



Perfect HMI control

The control's standard equipment includes a 10.4" high-color touchscreen with HMI.

Control Features and Benefits

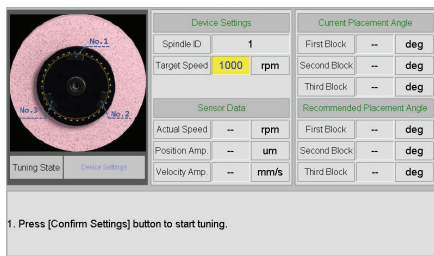
All new iSurface control

The **iSurface controls** are PC-based (NC control), high-specification industrial units. The high-response AC servo motors on the Y- and Z-axes are designed to improve accuracy.

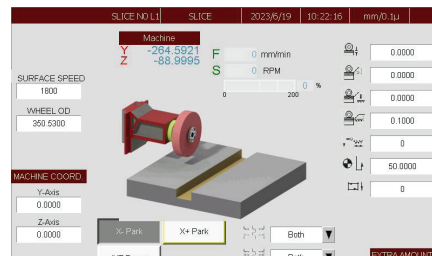
The control is equipped with a variable frequency drive system that automatically adjusts the grinding wheel's linear speed. A magnetic

encoder accurately detects spindle load and correctly grasps the spindle cutting load.

A built-in acceleration gauge monitors the grinding wheel's balance at all times. If the wheel becomes unbalanced, the operator will be notified to rebalance the wheel.



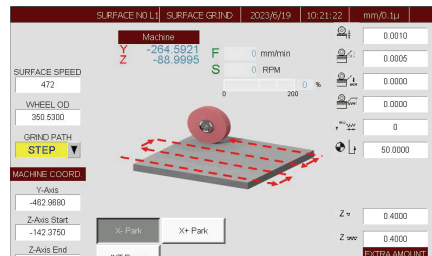
In-Machine Dynamic Balancing



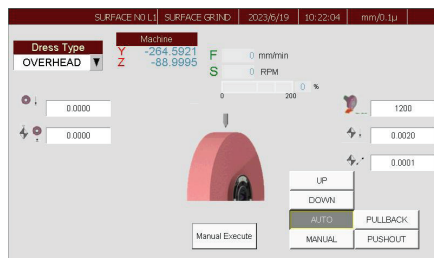
Plunge Grinding Mode



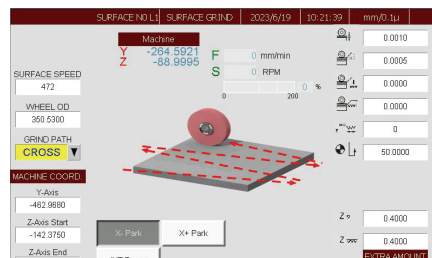
Automatic Dressing on Table (optional)*



Surface Grinding Mode



Automatic Overhead Dresser with Compensation (optional)

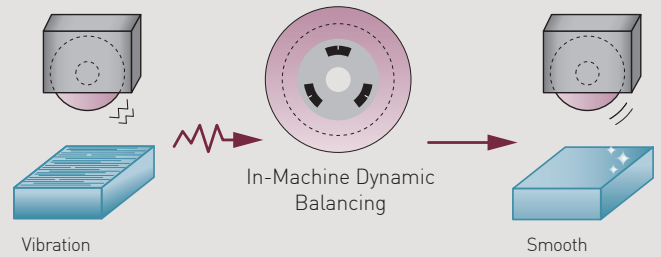


Crisscross Grinding Mode

Control Features and Benefits

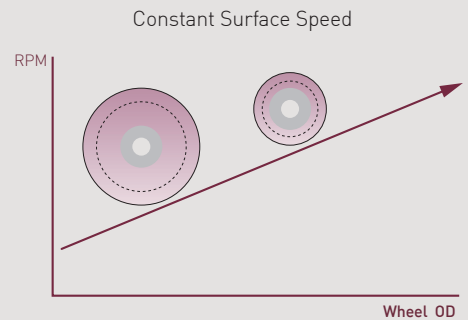
In-machine dynamic balancing

The control's data helps to set adjustments for the in-machine dynamic balancing in order to reduce grinding wheel vibration and eliminate the workpiece surface ripple to improve grinding quality.



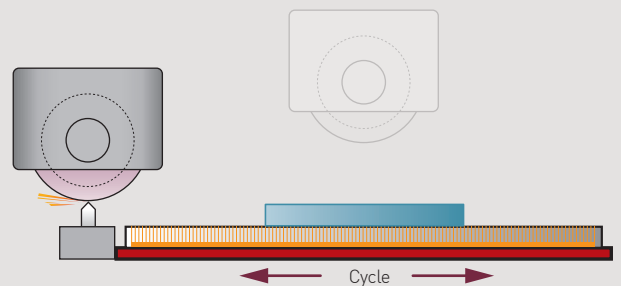
Variable speed spindle

The built-in driver controls spindle speed. Combined with the automatic dressing function, the driver provides constant surface speed regardless of the grinding wheel's changing diameter.



Automatic dressing on table (optional)*

When the grinder enters an automatic dress cycle, the table automatically positions itself where the diamond is set to dress and compensate according to operator settings.



Smart grinding path

By leveraging Chevalier's extensive experience in technological innovation, we have greatly enhanced the FSG-20/24ADIV Series' intelligent grinding path. This smart grinding path will automatically minimize air cutting strokes during grinding of such irregular shapes as I, L, Z or triangular. It will also automatically remove invalid cutting strokes and improve overall processing efficiency.

