

SCOPE OF WORK (SOW)

Building 409 Corrective Maintenance (5) Blast Machines

Date: September 3, 2026

Project Location: Anniston Army Depot, Building 409, 7 Frankford Ave Anniston, AL 36201

1. Project Background & Objective

The objective of this project is to perform corrective maintenance on five (5) industrial shot blast machines located in Building 409 at the Anniston Army Depot.

To improve reliability, decrease maintenance downtime, and eliminate threaded hardware issues, The contractor will replace the existing, legacy blast wheels with patented **BCT TwistLOK™ e-Wheel™** technology. This will transition the depot to threadless control cage adapters, threadless liner retention systems, and high-durability investment-cast super-alloy tool steel components, which provide 2–3 times the wear life of traditional blast wheel alloys. Additionally, select machines will receive new abrasive control valves, premium-efficiency motors, mill belts, bearings, and seals.

2. Core Technology Specifications

All new blast wheels supplied under this SOW will feature BCT's TwistLOK™ e-Wheel™ technology:

- **Threadless Retention:** Patented TwistLOK™ control cage adapter eliminates traditional threaded hardware for the control cage and feedspout.
- **Liner System:** Threadless end and top liner retention system.

- **Side Liners:** Thru-bolted side liners or replaceable T-Nuts for base mounting flanges.
 - **Sealing:** 3D Molded Urethane lid seals to prevent abrasive escape.
 - **Materials:** Investment-cast Super-Alloy Tool Steel construction for maximum wear life.
 - **Ease of Maintenance:** Features the M-LOK™ threadless spring-loaded locking pin, requiring only a simple 90-degree turn with a wrench to lock or disengage the assembly.
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3. Detailed Scope of Work by Equipment

The corrective maintenance is divided into five (5) distinct equipment-specific work packages across the facility's blast equipment fleet.

3.1. 96" Double Door Blast Table — ST-96 (Machine L6179)

Contractor will supply and install components and spare assemblies for Machine L6179 to complete the following scope:

- **TwistLOK™ e-Wheel™ Installation:** Supply and install two (2) M3A TwistLOK™ e-Wheels™ equipped with 30HP, 3600RPM premium-efficient motors.
 - Includes TwistLOK abrasion-resistant steel housings.
 - Includes fully cast lined housing with threadless end/top liner retention.
 - Includes e-Wheel bare wheels, XT tune-up kits, feedspouts with built-in blast hose adapters, and NuckleSaver™ assemblies.
 - Includes wheel mounting adapter kits with T-nut adapter flanges and required mounting hardware to adapt the M3A wheels to the existing blast table structure.
- **Abrasive Control :** Supply and install two (2) MACV Abrasive Control Valve assemblies.
 - Equipped with heavy-duty magnetically sealed slide gates, shot hose adapters, and blast hose clamps.
 - BCT to reuse existing site airlines for control valve connection.
 - Supply and install a new hopper bottom plate to provide a flat, stable mounting surface for the new valves.
 - Install two (2) new inspection covers to allow maintenance of the MACV assemblies from inside the hopper.

- Provide twenty (20) feet of 3" ID blast hose to replace the existing abrasive feed hose to the blast wheels.
- **Spare Parts Inventory Package:** Deliver the following dedicated spares for L6179:
 - One (1) spare 30HP, 3600RPM Premium Efficient Motor.
 - One (1) spare M3A TwistLOK™ e-Wheel™ assembly (bare wheel and housing, excluding motors and mounting adapter kits).
 - One (1) M3A Tune-Up Kit.

3.2. 96" Double Door Blast Table — ST-96 (Machine L6180)

Contractor will supply and install components for Machine L6180:

- **TwistLOK™ e-Wheel™ Installation:** Supply and install two (2) M3A TwistLOK™ e-Wheels™ with 30HP, 3600RPM premium-efficient motors, matching the technical specifications, adapter plates, and hardware detailed in Section 3.1.
- **Abrasive Control Upgrade:** Supply and install two (2) MACV Abrasive Control Valve assemblies, including heavy-duty magnetically sealed slide gates, flat hopper bottom plate, two (2) new inspection covers, and twenty (20) feet of 3" ID blast hose. BCT will reuse existing airlines.

3.3. 96" Double Door Blast Table — ST-96 (Machine L7032)

Contractor will supply and install components for Machine L7032:

- **TwistLOK™ e-Wheel™ Installation:** Supply and install two (2) M3A TwistLOK™ e-Wheels™ with 30HP, 3600RPM premium-efficient motors, matching the technical specifications, adapter plates, and hardware detailed in Section 3.1.
- **Abrasive Control Upgrade:** Supply and install two (2) MACV Abrasive Control Valve assemblies, including heavy-duty magnetically sealed slide gates, flat hopper bottom plate, two (2) new inspection covers, and twenty (20) feet of 3" ID blast hose. BCT will reuse existing airlines.

3.4. Tumble Blast Machine Super 7 (Machine M2590)

Contractor will perform corrective maintenance on the first of two Tumble Blast systems:

- **TwistLOK™ e-Wheel™ Installation:** Supply and install one (1) M1 TwistLOK™ e-Wheel™ with a 20HP, 3600RPM premium-efficient motor.

- Includes TwistLOK abrasion-resistant steel housing, fully cast lined housing, e-Wheel bare wheel, XT tune-up kit, feedspout with built-in blast hose adapter, and NuckleSaver™ assembly.
- Includes wheel mounting adapter kit with T-nut adapter flange and mounting hardware.
- **Mill Rubber Belt Replacement:** Remove the existing mill belt and install one (1) new direct mill rubber belt replacement featuring pre-formed holes and molded cleats. *(Note: Final belt dimensions and hole sizes must be verified by the customer at the time of order placement).*
- **Bearings and Seals Replacement:** Refurbish the mill rotation system by replacing:
 - Six (6) 4-bolt flange bearings for the mill shafts (covering the drive, take-up, and idler shafts).
 - Two (2) complete barrelhead bearing assemblies.
- **Spare Parts Inventory Package:** Deliver the following dedicated spares for M2590:
 - One (1) spare 20HP, 3600RPM Premium Efficient Motor.
 - One (1) M1 Tune-Up Kit.

3.5. Tumble Blast Machine Super 7 (Machine M2591)

Contractor will perform corrective maintenance on the second Tumble Blast system:

- **TwistLOK™ e-Wheel™ Installation:** Supply and install one (1) M1 TwistLOK™ e-Wheel™ with a 20HP, 3600RPM premium-efficient motor, matching the technical specifications, adapter plates, and hardware detailed in Section 3.4.
 - **Mill Rubber Belt Replacement:** Remove the existing mill belt and install one (1) new direct mill rubber belt replacement with holes and molded cleats. *(Note: Dimensions and hole sizes to be verified by customer at order placement).*
 - **Bearings and Seals Replacement:** Replace six (6) 4-bolt flange shaft bearings (drive, take-up, idler) and two (2) barrelhead bearing assemblies to match Section 3.4.
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4. Installation & Field Services (BCT Scope)

Contractor will provide complete turnkey mechanical installation services for all equipment listed in Section 3. The installation package is budgeted and defined as follows:

- **Service Team Deployment:** Contractor will deploy a qualified field service certified team to the Anniston Army Depot and perform repairs.
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