

## MAZAK DATA ITEMS

### DataXchange Machine Monitoring Data Items

Scytec DataXchange utilizes direct connectivity to acquire data for DataXchange machine monitoring. Below you can find the specific data items that can be collected from **Mazak Smooth Series** controllers. Data can then be visualized into useful manufacturing dashboards and charts, used with DXIQ, or by Vericut CNC Machine Connect.

#### Data Items Collected

**Alarms**  
**Alarm Code**  
**Alarm Detail**  
**Alarm Status**  
**Common Variable**  
**Connected Time**  
**Cycle Status**  
**Emergency Stop**  
**Feed Hold**  
**Feed Rate Override**  
**Mode Selection**  
**Part Count**  
**Part Number Executing Program**  
**Part Number Main Program**  
**Path Feed Rate**  
**Program Comment**  
**Program Executing**  
**Program Main**  
**Program/Optional Stop**  
**Rapid Override**  
**Spindle Override**  
**Spindle Speed**  
**Spindle Load**  
**Tool Number**

#### Data Items Description

The list of active alarm numbers reported  
The active alarm number without the description  
The active alarm number and description  
The alarm status of the control  
The current value held by the specific common variable  
The amount of time in seconds since a successful connection  
Whether a machine is in cycle or idle  
Whether or not the machine is in emergency stop  
Whether or not a machine is in a feed hold  
The active feed rate override setting as a percentage  
The current setting for the mode selection  
The current part count  
The part number read from the executing program  
The part number read from the full main program  
Feed rate for the selected path  
Program comment matching the search key  
The main or sub program currently executing  
The main program currently executing  
Whether program has stopped due to an M0/M1 code  
The percentage of the rapid traverse override  
The percentage of the spindle override for the specified spindle  
The spindle speed for the specified spindle  
The spindle load for the specified spindle  
The active tool number

## Scytec DXIQ and Vericut CNC Machine Connect

Specific data points are pulled from your shop floor equipment by DataXchange for use with Scytec DXIQ analytics and **Vericut CNC Machine Connect**. Below you will find the specific continuous data and the on-demand data that can be collected through the Precheck, CNC Machine Monitoring and Postcheck process in Vericut CNC Machine Connect.

### Continuous Data

- Active Alarms**
- Axis Feedrates**
- Axis Positions**
- Block Skip**
- Controller Mode**
- Coolant**
- Dry Run**
- E-Stop State**
- Executing Program Name**
- Feed Rate Override**
- Variables**
- Main Program Name**
- Optional Stop**
- Program Stop**
- Parameters**
- Path Feedrates**
- Rapid Override**
- Sequence Number**
- Spindle Direction**
- Spindle Override**
- Spindle Speed**
- Sub Program Name**
- Tool ID**
- Active Work Offset**

### On-Demand Data

- Axis Positions**
- Individual Parameters**
- Machine Configuration**
- Main CNC Program**
- Sub CNC Programs**
- Variables**
- Tool Offsets**
- Work Offsets**