ENERGY CONTROL PROCEDURE

The following Energy Control Procedure should be used for the equipment listed below.

Date Written: 4-2-14 Date of Revisions: _____-_____
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Reviewing Personnel: _____ Date Reviewed: _____
Approvals: _____ Date Approved: _____

EQUIPMENT DESCRIPTION

GENERAL DESCRIPTION: Horizontal Machining Center
MANUFACTURER: Makino BMC # 2014
MODEL: A55 SERIAL NUMBER: 408
LOCATION: N.C. Department

CONTROLS

The following Controls, including "start/stop" buttons, toggle switches, emergency stop button, shut-off valves, etc. have been identified for this equipment.

Description of Control	Location on Equipment
Main disconnect	Breaker panel by rest room
Main breaker	Right side of machine on electrical cabinet
Air supply	Left side of machine under oil chiller
Power on-off button	Operator panel

ENERGY SOURCES/ISOLATION DEVICES

The following Energy Sources and Energy Isolation Devices supporting this equipment have been identified.
Energy Types: (CHECK ALL THOSE APPLICABLE)

Electrical	**X**
Pneumatic	**X**
Hydraulic	**X**
Steam	
Chemical	
Thermal	
"Stored" Energy	
Other	

Sources / Devices	Location	Type of Lock/Tag Needed
Main disconnect	Breaker panel by rest room	Breaker cover std. lock and tag
Main breaker	Right side of machine electrical cabinet door	Std. lock and tag
Air supply	Left side under oil chiller	Quick connect cover std. lock and tag

Power on-off button	Operator panel	n/a

SHUTDOWN PROCEDURES

The steps listed below must be followed to properly shut down and de-energize this equipment. To verify the effectiveness of each step follow the instructions in the "Verification" column.

Lock-Out/Tag-Out

Procedure	Device used	How to verify
Notify "Affected" and "Other" employees of impending equipment shutdown		
Push power off button	n/a	Try and function
Switch off main breaker	Std. lock and tag	Try power on button
Switch off main disconnect	Breaker cover std. lock and tag	Check for voltage
Disconnect air line	Quick connect cover std. lock & tag	Check guage

RELEASE AND RESTART PROCEDURES

The steps listed below must be followed to properly release this equipment from a locked or tagged out condition and restart it.

Procedure	Location
Inspect work area and remove tools and other non-essential items.	
Inspect equipment and components to make sure it is intact and ready to run.	
Notify "affected" and "other" employees in the area of impending restart and make sure they are safely positioned away from the equipment	
Unlock and reconnect air supply	Left side of machine under oil chiller
Unlock and switch on main breaker	Electrical panel by rest room
Unlock and switch on machine breaker	Right side electrical cabinet on door
Push power on button	Operator panel