

MEPNN Supplier Scouting Opportunity Synopsis

Section 1: General Information

Scouting Number	2026-457
Item to be Scouted	BABA: Locks - Grade 2 Tubular
Days to be scouted	14
Response Due By	08/26/2026
Description	A Grade 2 tubular lock is one of the most common pieces of door hardware used in commercial light-duty and higher-end residential buildings. If you've ever opened a door in an office, school, apartment, or small business, you've

Section 2: Technical Information

Type of supplier being sought	(cored) latch mechanism installed into a standard 2'-1/8" door prep.
Reason	Manufacturer
	Minnesota
	BABA

Describe the manufacturing processes (elaborate to provide as much detail as possible)	1-Form the Lock Chassis Components The internal chassis parts are stamped and formed from steel to create the lock's structural body. -Stamp steel sheets into chassis plates and internal supports -Form the spindle hub, cam plates, and spring housings -Deburr all edges to ensure smooth mechanical movement 2-Machine the Latch Assembly The latch bolt and housing are machined to meet Grade 2 durability and security requirements. -Machine the latch bolt from steel rod stock -Form the tubular latch housing and insert the bolt -Add the deadlocking plunger (for security against credit-card bypass) -Install latch springs and test bolt travel 3-Produce Exterior Trim Components Levers, knobs, and roses are formed or cast depending on the design and finish requirements. -Die-cast or forge lever/knob shapes -Machine rose plates and trim rings -Drill and tap holes for mounting screws -Prepare surfaces for finishing (polish, brush, or texture) 4-Assemble the Locking Mechanism The internal mechanics—spindle, cams, springs, and retractor—are assembled into the chassis. -Install the retractor mechanism that pulls the latch back -Add torsion springs for lever return -Insert the spindle and cam system -Verify smooth lever rotation and latch retraction 5-Install the Key Cylinder (If Applicable) Entry, classroom, and storeroom functions require a keyed cylinder integrated into the chassis. -Install the cylinder housing into the exterior trim -Insert the key plug and pin stacks -Test key rotation and retraction linkage -Secure the cylinder to the chassis 6-Apply Surface Finishes All visible components receive architectural finishes for durability and appearance. -Apply plating (chrome, brass, bronze) or powder coat -Brush or polish stainless steel components -Perform corrosion-resistance treatments (e.g., passivation) -Inspect finish quality for uniformity 7-Final Assembly and Functional Testing The lock is fully assembled and tested to meet ANSI/BHMA Grade 2 performance standards. -Assemble interior and exterior trim to the chassis -Install latch and verify alignment -Perform cycle testing for lever return and latch operation -Conduct security tests (deadlocking, torque resistance)
Provide dimensions / size / tolerances / performance specifications for the item	See Attached Specification for more info on basis of design for Grade 2 Tubular Locks - MUST Meet BABA Requirements.
List required materials needed to make the product, including materials of product components	1. Chassis & Internal Mechanism Materials These components carry the mechanical load and must withstand 400,000+ ANSI test cycles. -Cold-rolled steel (CRS) – primary chassis body -Zinc alloy (Zamak) – internal housings, cams, and linkages -Hardened steel – critical wear points (spindles, hubs, locking pins) -Spring steel – torsion springs, return springs -Stainless steel (304/410) – anti-corrosion internal parts

- Brass – bushings, rotating collars, some cams
- Phosphor bronze – high-cycle springs and friction-resistant components

Purpose: Provide structural strength, smooth operation, and long service life.

2. Latch Assembly Materials

The latch is the most stressed component in a tubular lock.

- Hardened steel latch bolt
- Deadlocking plunger (hardened steel or stainless)
- Steel latch housing (CRS or stainless)
- Brass or zinc latch tailpiece
- Spring steel latch springs
- Nylon or PTFE guides (for low-friction movement)

Purpose: Ensure security, smooth retraction, and resistance to credit-card bypass.

3. Exterior Trim & Lever/Knob Materials

These are the visible, user-facing components.

- Stainless steel (304/316) – most common commercial trim
- Brass or bronze – premium architectural trim
- Zinc alloy (die-cast) – economical lever/knob bodies
- Aluminum – lightweight trim options
- Rubber or neoprene – lever bumpers (optional)
- Wood or decorative inserts (optional for designer trims)

Purpose: Provide durability, aesthetics, and tactile comfort.

4. Keying Components

These materials support the cylinder and key system.

- Brass cylinder housing
- Brass or nickel-silver pins
- Brass or stainless steel springs
- Steel or brass tailpiece
- Nickel-silver keys (standard for commercial systems)

Purpose: Deliver reliable key control and long-term wear resistance.

5. Fasteners & Mounting Hardware

Used to secure the lock to the door.

- Steel thru-bolts
- Machine screws (steel or stainless)
- Wood screws (for residential installs)
- Threaded posts
- Set screws
- Nylon or metal washers

Purpose: Maintain structural integrity and prevent loosening over time.

6. Surface Finishes & Treatments

Architectural hardware must match building specifications.

- Satin chrome (US26D)
- Polished chrome (US26)
- Satin stainless (US32D)
- Polished stainless (US32)
- Oil-rubbed bronze (US10B)
- Satin brass (US4)
- Black powder coat
- PVD coatings (high-durability decorative finish)
- Passivation (for stainless steel)
- Electroplating (for zinc or brass trim)

Purpose: Provide corrosion resistance and aesthetic consistency.

7. Protective & Functional Materials

Used to reduce wear, noise, and corrosion.

- Nylon bushings
- PTFE washers
- Lithium or silicone grease
- Anti-corrosion coatings
- Friction-reducing inserts

	Purpose: Ensure smooth operation and long service life.
Are there applicable certification requirements?	No
Are there applicable regulations?	No
Are there any other standards, requirements, etc.?	No
Additional Technical Comments	

Section 4: Business Information

Estimated potential business volume	60
Estimated target price / unit cost information (if unavailable explain)	\$40 and \$190 per unit
When is it needed by?	July 2027
Describe packaging requirements	Foam sleeves or bubble wrap Scratch-protection film on plated or painted finishes Cardboard collars to protect lever geometry Purpose: Maintain finish quality and prevent mechanical damage.
Where will this item be shipped?	Blaine Minnesota

Additional Comments

Is there other information you would like to include?	
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