

## ENERGY CONTROL PROCEDURE

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

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 Approvals:                                  Date Approved:     

### EQUIPMENT DESCRIPTION

GENERAL DESCRIPTION: Horizontal Machining Center  
 MANUFACTURER: Makino BMC # 2012 / #2001 / #2008  
 MODEL: A55 SERIAL NUMBER: LM 364 /1048 / 0992  
 LOCATION: NC Department (Tool Room Wall)

### 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
Power on button	Operator’s Panel Right side
Main breaker	Operator’s side close to rear on panel door
Main disconnect	On wall behind machine marked

### 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	<b>X</b>
Pneumatic	<b>X</b>
Hydraulic	<b>X</b>
Steam	
Chemical	
Thermal	
“Stored” Energy	
Other	

Sources / Devices	Location	Type of Lock/Tag Needed
Main breaker	Operator side electrical cabinet	Std. lock – tag
Air supply	Magazine side under oil chiller	Quick disconnect cover std lock & tag
Main disconnect	Wall behind machine	Std. lock & tag


**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 any control switch
Switch off main breaker	Std. lock and tag	Push power on button
Main disconnect	Std. lock and tag	Check for voltage
Quick disconnect cap	Std. lock and tag	Check pressure 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 disconnect switch on	On wall behind machine
Unlock main breaker switch on	On side of machine electrical panel
Unlock air supply reconnect	Magazine side under oil chiller
Push power on button	Operator panel