

## SIEMENS DATA ITEMS

### DataXchange Machine Monitoring Data Items

Scytec DataXchange utilizes Siemens OPC UA connectivity to acquire data items for DataXchange machine monitoring as well as Scytec DXIQ analytics and Vericut CNC Machine Connect. Below you can find the specific data items that can be collected from the **Siemens 840D Solution Line** with **SINUMERIK Operate** and **SINUMERIK ONE** controls. Data can then be visualized into useful manufacturing dashboards and charts, used with analytics, or by Vericut CNC Machine Connect.

#### Data Items Collected

**Active Tool**  
**Alarm Code**  
**Alarm Status**  
**Axis Feed Rate**  
**Capture Alarms**  
**Connect Time**  
**Connected Time**  
**Coolant**  
**Current Executing Block**  
**Cycle Status**  
**Dry Run**  
**Emergency Status**  
**Feed Hold Status**  
**Feed Rate Override**  
**Mode Selection**  
**Rapid Override**  
**Part Count**  
**Program File Name**  
**Program Stop (M0)**  
**Options Stop (M1)**  
**Rapid Override**  
**Single Block Status**  
**Spindle Load Meter Percent**  
**Spindle Override**  
**Spindle Speed**

#### Data Items Description

Returns the tool position of the active tool  
Returns the alarm code without the description  
Whether or not an alarm is active  
Feed rate information for the specified path and axis number  
Captures all alarms including those that go off simultaneously  
The connect time for the most recent poll  
Returns time in seconds since a successful connection  
Whether or not coolant is enabled  
The currently active program block, with/without line number  
Whether or not machine is cycling  
Whether the dry run setting is on or off  
Whether a machine is in an e-stop or not  
Whether a machine is in feed hold or not  
The current feed rate override represented as a percentage  
The currently selected controller mode  
The current rapid override as a percentage  
Returns the current part count from the Siemens part counter  
Returns the actual file name of the program  
Returns true if the program has stopped due to an M0 code  
Returns true if the program has stopped due to an M1 code  
Returns the percentage of the rapid traverse override  
Whether single block mode is currently on or off  
Spindle load as a percent for the specified spindle  
The active spindle override as a percentage  
Returns the speed of the specified spindle