COOLING TECHNOLOGY INSTITUTE

PRICE LIST
Publications

Publications List

A complete set of these Standard Specifications and Research Reports in a 3-ring vinyl binder with "Cooling Technology Institute Publications" lettered on it may be purchased for $685 plus postage/handling in the U.S.A. For those who already have some or all of these publications, the binder may be purchased for $15 post-paid. Prepayment is requested on orders of less than $30. There is a 20% discount to Members. Quantity prices quoted upon request. Prices do not include postage.

Legend Used for Prefixes:

STD ..... Standard
ATC ..... Test Code
BUL ..... General Bulletin
ESB ..... ES&M Committee Bulletin
ESG ..... ES&M Committee Guideline
PTB ..... P&T Committee Bulletin
PTG ..... P&T Committee Guideline
WTB ..... Water Treating Committee Bulletin
WTG ..... Water Treating Committee Guideline
ADM ..... Administrative

CTI Code Tower Standard Specifications

STD-103 ..... Redwood Lumber Specifications $8.00

CTI Grades of Redwood Lumber; allowable grades and grading rules for redwood used in industrial towers and Framework Design Data: allowable design stresses (wet operating weight) nominal and dressed dimensions, wind loading and weight calculations. *Revised February 2007*

ESB-104 ..... Wood Maintenance $12.00

This is a report of 10 years field study of operating towers and eight preservative treatments. Discuss types of deterioration and means of prevention through water treating and preservative treatments. Tables and graphs of field study data, photographs of typical types of deterioration. *Reviewed February 2007*

ATC-105 ..... Acceptance Test Code..... $75.00

Part I - Test Procedure: methods and instrumentation for testing mechanical draft and natural draft cooling towers.

Part II - Evaluation of results: method for evaluation of the performance of mechanical draft cooling towers using both characteristic curves and performance curves; natural draft and natural draft-fan assisted cooling towers using characteristic curves and performance curves. The results are expressed in terms of water cooling capacity.

Part III - Appendix: example evaluation of mechanical draft cooling tower, natural draft cooling tower, and fan-assist cooling tower using either characteristic curve method or performance curve method; calculation of KaV/L; enthalpy tables; facsimiles of ATC-106 Test Forms. *Revised February 2000*

ATC-105S ..... Acceptance Test Code..... $25.00
for Closed Circuit Cooling Towers

This code is similar to the open circuit tower in both form and function except for the fluid circuits. *Reviewed July 2011*

ATC-106..... Acceptance Test Code..... $25.00
for Mechanical Draft Evaporative Vapor Condensers

This code specifies the procedures, apparatus, and instrumentation to be used for testing and evaluating the performance of evaporatively cooled, mechanical draft, vapor condensers. *Reviewed July 2011*

ATC-107 ..... Test Code for Aircooled Condensers.... $25.00

This document details the measured test parameters, instrumentation, test measurements and data reduction procedure required for determination of the thermal capability of a dry, air-cooled steam condenser (ACC). *July 2011*

BUL-109 ..... Nomenclature for Industrial $8.00
Water Cooling Towers

Recommended terms and definitions for use in describing tower components, designs and performance; includes abbreviations and letter symbols. *Revised February 1997*

PTB-110..... Recirculation $8.00

This is a summary of 7 years field study, and gives a procedure to determine maximum recirculation to be expected for any given operating condition; also recommendations for tower orientation to minimize recirculation. *June 1977*

STD-111 ..... Gear Speed Reducers $10.00

This standard sets forth rating practice and operating considerations for gear speed reducers used with propeller type fans on industrial water cooling towers. *Revised February 2009*

STD-112 ..... Pressure Preservative Treatment $10.00
of Dimensional Lumber

This standard sets forth the minimum retentions and penetrations to be obtained, and the physical condition of the lumber when pressure treating industrial water-cooling tower lumber. *Revised February 2009*

STD-114 ..... Design of Cooling Towers with $10.00
Douglas Fir Lumber

Grades of Douglas Fir Lumber: recommended stress and non-framework grades and grading rules in application of WCLA grades and Design Data: allowable design stresses (wet operating weight), minimum requirements for non-framework members; nominal and dressed dimensions, wind loading and weight calculations. *Revised February 2007*

PTG-116 ..... Recommended Recirculation..... $8.00
Allowances

Application of average recirculation to wet bulb temperature to obtain design inlet wet bulb temperature corrected for recirculation. *April 1959*

ESB-117 ..... Recommendations for Maximum..... $8.00
Life of Cooling Tower Lumber

Summary of results, Cooling Tower Institute field study on wood maintenance. Includes recommendations for water and lumber treatment. *Revised February 2007*

Bid Form

PTG-118 SF/FA (Factory Assembled) **$5.00**
PTG-118 SF/FE (Field Erected) **$5.00**

The inquiry and Bid Form is used to show minimum information that is necessary to include inquiries and to show all pertinent data on the requested bids. Cooling tower purchasers use this form with their inquiries by filling out all the information marked with an asterisk (*). Manufacturers then return their bids on this form. This assures the purchaser of receiving adequate information on all bids. It also facilitates the comparison of bids by furnishing the same information in the same place on all bids. Further, it establishes uniform units for the various data. *July 1993*

STD-119 ..... Timber Connection Specification $8.00

This standard sets forth in detail the recommended material and manufacturing limitations, design requirements and allowable loads for commonly used timber fasteners employed in the construction of industrial cooling towers. *Revised February 2007*

ESG-120..... Lightning Protection System Guideline.. $10.00

This guideline sets forth recommended design criteria, components, and the specifications for traditional lightning protection systems installed on water-cooling towers. *March 2009*

ESG-121..... Construction Safety and Health $10.00
Guidelines

The purpose of this document is to serve as a safety and health guideline for various cooling tower procedures that are routinely performed on job sites. The information provided is based on OSHA federal requirements. *October 2009*

ATC-128..... Code for Measurement of Sound $15.00
From Water Cooling Towers

This code applies to mechanical and natural draft towers. Test and measurement procedures, operating conditions and instrumentation are specified. *Revised July 2005*

WTG-129 ..... Handling Water Treatment $8.00
Chemicals Safely

Laminated poster for use where chemicals are handled. General and emergency procedures. *December 1996*

WTG-130..... Guidelines for Evaluation of..... $8.00
Cooling Tower Treatment Effectiveness

Water treatment procedure, by the CTI Water Treatment Committee. *October 1981*

STD-131..... Fiberglass-Reinforced Plastic Panels ... $10.00

Covers the classification materials of construction, workmanship and methods of testing glass-fiber reinforced plastic panels in various profiles intended for use as casing, louvers and similar applications on cooling towers. *Revised July 2009*

WTG-132..... Supervisory Guide..... $8.00
Handling Water Treatment Chemicals

A guide for first-line supervisors responsible for cooling tower treatment operations. *October 1984*

ATC-133..... Acceptance Test Code for..... $15.00
Spray Cooling Systems

Part I - Test Procedure: methods and instrumentation to determine the capability of spray cooling systems.

Part II - Evaluation of Results: outlines a method of evaluation of the performance of spray cooling systems from test data using performance curves.

Part III - Appendix: performance curve method. *February 1985*

STD-134..... Plywood for Use in Cooling Towers..... $8.00

This standard sets forth specifications, grading rules, grades and species and design criteria for cooling tower components constructed of plywood. *Revised February 2007*

PTG-135..... Guidelines for Thermal Upgrading of $8.00
Mechanical Draft Cooling Towers

The purpose of this document is to provide guidelines to assist the user in thermal upgrading, repair and rebuilding of mechanical draft cooling towers. *Revised March 1998*

STD-136..... Thermoplastic Materials Used for $10.00
Film Fill, Splash Fill, Louvers and Drift Eliminators

This specification covers the classification of rigid polyvinyl chloride (PVC); the physical properties, burning properties and recommended testing procedures employed to determine the defined values, whether processed from virgin or reground materials. *Revised March 2010*

STD-137..... Fiberglass Pultruded Structural $12.00
Products for Use in Cooling Towers

This specification offers recommendations for classification, materials of construction, tolerances, defects, workmanship, inspection, physical, mechanical and design properties of glass fiber-reinforced pultruded structural shapes intended for use as construction items in cooling tower applications. *Revised October 2009*

ESG-138 ..... Recommended Procedures $10.00
Long Term Storage

Procedures recommended for the long-term storage of industrial scale cooling towers. In general, long-term storage is for an extended period of more than one year, but these recommendations can also be modified for seasonal storage. The techniques are divided between Mechanical Equipment and Wood Structure. These two groups of components require the most attention because they will deteriorate rapidly if preventive measures are not taken. *Revised October 2009*

WTB-139..... Suggested Ozone Reading List $8.00
WTB-139.1

The CTI Water Treatment Committee has prepared the attached reading list on the use of ozone in cooling water systems. This suggested list of reading materials was developed to assist in the dissemination of information on the use of ozone in cooling water systems and in no way represents an endorsement by CTI on the use of ozone. This list will periodically be updated as new contributions to the literature are made on this topic. *April 1992 / July 1994*

ATC-140 .. Isokinetic Drift Measurement Test Code... $60.00
For Water Cooling Towers

The purpose of this Code is to describe instrumentation and procedures for the testing and evaluation of drift from water-cooling towers. *Revised July 2011*

WTG-141 ..... Application of Oxidizing Biocides $25.00

This document will cover the use and application of the four major oxidizing biocides used in treating cooling waters: chlorine, bromine, chlorine dioxide, and ozone. The document will help end users and all personnel involved in treating cooling systems to better understand the chemistry, the application methods and the safety and environmental issues concerning oxidizing biocides. *June 2004*

WTG-142 ..... Treatment of Galvanized..... $10.00
Cooling Tower to Prevent White Rust

The purpose of this document is to provide steps in preventing “white rust” through the application of appropriate water treatment programs. *June 1994*

PTG-143 ..... Recommended Practice for $10.00
Airflow Testing of Cooling Towers

This document helps in determining the purposes for anemometer and/or pitot tube testing in cooling towers. *June 1994*

ESG-144 ..... CTI Fastener Material Guidelines..... $8.00

Sets forth guidelines for selecting fasteners and identifies and specifies materials typically used in cooling tower fasteners. *July 1994*

BUL-145 ..... International System of Units (SI) $10.00

A practical medium of exchange for all basic data of interest to manufacturers, suppliers, and users of cooling towers. *Reviewed July 2011*

STD-146.... Standard for Liquid Flow Measurement ... $16.00

Methods for cooling tower liquid flow measurement. *Sept 2008*

WTB-147..... Water Reuse Paper of Interest $8.00
To Cooling Tower Users

This is a bibliography of published and presented papers on the general subject of water reuse in cooling tower systems. *August 1997*

WTB-148..... Legionellosis ..... N/C

CTI Position Statement on the disease known as the Legionnaires' Disease, caused by the bacterium Legionella pneumophila. *July 2008*

STD-149..... Corrosion Testing Procedures..... $10.00

A code to develop standardized test procedures and evaluation techniques also designed to provide a uniform method to compare relative water treatment program performance in a cooling water system. *October 2000*

ATC-150 ..... Acceptance Test Procedure for..... $25.00
Wet-Dry Plume Abatement

This code covers the determination of the effluent air or plume characteristics of wet-dry cooling towers, designed for plume abatement. *Revised July 2011*

STD-151 ..... Variable Frequency Drive $8.00
Application Guidelines for Cooling Towers

This standard covers the guidelines for operation of cooling towers at variable speeds. *July 2002*

ESG-152.... Structural Design of FRP Components $10.00

This guideline provides minimum design standards and cautionary recommendations to designers of FRP structural cooling towers. *March 2010*

ESG-153....Recommended Guidelines for Portland ... $10.00
Cement Concrete for Mechanical Draft Cooling Towers

This guideline offers recommendations for the use of Portland cement concrete in the use of mechanical draft cooling towers. *February 2007*

STD-154 ..... Cooling Tower Filament Wound $10.00
Fiberglass Piping Systems

The information within this standard is for the design, manufacturing, installation and testing of FRP piping to be used in Cooling Tower applications. *April 2008*

WTG-155..... Internal Plant Cooling Water Reuse $10.00

The purpose of this document is to provide general guidelines to plant owners and operators for water conservation through internal plant cooling water reuse. *July 2008*

PTG-156.... Preparation for an Official CTI Thermal ..... N/C
Performance Plume Abatement, or Drift Emission Test

This bulletin covers test preparation for an official water cooling tower thermal performance test, plume abatement test or drift emissions test. *October 2000*

STD-201 ..... Standard for Thermal Performance $40.00
Certification of Evaporative Heat Rejection Equipment

This Standard sets forth a program whereby the Cooling Tower Institute will certify that all models of a line of evaporative heat rejection equipment offered for sale by a specific Manufacturer will perform thermally in accordance with the Manufacturer's published ratings, as limited in Paragraph 4.5. *Revised April 2011*

STD-202 ..... Standard for Publication of Custom $15.00
Cooling Tower Thermal Performance Test Results

This Standard sets forth a program whereby manufacturers of custom cooling towers voluntarily allow the results of their CLTTA tests to be published under the requirements of this program. *Revised July 2011*

STD-203 ..... Industrial Cooling Tower Standard $10.00

This Standard covers the design, fabrication and inspection of crossflow and counterflow mechanical draft cooling towers. January *2005*

(Prices do not include postage and handling.)

Software

ToolKit Software V3.1

A suite of useful software applications for anyone responsible for the performance of evaporative cooling towers. Includes the Demand Curve Worksheet, Air Properties Calculator and Mechanical Draft Performance evaluator. Software shipped via CD-Rom.

Single User License (Member) $395.00

Single User License (Non-Member) $450.00

PerfCurv (Stand-alone Performance Curve Application)

A subset of the full ToolKit that facilitates the evaluation of test data from testing of a Mechanical Draft Cooling Tower (both crossflow and counterflow, induced draft or forced draft). Calculates percent performance or cold water temperature deviation

Single User License (Member) $195.00

Single User License (Non-Member) $240.00

(Prices do not include postage and handling.)

CTI Journal

The *CTI Journal* is the first technical journal devoted solely to the subject of cooling towers and their operations. The *CTI Journal* is of current interest to Institute members and other professionals responsible for the construction specifications, testing, maintenance and operation of cooling towers.

The *CTI Journal* is published each year in January and June. Complimentary subscriptions are mailed to individuals in the United States. Library subscriptions are $30/year. Subscriptions mailed to individuals outside the United States are $30/per year.

CTI Directory

Membership Directory

Spiral bound with membership categorized by Honorary Members, Manufacturers, Suppliers, Users and Individual Members. Includes a copy of the CTI Bylaws.

Membership Directory $50.00

(Prices do not include postage and handling.)

CTI Manual

The purpose of the CTI Manual is to bring together into a common place, comprehensive information pertaining to cooling towers and other types of equipment that reject heat to the atmosphere. The Manual has been developed in the form of individual chapters, each of which stands on its own merit, and includes a list of references and a bibliography.

Chapters now available:

Chapter 1 - Cooling Tower Operations (March 2010) $10.00

Chapter 2 - Introduction to CTI Thermal Design (March 1998) $8.00

Chapter 3 - Performance Variables of Cooling Towers (March 1998) $15.00

Chapter 4 - Recommendations for Winter (September 2010) $15.00

Chapter 5 - Field Test Handbook (April 1998) $30.00

Chapter 6 - Water Chemistry and Treatments (July 2005) $25.00

Chapter 8 - Environmental Aspects of Cooling System Operation (June 1981) $8.00

Chapter 9 - Materials of Construction for Cooling Towers (Revised October 2009) $12.00

Chapter 10 - Mechanical Components for Cooling Towers (March 2011) $15.00

Chapter 11 - Electrical Components for Cooling Towers (January 1984) $8.00

Chapter 12 - Field-Erected Cooling Tower Fire Protection (March 2010) $10.00

Chapter 13 - Inspection of Cooling Towers (Revised July 2005) $15.00

Complete manual with binder $171.00

3-Ring 2" binder with "CTI Manual" lettered on it is available for $15.00. Members receive a 20% discount.

(Prices do not include postage and handling.)

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