MEPNN Supplier Scouting Opportunity Synopsis

Section 1: General Information

2025-055
Nozzle Check Valves
15
03/13/2025
ASME Class 300 stainless steel construction axial nozzle check valve, 4-to-20- inch diameter
New Mexico

Section 2: Technical Information

Type of supplier being sought	Manufacturer
Reason	BABA
Describe the manufacturing processes (elaborate to provide as much detail as possible)	metal casting, 6 axis machining/milling to tight tolerances, assembly, computational fluid dynamic modeling and hydraulic testing
Provide dimensions / size / tolerances / performance specifications for the item	Type V625 Axial Nozzle Check Valve 16 Inches: a. Construction: Axial nozzle style check valve, American Society of Mechanical Engineers (ASME) Class 300 flanges, cast valve body and flanges, American Society for Testing and Materials (ASTM) A487 GR CA6NM CI B or ASTM A351 CF8M stainless steel body material, centered and guided solid disk within the inner body, Inconel X-750 spring, 13 percent Chromium 6 percent Nickel stainless steel internal components, rated working pressures up to 720 psi, metal to metal seal with leakage rate of ISO 5208 Class C or better, compliant with NSF 61, and self-contained without the need for external power, dampening devices, or hydraulics.
	b. Working pressure: 240 psi to 350 psi at Intake Pump Station, 280 psi to 310 psi at Caprock Pump Station.
	c. Function: fast closing spring loaded check valve to reduce surge potential in pump shutoff application. Valve shall close in less than 0.1 seconds in pump shutoff condition. Manufacturer shall submit relevant data from test stands or other installations to provide evidence of ability to meet closure rate.
	 d. Flows: 1) Normal flows between 2,250 gpm and 5,000 gpm. 2) Abnormal flows between 1,200 gpm and 2,250 gpm, but not at risk of surge- any backpressure or closure rate is acceptable in this flow range. Abnormal Flows between 5,000 gpm to 6,000 gpm, but under exceptionally infrequent and controlled conditions, any backpressure less than 1 psi is acceptable in this flow range.
	e. Capacity: Able to pass all normal flows at less than 0.5 psi pressure loss. Cracking pressure: shall not exceed 0.4 psi.
List required materials needed to make the product, including materials of product components	CR CA6NM CI B (https://www.alloycasting.com/alloys/a487-ca6nm-cl-b) or A351 CF8M (https://www.alloycasting.com/alloys/a351-cf8m) stainless steel; Inconel X-750 (https://www.specialmetals.com/documents/technical- bulletins/inconel/inconel-alloy-x-750.pdf)
Are there applicable certification requirements?	No
Are there applicable regulations?	Yes

Details	ANSI/NSF 61
Are there any other stndards, requirements, etc.?	Yes
Details	ASME, ISO 5208 Class C, ASTM A487
NAICS 1	332911 Industrial valve manufacturing
NAICS 2	
Additional Technical Comments	

Section 4: Business Information

Estimated potential business volume	one-time purchase of 10 units total
Estimated target price / unit cost information (if unavailable explain)	\$70,000 per unit
When is it needed by?	Approval needed asap; procurement potentially in the next 2 years.
Describe packaging requirements	palletized individually
Where will this item be shipped?	New Mexico

Additional Comments

Is there other information you would like to include?