

7680 INNOVATION WAY MASON, OHIO 45040 513-573-7200 FAX: 513-573-7360

March 23, 2020

Considering these extraordinary times when production may be idled for an undetermined period, Makino would like to proactively supply guidance on ways to best position your machine tools for a quick return to profitability. Please review the below guidelines as you consider how to ramp down:

Machining Center

Machine layup suggestions for complete shutdown:

- Remove all coolant and clear lines of residual coolant
- Clean all coolant tanks and conveyors and spray with rust preventative
- Clean all bare metal surfaces and spray with rust preventative
- Pull back all way covers and spray LM guides and ball-screws with rust preventative
- Spray all toolholder tapers with rust preventative
- Clean and lubricate drawbar fingers/taper
- Replace all servo drive batteries
- Back up machine data and CNC data
- Lockout machine

Machine layup suggestions for partial (monitored) shutdown:

- Remove all coolant and clear lines of residual coolant
- Clean all coolant tanks and conveyors and spray with rust preventative
- Clean all way covers and spray with rust preventative
- Spray all toolholder tapers with rust preventative
- Clean and lubricate drawbar fingers/taper
- Replace all servo drive batteries
- Back up machine data and CNC data
- Operate the axes, ATC, APC and spindle on a one hour "warmup" cycle daily to keep proper lubrication on moving surfaces

For Makino EDM equipment:

Sinker EDM

Machine layup suggestions for complete shutdown:

- Leave Machine filled with Oil as will act as a rust preventative
- Clean all bare metal surfaces and spray with rust preventative
- Ensure All Axes and Ball Screws are greased
- Spray all toolholder tapers with rust preventative



7680 INNOVATION WAY MASON, OHIO 45040 513-573-7200 FAX: 513-573-7360

Sinker EDM

Machine layup suggestions for complete shutdown(cont'd):

- Clean and lubricate drawbar fingers/taper
- Back up machine data and CNC data
- Power Down Machine and Lock Out

Machine layup suggestions for partial (monitored) shutdown:

- Ensure All Axes and Ball Screws are greased
- Spray all toolholder tapers with rust preventative
- Clean and lubricate drawbar fingers/taper
- Back up machine data and CNC data
- Power Down Machine and Lock Out

Wire EDM

Machine layup suggestions for complete shutdown:

- Clean all bare metal surfaces and spray with rust preventative
- Clean Wire Path- Remove Wire Spool
- Ensure All axes and Ball screws are greased
- Back up machine data and CNC data
- Power Down Machine and Lock Out

Machine layup suggestions for partial (monitored) shutdown:

- Remove all water and clear lines of residual water
- Clean all water tanks
- Clean all way covers and spray with rust preventative
- Back up machine data and CNC data
- Perform Machine Home
- Power Down Machine and Lock Out

Please contact us at 888-Makino-4 (625-4664) with any questions specific to your circumstance or assistance with these activities. Makino stands ready to respond as necessary both today and in the future.

Makino Customer Support Service@Makino.com www.makino.com

mymakino.com