

ENERGY CONTROL PROCEDURE

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

Date Written: 4-2-14 Date of Revisions: _____ - _____
 Authors: Ed Graef
 Reviewing Personnel: Steve Voll Date Reviewed: 4-14-14
 Approvals: _____ Date Approved: _____

EQUIPMENT DESCRIPTION

GENERAL DESCRIPTION: Horizontal Machining Center
 MANUFACTURER: Makino #2032
 MODEL: A55 SERIAL NUMBER: LM-463
 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 Discount	Behind Machine on wall by rest room (locker room)
Main Breaker	Operators Side electrical Panel Door
Off-On Button	Operators Panel Right Side
Air Supply	Left Rear under hydraulic tank

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	
Steam	
Chemical	
Thermal	
“Stored” Energy	
Other	

Sources / Devices	Location	Type of Lock/Tag Needed
Main Disconnect	On Wall by rest room marked	Standard lock & tag
Main Breaker	Right side of machine cabinet	Standard lock & tag
Main air supply	Left rear of machine under hydraulic unit	Quick connect cover standard lock and tag
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	N/A	Try and function
Switch off main breaker	Standard lock and tag	Try power control on
Switch off main disconnect	Standard lock and tag	Check for voltage
Disconnect air supply	Plug cover standard lock and tag	Check gauge

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 main disconnect switch on	On wall behind machine by rest room
Unlock main air plug reconnect	Left side under hydraulic unit
Unlock and switch on main breaker	Right side electrical panel door
Push control power on button	Operator’s panel
Test machine	