# OrbitalATK – Building 65 20 mm. MK244 Compaction and Loading-20mm PGU Loading Relocation

#### CLIENT

OrbitalATK

#### LOCATION

Independence, Missouri

### **PROJECT DESCRIPTION**

OrbitalATK Armament Systems specializes in innovating low-cost, highly reliable and precise weapons and ammunition for artillery and mortar systems, medium caliber weapons platforms, battle tanks and for the individual soldier. It is the world's top producer of medium-caliber live and training ammunition and gun systems. Their precision guidance kit approach provides a common technology base that transforms conventional artillery and mortar munitions into precise, Global Positioning System (GPS) guided weapons.

When OrbitalATK needed relocation and integration of 20 mm. Loaders and Associated Equipment, it called on Black & McDonald (B&M) to ensure the move was a success.

## **B&M SCOPE OF WORK**

B&M disconnected the PGU Loading Machine, currently located in Building 3 priming, printers (two each) and crimp detect (attached to loader exit). B&M:

- Labelled all wires prior to disconnection permitting re-connection following the physical move
- Disconnected the power for machines from the main buss
- Unwired the main drives from each shut-off switch box
- Unwired the loader control cabinets from electrical supply and loader junction boxes
- Unwired the loader and Loctite machines and printer cabinets from their respective junctions
- Unwired the crimp detect from the supply junction
- Bundled the wires as required to permit machine movement to location
- Removed the electrical boxes specific to these machines from the walls

## OrbitalATK – Building 65 20 mm. MK244 Compaction and Loading-20mm PGU Loading Relocation

B&M re-connected the loader and Loctite application machine in Bay 19, Wing B of Building 65. The team:

- Mounted the electrical boxes and cabinets to walls as marked by 20 mm. Engineering
- · Re-connected all machine wiring to control boxes and cabinets
- Connected the supply switching to supply drops
- Completed the functional checkout of all electronics with 20 mm. Operations and Engineering to verify proper re-connection.

B&M performed the following for disconnection of the 20mm MK244 Compaction and Loading Equipment, currently located in Building 3 West Charge Wing, Bay 1:

- Labelled all wires prior to disconnection permitting proper re-connection after the physical move
- Disconnected power for both machines from the main buss
- Unwired the loader main drive and conveyor from the shut-off switch box
- Unwired compaction unit control cabinet from electrical supply
- · Unwired press motor to facilitate removal from press
- Unwired loader from its junction
- · Unwired compaction unit from control cabinet
- Unwired island (rotary) feed table from its electrical source at loader
- Unwired conveyor from end of the loader to facilitate moving it separately
- Bundled wires as required to permit machine movement to new location
- Removed electrical boxes specific to these machines from the walls

B&M performed the following tasks for re-connection of the loader and compaction unit in Bay 17, Wing B of Building 65:

- Mounted the electrical boxes and cabinets to walls as marked by 20mm engineering
- · Re-connected all machine wiring to control boxes and cabinets
- Connected the supply switching to supply drops
- Completed the functional checkout of all electronics with 20mm Operations and Engineering to verify proper re-connection

### **BENEFITS TO THE CLIENT**

OrbitalATK relied on B&M's technical experience to ensure the detailed project was completed on-time and without hassle or fuss.