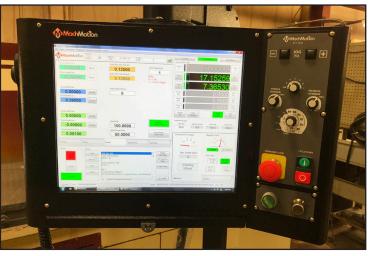


GRINDING MACHINE CONTROL

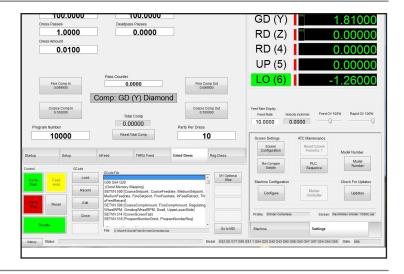


Industrial Motion Control

- Large 17" display touch screen
- Closed-loop, DSP Ethernet motion controller
- Standard Fanuc-style G-code programming
- Macro B programing, parametric G-code
- Rugged control enclosure; dust/liquid resistant

Specialized Conversational Interface - Operator Input

- Every CNC grinder has unique cycles that are needed to meet your demanding production needs, along with your unique grinding process
- A complex grinder process does not mean you need a highly skilled operator
- MachMotion prides ourselves in the ability to give a personalized conversational control solution
- MachMotion team members are versed with mechanical and software design skills, grasping your concepts quickly, helping you bring them to reality





Surface Grinder CNC Machine Retrofit Solutions

- Simple Conversation User Input though 17"
 TOUCH Screen
- Z & Y Axis Servo Controlled
- X Axis Servo or Hydraulic Controlled
- Automatic Dressing Cycle Macro
- Electromagnetic Interlocks

Mach/Notion Whats Included



ID, OD - Cylindrical and Specialty Grinder Machines Retrofits

- CNC horizontal or vertical machine type grinders
- Grinding cycles, teach points oscillating grinding, plunge/ multi-plunge, specialty machine cycles
- Profile dressing cycle using a G-code file
- Straight dressing cycle macro
- Probe inputs
- Gap elimination microphone system input
- Share with us your unique grinding process and we will make a simple user interface

Centerless Grinder Control Retrofit Solution

- Up to 6 Axis Control
- 2 Axis Profile Wheel Dress
- 2 Axis Profile Reg Wheel Dress
- Upper Slide
- In Feed Lower Slide
- Operator Screen designed simple for simple production level operator





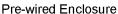
Double Disc Grinder Control Retrofit Solution

- Simple Conversation User Input though 17"
 TOUCH Screen
- In-feed Axis Plunge control
- User Comp increment buttons
- Interface to Hydraulic part oscillator
- Dress Cycle
- Probe part thickness input



GRINDING MACHINE CONTROL







Spindle Control with VFD









Options

- Ready to bolt on, pre-wired enclosure for your system
- CNC Grinder spindle control with VFD ("spindle drive") up to 125HP
- Dual Loop Scale Feedback Encoder
- Wi-Fi ready
- Touch Screen
- MPG Pendant

AC Servo Motor Options

- High Resolution Digital AC Servo System, Position Repeatability .00001
- Yaskawa servos with 20bit encoder

YASKAWA





Easy to Install/Operate

- MachMotion turnkey installation services,
 GUARANTEED POWER-UP available
- Install yourself or use MachMotion's qualified technicians
- One-time setup; Easily backup machine configuration
- Part File Import; Network access via Ethernet to offices/other departments





FREE Control Support Included

- No charge for control support
- Remote login service included; we can see what you see
- Non-transferable
- One year warranty on all parts

Our Guarantee

- Customer service and support is priority #1
- Direct seller; we're your single source for sales and support, no middle man
- US-based manufacturing, sales, service, and support
- Call us and speak to a live person, M-F 8-5 pm (Central)





Grinder Control Retrofits Surface 3 Axis

Grinder Control Retrofits Surface 3 Axis

MachMotion

We've Got You Covered! Customer Examples



Cincinnati Milacron



Cincinnati Milacron



CNC Centerless Grinder Retrofit



5 Axis Centerless Grinder



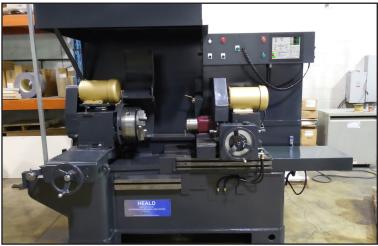
Cincinnati Centerless Grinder Controller



Landis Viking Centerless Grinder

Machine control

Customer Examples



Alloy ID Grinder



Cincinnati OD Grinder CNC Control



OD Grinder CNC Retrofit MachMotion



Besly DH6 Disc Grinder Retrofit Control Package



Chevalier FSG-2460TX Surface Grinder Controller Upgrade



MachMotion Surface Grinder Controller



Kit Model Number	N/A
Control Series	1050G
Screen Size	17" LCD Monitor
Touch Screen	Yes
Program Storage (Solid State HD)	64GB
Processor	Intel 2.00GHZ
Macro B Programming	Yes
Parametric G Code Compatibility	Yes
Axis Supported	6 & 1 Spindle
Servo Motors Included (# Axis)	Yaskawa (3)
Default Servo Size	450W 2.4NM
Servo Encoder Resolution	1,000,000 Counts per rev
Dual Loop Scale Feedback Encoder	Optional
Regulating wheel/Work Holding Servo	N/A
Ball screw Mapping	Yes
Main Power Voltage	230Volt 3 Phase
Inputs	16
Outputs	8
Ethernet I/O For Tool changer	No
Grinder Wheel Relay Outputs	2
Grinder Wheel Analog Output	1
Grinder Spindle Drive VFD	Optional
Pre-wired electrical enclosure included	30 X 30 X 12
1 year warranty on parts	Yes
Lifetime Technical Support	Yes



Remote support via the internet	Yes
Estimated Installation	Call for Quote
Normal Stock item	Avg Lead time 3 Weeks
CNC Control Size	24" (W) X 15.5" (H) X 6.5" (D)
Operating System	Windows
Power Requirements	110-240 VAC operation
Ethernet	Connect to your network and easily transfer files from the office to your computer
USB Ports	1 External USB Port + 1 Internal
Operator Panel	X15-10-01 Operator Panel, with Jog Buttons, Axis Selector, Increment Selector, Jog Speed Selector, Cycle Start, Feed-hold and Emergency Stop Buttons.
Available Power Supply Outputs	5VDC, 12VDC & 24VDC
Digital Outputs	8 Flood/Mist, Coolant, Lamp, etc.
Digital Output Voltage Range	5V-24VDC
Digital Inputs	16 Example: X, Y, & Z Limit Switches, Oilier Refill Warning, etc.
Digital Input Voltage Range	2.5V-48VDC
Safety Features	Opto-isolated I/O & Hardwired E-Stop
Encoder Inputs	6 Differential Quadrature Encoder Inputs. 32-Bit Resolution





Sample Quote for Grinder Control Retrofits Surface 3 Axis

Item Description QTY Price