminator | 10 |
| 14-01 | Frame Ass'y Main Pipe | 2 |
| 14-02 | Frame Ass'y Stay Pipe | 2 |
| 15-01 | Motor Base | 1 |
| 15-02 | U-Bolt | 4 |
| 15-03 | U-Bolt | 4 |

| | | |
|--------|-----------------------|-------|
| 16-01 | Motor | 1 |
| 16-02 | Speed Reducer | 1 |
| 16-03 | Fan Key | 1 |
| 16-04 | Fasten Nut | 1 |
| 16-05 | Lock Nut | 1 |
| 17-01 | Fan Hub | 1 |
| 17-02 | Fan Blade | 4 |
| 17-04 | U-Bolt | 8 |
| 18-01 | Fan Guard | 8 |
| 19-00 | Basin Supporter Ass'y | 16 |
| 20-01 | Louver Supporter | 48 |
| 20-01B | Louver Supporter - B | 48 |
| 20-02 | Inlet Louver | 16 |
| 20-08 | Wing Bolt | 144 |
| 20-09 | Plastic Washer | 144 |
| OTHERS | Bolts & Nuts | 1 SET |

| FOR TECHNICAL DIAGRAMS | | | |
|------------------------|----------------------|----------|--------|
| Item | Description | Material | QTY |
| 1 | Fan Motor | - | 1 pcs |
| 2 | V-Belt Reducer | - | 1 set |
| 3 | Motor Frame Assembly | HDGS | 1 set |
| 4 | Fan | AC | 1 set |
| 5 | Fan Guard | HDGS | 1 set |
| 6 | Casing | FRP | 16 pcs |
| 7 | Hand Hole | EVA | 1 pcs |
| 8 | Sprinkler Head | AC | 1 set |
| 9 | Sprinkler Pipe | PVC | 10 pcs |
| 10 | Eliminator | FRP | 10 pcs |
| 11 | Tension Device | HDGS | 1 set |
| 12 | Stand Pipe | PVC | 1 set |
| 13 | Filling | PVC | 1 set |
| 14 | Stopper or Column | HDGS | 1 set |
| 15 | Filling Supporter | HDGS | 1 set |
| 16 | Casing Supporter | HDGS | 6 pcs |
| 17 | Inlet Louver | PVC | 1 set |
| 18 | Frame Assembly | HDGS | 1 set |
| 19 | Water Basin | FRP | 12 pcs |
| 20 | Water Sump | FRP | 1 pcs |
| 21 | Ladder | HDGS | 1 set |
| 22 | Strainer | HDGS | 1 pcs |
| 23 | Flange | HDGS | 2 pcs |
| 24 | Basin Supporter | HDGS | 16 pcs |

Materials Key

| | |
|------|---------------------------------|
| FRP | Fiberglass Reinforced Polyester |
| HDGS | Hot Dipped Galvanized Steel |
| STS | Stainless Steel |
| AC | Aluminum Alloy Cast |

Water Basin Sealing Material

| | |
|-----------------|------------|
| Fiberglass | 1 Set—A |
| Polyester Resin | 1 Keg—B |
| Catalyst | 1 Bottle—C |

Cooling Tower Systems, Inc.

196 Lower Cherry Street Macon, GA 31201

TF: 800.752.1905

F: 478.755.8304

www.coolingtowersystems.com

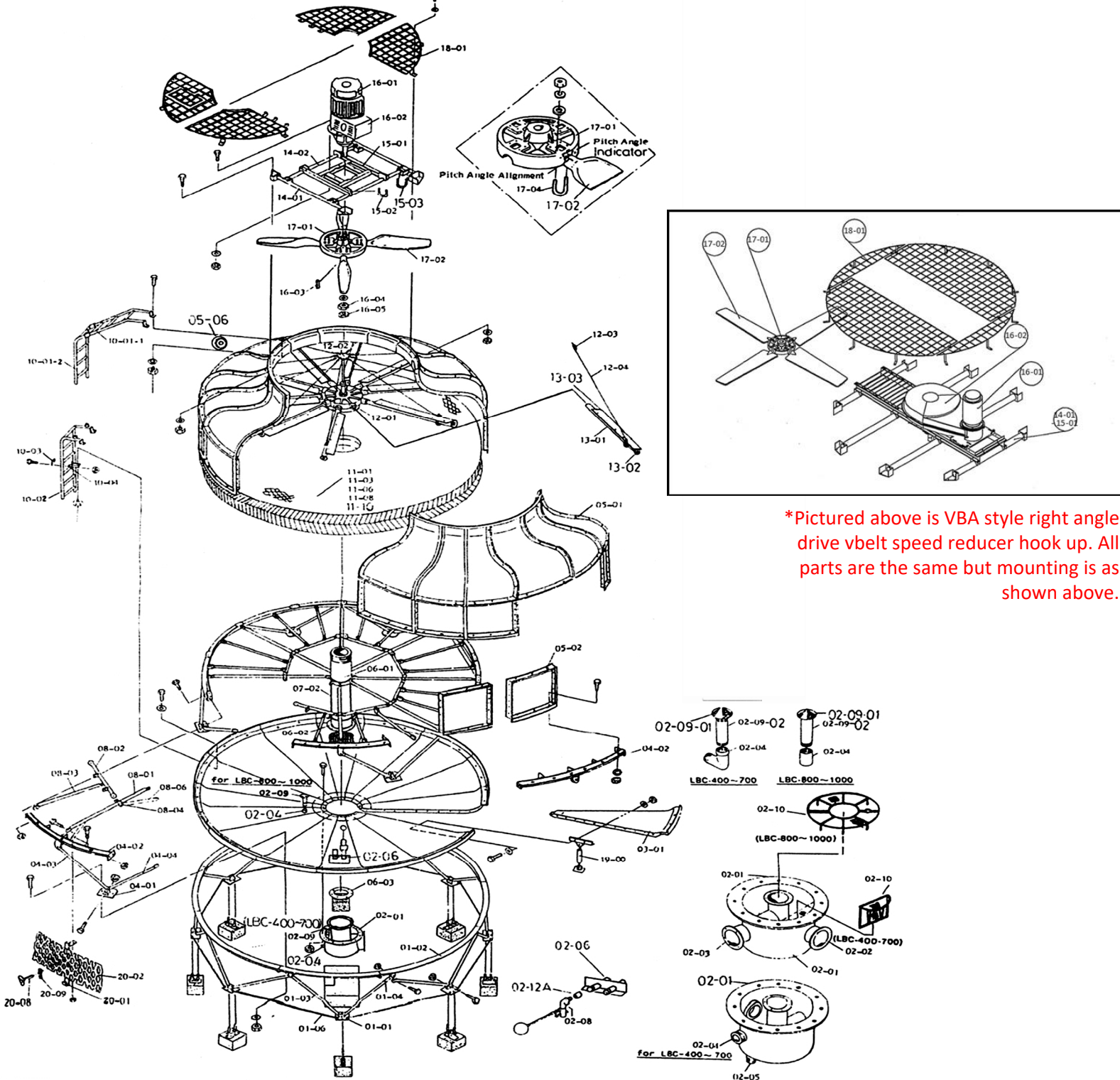
info@coolingtowersystems.com



Cooling Tower Systems, Inc.

ASSEMBLY DIAGRAM: MODEL T-3000

Pictured below is LBM Vbelt speed reducer hook up



*Pictured above is VBA style right angle drive vbelt speed reducer hook up. All parts are the same but mounting is as shown above.

Cooling Tower Systems, Inc.

196 Lower Cherry Street Macon, GA 31201

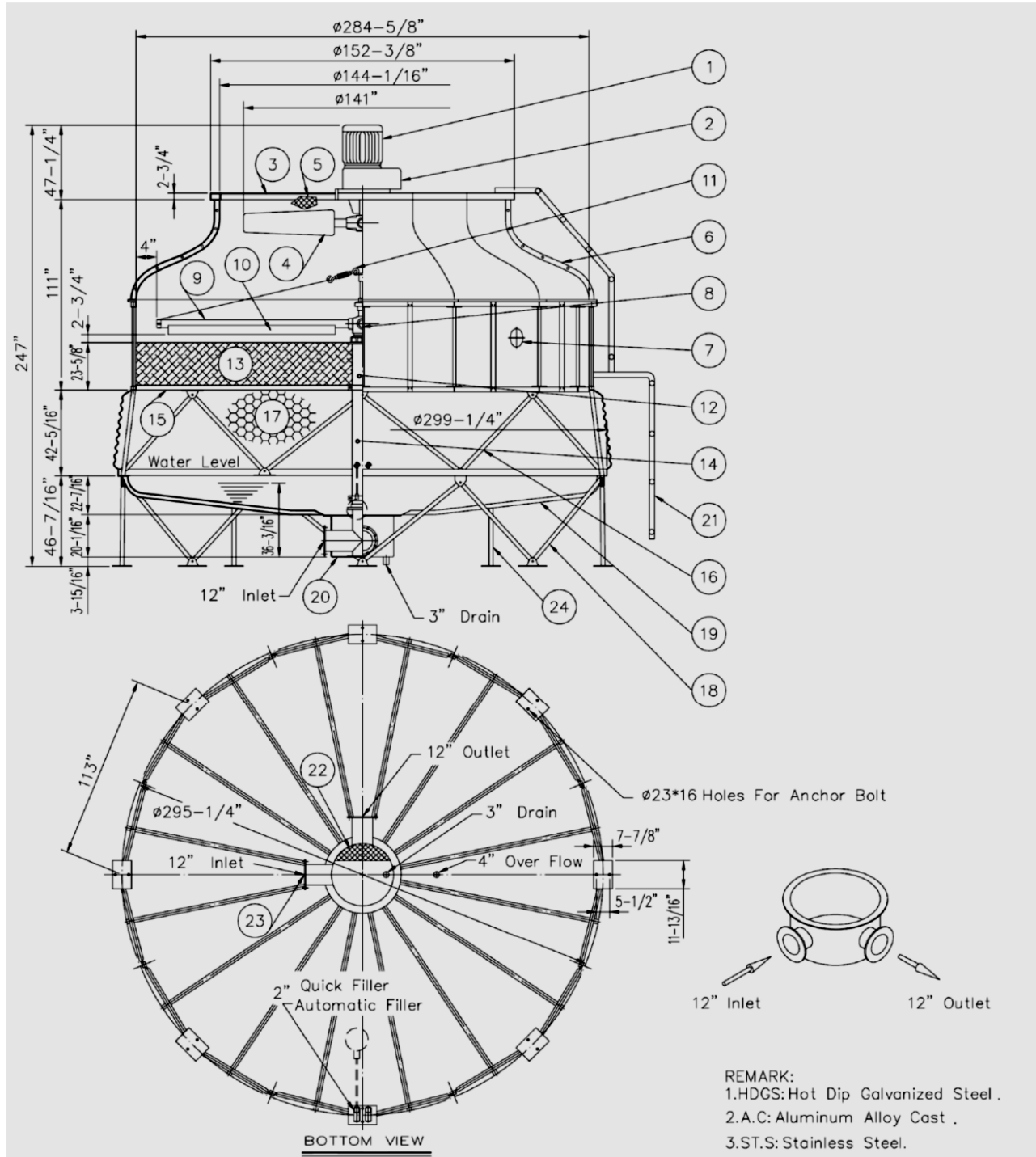
TF: 800.752.1905

F: 478.755.8304

www.coolingtowersystems.com

info@coolingtowersystems.com

TECHNICAL IMAGE A: MODEL T-3000



Cooling Tower Systems, Inc.

196 Lower Cherry Street Macon, GA 31201

TF: 800.752.1905

F: 478.755.8304

www.coolingtowersystems.com

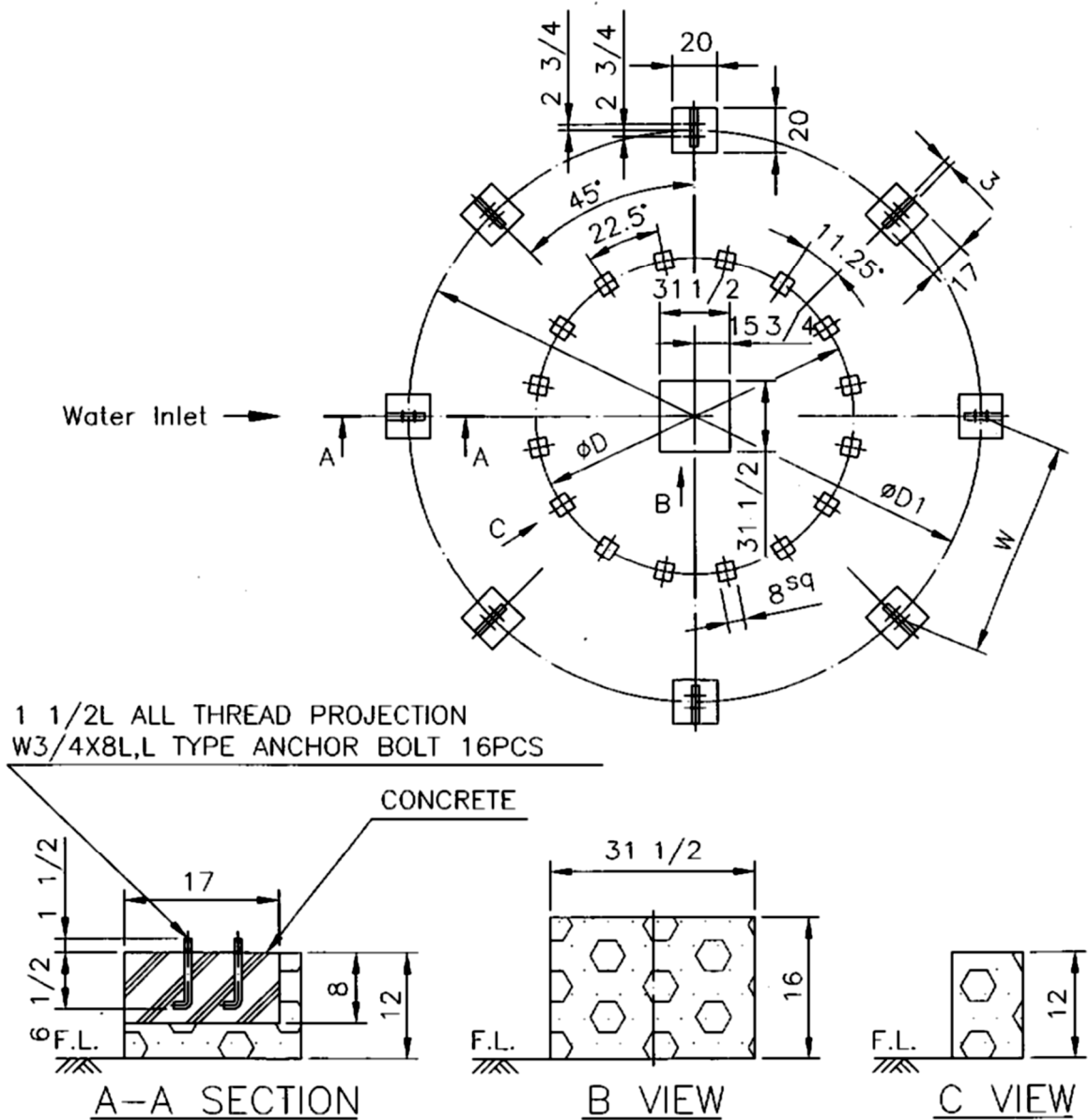
info@coolingtowersystems.com



FOUNDATION DRAWING: MODEL T-3000

Cooling Tower Systems, Inc.

| T- | øD | W | øD1 | L TYPE ANCHOR BOLT | | |
|------|---------|--------|---------|--------------------|---|-----|
| | | | | SIZE | L | PCS |
| 2600 | 141 3/4 | 97 5/8 | 255 1/8 | W3/4 | 8 | 16 |
| 2700 | 141 3/4 | 97 5/8 | 255 1/8 | W3/4 | 8 | 16 |
| 2800 | 163 1/2 | 113 | 295 1/4 | W3/4 | 8 | 16 |
| 3000 | 163 1/2 | 113 | 295 1/4 | W3/4 | 8 | 16 |



Cooling Tower Systems, Inc.

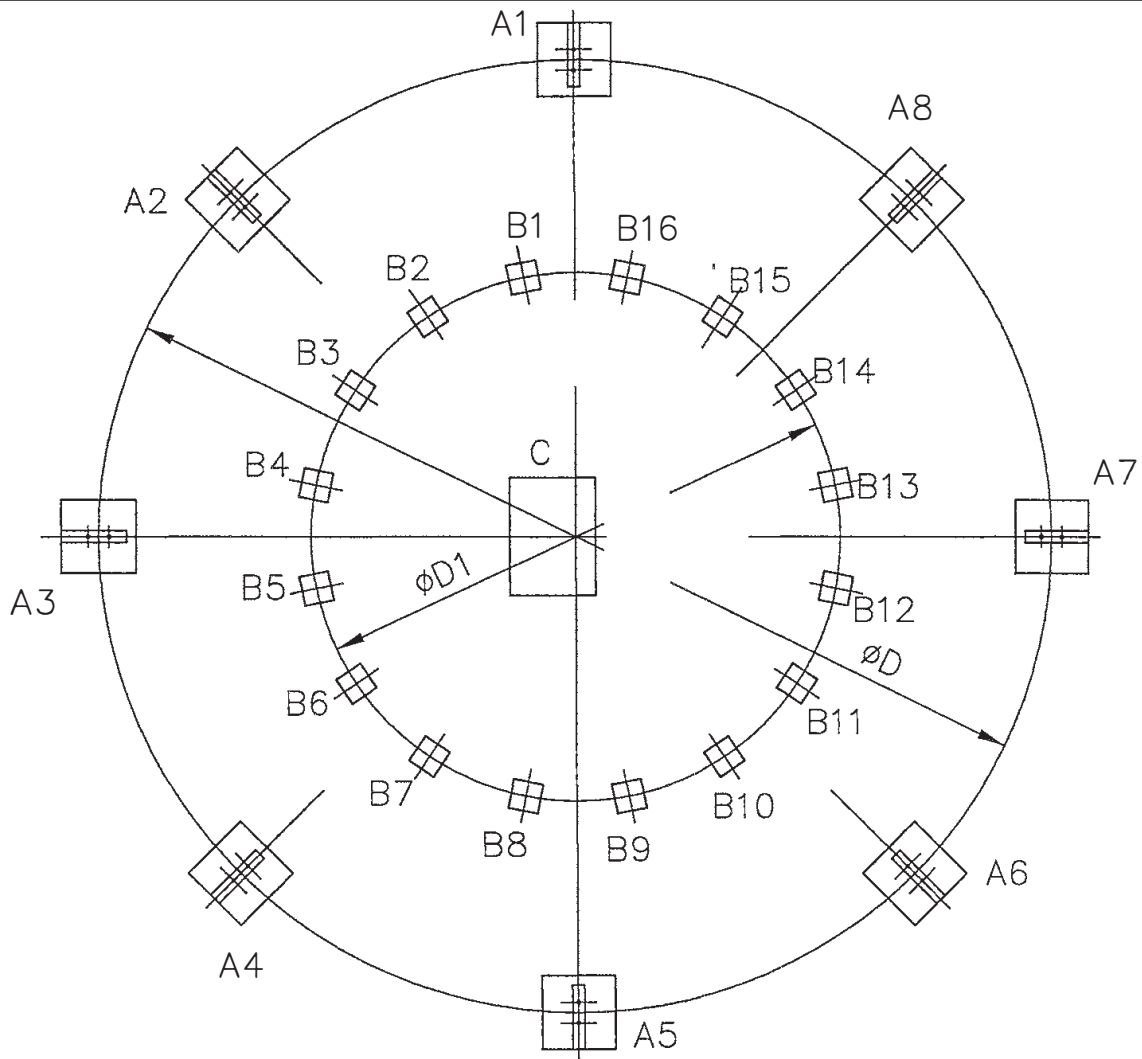
196 Lower Cherry Street Macon, GA 31201

TF: 800.752.1905

F: 478.755.8304

www.coolingtowersystems.com

info@coolingtowersystems.com



| TOWER MODEL T-2 | ϕD | $\phi D1$ | DEAD LOAD | | |
|--------------------|----------|-----------|-----------|------------|---------|
| | | | A1=...=A8 | B1=...=B16 | C |
| 600 | 255 1/8" | 141 3/4" | 1602lb | 250lb | 10627lb |
| 700 | 255 1/8" | 141 3/4" | 1635lb | 244lb | 10904lb |
| 800 | 295 1/4" | 163 1/2" | 2461lb | 345lb | 16140lb |
| 1000 | 295 1/4" | 163 1/2" | 2524lb | 327lb | 16502lb |

| TOWER MODEL T-2/3 | LIVE LOAD | | |
|----------------------|-----------|------------|--------|
| | A1=...=A8 | B1=...=B16 | C |
| 600 | 433lb | 68lb | 2870lb |
| 700 | 459lb | 72lb | 3044lb |
| 800 | 563lb | 88lb | 3737lb |
| 1000 | 596lb | 94lb | 3956lb |