

SECTION 23 25 00 {15185}

HVAC WATER TREATMENT

{CHEMICAL WATER TREATMENT EQUIPMENT}

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This section includes equipment and materials for cleaning HVAC, hydronic and steam systems, and for treating those systems and their component pieces of equipment.

Manufacturers listed in this section were identified as representative and not as an endorsement for meeting this specification. For additional product information, visit 4Specs at [www.4specs.com](http://www.4specs.com), ARCAT at [www.arcat.com](http://www.arcat.com), First Source at [www.reedfirstsource.com](http://www.reedfirstsource.com), SpecSource at [www.specsource.com](http://www.specsource.com), and Sweets Network at [products.construction.com](http://products.construction.com).

This section includes performance, proprietary, and descriptive type specifications. Edit to avoid conflicting requirements.

Contact the CSRF Support Center at [supportcenter@csrf.org](mailto:supportcenter@csrf.org) to submit comments or suggestions for improvements to this specification. Visit the SPECTEXT web site at [www.spectext.com](http://www.spectext.com) for current product announcements.

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PART 1 GENERAL

1.1 SUMMARY

A. Section Includes:

1. System cleaner.
2. Closed system treatment (water).
3. Steam system treatment.
4. Condenser water system treatment.
5. Open system treatment.
6. Chemical feeder equipment including associated feeders, pumps, tanks, controls, meters and valves.
7. Test equipment.

B. Related Sections:

1. Section 23 05 13 - Common Motor Requirements for HVAC Equipment: Product requirements for motors for placement by this section.
2. Section 26 05 03 - Equipment Wiring Connections: Execution requirements for electrical connections specified by this section.

C. Related Sections:

1. Section 16150 - Wiring Connections: Execution requirements for electrical connections specified by this section.
2. Section 16227 - Common Motor Requirements for HVAC Equipment: Product requirements for motors for placement by this section.

## 1.2 REFERENCES

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List reference standards included within text of this section. Edit the following for Project conditions.

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- A. National Electrical Manufacturers Association:
  - 1. NEMA 250 - Enclosures for Electrical Equipment (1000 Volts Maximum).

## 1.3 PERFORMANCE REQUIREMENTS

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Use this article carefully; restrict statements to identify system performance requirements or function criteria only.

Select characteristics applicable to system.

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- A. Provide system to treat water available at project site to maintain the following characteristics of water in [closed] [steam] [condenser] [open] systems:
  - 1. Hardness: [\_\_\_\_\_].
  - 2. Iron: [\_\_\_\_\_].
  - 3. Total Dissolved Solids: [\_\_\_\_\_].
  - 4. Total Alkalinity: [\_\_\_\_\_].
  - 5. Silica: [\_\_\_\_\_].
  - 6. pH: [\_\_\_\_\_].

## 1.4 SUBMITTALS

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Only request submittals needed to verify compliance with Project requirements.

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- A. Section 01 33 00 - Submittal Procedures {01330 - Submittal Procedures}: Submittal procedures.
- B. Shop Drawings: Indicate system schematic, equipment locations, and controls schematics, electrical characteristics and connection requirements.
- C. Product Data: Submit chemical treatment materials, chemicals, and equipment including electrical characteristics and connection requirements.
- D. Manufacturer's Installation Instructions: Submit placement of equipment in systems, piping configuration, and connection requirements.
- E. Manufacturer's Certificate: Certify products meet or exceed specified requirements.
- F. Manufacturers Field Reports: Indicate start-up of treatment systems when completed and operating properly. Indicate analysis of system water after cleaning and after treatment.