# **MEPNN Supplier Scouting Opportunity Synopsis**

Section 1: General Information	
Scouting Number	2025-337
Item to be Scouted	BABA Compliant Water Heater Components
Days to be scouted	30
Response Due By	10/10/2025
Description	BABA Compliant: Water Heater
Section 2: Technical Information	
Type of supplier being sought	Other
Details	BABAA-compliant self-certified manufacturers
Reason	BABA
Describe the manufacturing processes (elaborate to provide as much detail as possible)	Domestic components in each of the BABAA compliant manufactured products must exceed 55% of the total component cost and be assembled in the United States.
Provide dimensions / size / tolerances / performance specifications for the item	See attached specs and mechanical schedule for more information.
List required materials needed to make the product, including materials of product components	See attached specs and mechanical schedule for more information.
Are there applicable certification requirements?	Yes
Details	Build America, Buy America Act (BABAA) compliant
Are there applicable regulations?	Yes
Details	Must be able to submit BABAA manufactured product self-certification manufactured product letter that details a compliant product.
Are there any other stndards, requirements, etc.?	No

Section 4: Business Information		
Estimated potential business volume	TBD post selection. Cost should be the best available, and cannot increase the project cost by 25%.	
Estimated target price / unit cost information (if unavailable explain)	TBD post selection. Cost should be the best available, and cannot increase the project cost by 25%.	
When is it needed by?	Q1 2026	
Describe packaging requirements	Must arrive undamaged	
Where will this item be shipped?	Colorado	

See attached specs and mechanical schedule for more information.

Additional Technical Comments

# Additional Comments Is there other information you would like to include? Nationwide Search Provide written documentation in response to the Supplier Scouting request of being a current Build America Buy America Act compliant Water Heater Components manufacturer with experience in manufacturing the system components, meeting the product performance requirements. Information on BABAA compliance requirements can be found at the Made in America Office link https://www.madeinamerica.gov/.

**GMP SET** Feb 4, 2025

1394,1374,1355 Cottonwood Broomfield, CO 80020 Caddis No. 2304

### **Division 22 - Plumbing**

### SECTION 223310 - COMMERCIAL ELECTRIC DOMESTIC WATER HEATERS

### **PART 1 – GENERAL**

### 1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Divisions 1 Specification Sections, apply to this section.

### 1.2 SUMMARY

A. This section includes electric storage water heaters for potable water.

### 1.3 REFERENCES

- A. UL 1453 "Electric Booster and Commercial Storage Tank Water Heaters"
- B. ASME Boiler and Pressure vessel code, Section IV, Part HLW
- C. ASHRAE/IES 90.1-2010
- D. ISO 9001 "Quality Management System"
- E. NFPA 70- National Electric Code NSF/ANSI Standard 61- Drinking Water System Components
- F. ASTM G123 00(2005) "Standard Test Method for Evaluating Stress-Corrosion Cracking of Stainless Alloys with Different Nickel Content in Boiling Acidified Sodium Chloride Solution."

# 1.4 SUBMITTALS

- A. Product Data: Include rated capacities; shipping, installed, and operating weights; furnished specialties and accessories for each model indicated.
- B. Shop Drawings: Detail equipment assemblies and indicate dimensions, required clearances, components, and size of each field connection
- C. Wiring Diagrams: Detail for wiring power signal, differentiate between manufacture-installed and field-installed wiring
- D. Maintenance Data: Include in the maintenance manuals specified in Division 1. Include maintenance guide and wiring diagrams

### 1.5 REGULATORY REQUIREMENTS

- A. Conform to applicable code for internal wiring of factory wired equipment
- B. Units: ETL, UL or CSA Listed as a Complete Electric Water Heater Assembly.
- C. Conform to ASME Section IV. Part HLW for Water Heater construction.

**GMP SET** Feb 4, 2025

1394,1374,1355 Cottonwood

Broomfield, CO 80020 Caddis No. 2304

### **Division 22 - Plumbing**

### **QUALITY ASSURANCE** 1.6

- Listing: The water heater will be listed ETL listed to UL 1453 "Electric Booster and A. Commercial Storage Tank Water Heaters"
- B. ASME Compliance: Water heater shall bear the ASME HLW stamp and be National Board listed
- C. Manufacturer: Company specializing in manufacturing the products specified in this section with minimum twenty years' experience.
- D. Water heater manufacturer certified to ISO 9001 Quality Management System.

### COORDINATION 1.7

Coordinate size and location of concrete bases

### 1.8 WARRANTY

- Storage Tank: 25-year (15 years full, 10 years prorated) coverage for manufacturing or A. material defects, leaks, production of rusty water and/or chloride stress corrosion cracking. Tank warranty does not require inspection and maintenance of anode rods.
- The heater shall have a first year service policy, which shall cover labor and freight B. costs under certain conditions for warranty covered services.
- C. The heater shall have a long-life service policy, which shall cover labor and freight costs under certain conditions for warranty covered services.

## **PART 2 - PRODUCTS**

### 2.1 **MANUFACTURERS**

- A. Available Manufacturers: Manufacturer shall be a company specializing in manufacturing the products specified in this section with minimum twenty years' experience. The water heaters shall be manufactured by a company that has achieved certification to the ISO 9001 Quality Management System.
- B. The water heaters shall be ETL listed as a complete unit. The heater shall satisfy current Federal Energy Policy Act standards for both thermal efficiency and stand-by heat losses.
- C. Manufacturers: PVI is the basis of design. Acceptable manufacturers shall be subject to compliance with the requirements

### CONSTRUCTION 2.2

- The storage section of the water heater shall be ASME HLW stamped and National A. Board Registered for a maximum allowable working pressure of 150 psi and pressure tested at 1-1/2 times working pressure.
- B. All tank connections/ fittings shall be nonferrous. Tank shall be equipped with a balltype drain valve. Tank design will include a manway sized access to the tank interior.

**GMP SET** Feb 4, 2025

1394,1374,1355 Cottonwood Broomfield, CO 80020 Caddis No. 2304

# **Division 22 - Plumbing**

- C. The storage tank shall be an unlined pressure vessel constructed from phase-balanced austenitic and ferritic duplex steel with a chemical structure containing a minimum of 21% chromium to prevent corrosion and mill certified per ASTM A 923Methods A to ensure that the product is free of detrimental chemical precipitation that affects corrosion resistance. The material selected shall be tested and certified to pass stress chloride cracking test protocols as defined in ISO 3651-2and ASTM G123 00(2005) "Standard Test Method for Evaluating Stress-Corrosion Cracking of Stainless Alloys with Different Nickel Content in Boiling Acidified Sodium Chloride Solution."
- D. Waterside surfaces shall be welded internally utilizing joint designs to minimize volume of weld deposit and heat input. All heat affected zones (HAZ) shall be processed after welding to ensure the HAZ corrosion resistance is consistent with the mill condition base metal chemical composition. Weld procedures (amperage, volts, welding speed, filler metals and shielding gases) utilized shall result in a narrow range of austenite-ferrite microstructure content consistent with phase balanced objectives for welds, HAZ and the base metal.
- E. All internal and external tank surfaces shall undergo full immersion passivation and pickling processing to meet critical temperature, duration and chemical concentration controls required to complete corrosion resistance restoration of pressure vessel surfaces. Other passivation and pickling methods are not accepted. Immersion passivation and pickling certification documents are required and shall be provided with each product.
- F. Materials shall meet ASME Section II material requirements and be accepted by NSF 61 for municipal potable water systems. Storage tank materials shall contain more than 80% post- consumer recycled materials and be 100% recyclable.
- G. Water contacting tank surfaces will be non-porous and exhibit 0% water absorption.
- H. Lined or plated storage tanks will not be acceptable.
- I. Water heaters that require anodes will not be acceptable.
- J. Heating elements will be sheathed in Incoloy. Each element will individually mount to the tank by means of a four-bolt bronze flange over stainless steel studs with an o-ring seal. A fused magnetic contactor will be supplied for each power circuit. Maximum current per circuit will be 50 amps on three-phase units.

### 2.2 PERFORMANCE

A. Water heater will meet the requirements of ASHRAE 90.1–2010.

# 2.3 WATER HEATER TRIM

- A. As a minimum, the heater will be equipped with the following:
  - electronic low water cutoff
  - 2. an *immersion* operating thermostat
  - 3. *immersion* temperature limiting device
  - 4. an ASME rated temperature and pressure relief valve

**GMP SET** Feb 4, 2025

1394,1374,1355 Cottonwood Broomfield, CO 80020 Caddis No. 2304

### **Division 22 - Plumbing**

- 5. and options as selected on form PV 8130
- B. Operating and safety controls shall meet the requirements of UL

### PART 3 – EXECUTION

### 3.1 INSTALLATION

A. Install water heaters level and plumb in accordance with manufacturers' written instructions and referenced standards.

### 3.2 FINISHING

A. The heater will be completely packaged, requiring only hookup for electrical and plumbing. The heater will be insulated with multiple layers of heavy-density fiberglass, jacketed with powder- coated steel panels, and mounted on heavy-duty channel skills. The heater will fit properly in the space provided and installation will conform to all local, state, and national codes.

### 3.3 START-UP

A. Start up on the unit will be performed by factory trained and authorized personnel. A copy of the startup report will be provided to the owner.

# **END OF SECTION**