

GP 08-01-01	Cooling Towers	June 2002
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Cooling Towers

GP 08-01-01

Scope

[I] This Global Practice (GP) covers the design, fabrication, and inspection of field erected mechanical draft cooling towers.

[I] An asterisk (*) indicates that a decision by Purchaser is required or that additional information is furnished by Purchaser.

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1. Required References

- 1) [I] This Section lists Practices and Standards that are generically referenced and assumed to be a part of this document. Unless otherwise specified herein, use the latest edition.
- 2) * [I] Design, fabrication, and erection shall comply with all local, state, or federal rules or regulations specified by Purchaser.

1.1. Global Practices–ExxonMobil Engineering Practices

GP 02-01-01	Plant Noise Design Criteria
GP 04-01-03	Design Loads for Structures
GP 04-02-01	Auxiliary Structures for Operation and Maintenance
GP 16-09-01	Low Voltage AC Motors Up to 200 HP (150 kW)
GP 17-05-01	Human Factors in Plant Design
GP 20-01-01	Inspection of Equipment and Materials

1.2. ASME–American Society of Mechanical Engineers

ASME B16.5	Pipe Flanges and Flanged Fittings NPS 1/2 Through NPS 24
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1.3. ASSE/SAFE–American Society of Safety Engineers

ASSE/SAFE A14.3	Safety Requirements for Fixed Ladders
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1.4. CTI–Cooling Technology Institute

CTI ATC-105	Acceptance Test Code for Water Cooling Towers
CTI STD-111	Gear Speed Reducers
CTI STD-118	Inquiry and Bid Form
CTI STD-119	Timber Connection Specification
CTI STD-131	Fiberglass Reinforced Plastic Panels for Application on Industrial Water-Cooling Towers
CTI STD-134	Plywood for Use in Cooling Towers
CTI STD-136	Polyvinyl Chloride Materials Used for Film Fill, Splash Fill, Louvers and Drift Eliminators
CTI STD-137	Fiberglass Pultruded Structural Products for Use in Cooling Towers

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2. Additional Requirements

* [I] The following Practices and Standards shall be used with this Practice as specified by Purchaser or as required by Table 2.

2.1. Global Practices–ExxonMobil Engineering Practices

GP 03-10-04	Plastic and Plastic-Lined Piping
GP 10-11-01	Sizing of Drivers and Transmissions for Compressors, Fans, and Pumps

2.2. ASTM–American Society for Testing and Materials

ASTM A 123/A 123M	Standard Specification for Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products
ASTM A 153/A 153M	Standard Specification for Zinc Coating (Hot-Dip) on Iron and Steel Hardware
ASTM A 536	Standard Specification for Ductile Iron Castings
ASTM B 96/B 96M	Standard Specification for Copper-Silicon Alloy Plate, Sheet, Strip, and Rolled Bar for General Purposes and Pressure Vessels
ASTM B 98/B 98M	Standard Specification for Copper-Silicon Alloy Rod, Bar and Shapes
ASTM B 99/B 99M	Standard Specification for Copper-Silicon Alloy Wire for General Applications
ASTM B 179	Standard Specification for Aluminum Alloys in Ingot and Molten Forms for Castings from All Casting Processes
ASTM C 150	Standard Specification for Portland Cement
ASTM E 84	Standard Test Method for Surface Burning Characteristics of Building Materials

2.3. CTI–Cooling Technology Institute

CTI STD-103	Redwood Lumber
CTI STD-114	Douglas Fir Lumber
CTI STD-112	Pressure Preservative Treatment of Lumber

2.4. U.S. Products Standard

PS 1	Construction and Industrial Plywood
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