

START-UP SHEET Cooling Tower

| Job Na | ame | THE | | | _Job I | Numbe | r | | |
|---|--------------------------|---|----|---------------|----------------|-------|--|--|--|
| | ddress | | | | | | The second secon | | |
| Section | n 5: Equipment Descripti | on | | | | | | | |
| Spec. | #: | Submittal #: | | P&ID / Dwg #: | | | | | |
| Area | Served: | | | | | | | | |
| | Data | Design | | | Actual On Site | | | | |
| Unit T | 'ag # | | | ******* | | | Administration and distribution to 10-444 table Trades and increase and | | |
| Manuf | acturer | | | | | | ARTICLE CONTROL OF THE STATE OF | | |
| Mod | del # | | | | | | | | |
| Seri | al# | | | | | | | | |
| Tower | Fan Motor Manufacturer | | | | | | | | |
| Mod | del # | | | | | | | | |
| Seri | al# | | | | | | | | |
| Tower | Pump Motor Manufacture | े | | | | | | | |
| Mod | del # | | | | | | | | |
| Seri | al# | | | | | | | | |
| Belts | | | | | | | | | |
| Belts | | | | | | | | | |
| Section | n 6: Equipment Pre-Insta | allation Inspection | | | | | | | |
| Step | Inspectio | on Description | Ye | es | No | N/A | Performed By (Initials & Date) | | |
| 6.2 | Nameplate data matches | vendor specifications. | |] | | | | | |
| 6.3 | All parts are received. | | F |] | | | | | |
| 6.4 | No visible signs of dama | ge, leak, or defective parts. | |] | | | | | |
| Commer Observa , Perform (Therm Review | Print med By | Name Signatu | re | | | | Date | | |
| (Owner | r/Representatives) | | | | | | | | |



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| Step | In | spection Description | | Yes | No | N/A | Performed By (Initials & Date) |
|---|--|---|-------|---|----|-----|-----------------------------------|
| 6.5 | Verify electrical s and thermal overl | service for correct voltage, curoad protection. | rrent | | | | |
| 6.6 | Operational and Navailable in the fi | Maintenance (O&M) manual i eld. | s | | | | |
| 6.7 | Start-up technicia procedures in the | ns have reviewed factory star O&M manual. | t-up | | | | |
| 6.8 | (VFDs) that are co | ed Variable Frequency Drives ontrolling fans and pumps, co FD start up forms. | 1 | | | | |
| Section | n 7: Installation In | spection | | | | | |
| Step | In | spection Description | - | Yes | No | N/A | Performed By (Initials & Date) |
| 7.2 | Unit is installed le | evel. | | | | | |
| 7.3 | Tag # is attached | to the unit. | | | | | |
| 7.4 | Service clearance | is adequate for maintenance. | | | | | |
| 7.5 | | fans, eliminators, heat exchan p strainers are installed and c | | | | | |
| 7.6 | Shipping blocks a section. | and materials are removed from | m fan | | | | |
| 7.7 | Water sump is clean. | | | | 口 | | |
| 7.8 | Water treatment is provided. | | | | | | |
| 7.9 | Sheaves are aligned. | | | | | | |
| 7.10 | Multi speed moto | r is installed. | | | | | |
| 7.11 | Fan hub, sheaves | and bearing setscrews are tigl | ht. | -0 | | | |
| 7.12 | Each fan belt tens | sion is correct. | | | | | |
| Comments/ Observations Print Name Signature Date | | | | | | | |
| Perform | • | | | annugar editir hi earn in distribution (A.C.) | | | |
| Review (Owner | red By r/Representatives) | | | | | | |



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| Step | Inspection Description | Yes | No | N/A | Performed By |
|---------------------------------------|---|------------|-------------------|----------|-----------------------------------|
| 7.13 | Motor and blower bearings are lubricated. | $+$ \Box | | П | (Initials & Date) |
| 7.14 | Spray nozzles and water level controls are installed. | | $-\frac{-}{\Box}$ | П | |
| 7.15 | Fan shaft bearing angular alignment is correct and bolts are tight. | | | | |
| 7.16 | Vibration isolators are installed and adjusted. | | | | |
| 7.17 | All electrical connections are secure. | | | | |
| 7.18 | All access panels and covers are in place. | | | | |
| 7.19 | Isolation valves are installed. | | | | |
| Section | 8: Operational Inspection | | L | <u> </u> | |
| Step | Inspection Description | Yes | No | N/A | Performed By (Initials & Date) |
| 8.2 | Unit vibration is acceptable. | | | | (Initials & Date) |
| 8.3 | Each fan rotation is correct. | | | | |
| 8.4 | Each pump rotation is correct. | | | | |
| 8.5 | Water level make-up valve is operating correctly. | | | | |
| 8.6 | Check tower for leaks. | | | | |
| 8.7 | 7 Coupling assembly needs alignment. | | | | |
| 8.8 | Record final data. | | | | |
| 8.9 | Add water treatment per specifications. | | | | |
| 8.10 | Record start up operating parameters below (If multiple components, including fans and pumps are part of the unit, record those information in the Supplementary Form, FN-8.028.2 or FN-8.028.3). | | | | |
| Comme Observa Perform (Therm | Print Name Signa med By (1a) | ture | | | Date |
| | r/Representatives) | | | | |



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| Record Start Up Operating Paramet | ers | rs | eı |
|-----------------------------------|-----|----|----|
|-----------------------------------|-----|----|----|

| Data | Design | Actual On Site |
|--------------------------|--------|----------------|
| Tower Inlet Temperature | | |
| Tower Outlet Temperature | | |

Water Treatment Use

| Water Treatment Used | Amount | Initial Levels |
|----------------------|--------|----------------|
| | | |
| | | |
| | | |
| | | |

End of Section

| Comments/ | |
|--------------|---------------------------|
| Observations | |
| | |
| | |
| | Print Name Signature Date |
| | |

Performed By (Therma)

Reviewed By

(Owner/Representatives)