

OKUMA DATA ITEMS

DataXchange Machine Monitoring Data Items

Scytec DataXchange utilizes direct connectivity to acquire data 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 **OKUMA OSP-P300, OSP-P300A and OSP-P500** 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 Information
Coolant
Current Block
Cycle Status
Dry Run
Emergency Status
Feed Hold Status
Feed Rate Override
Input/Output Data (Bit, Word, Long Word)
Mode Selection
Optional Block Skip
Optional Stop or Program Stop
Part Count
Part Number
Path Feed Rate
Program Comment
Program File Name
Main Program Number
Active Program Number
Rapid Override
Single Block Status
Spindle Load Percent
Spindle Override
Spindle Speed
Common Variable

Data Items Description

The current active tool number
Alarm information including code and description
Whether coolant is currently active
The currently active program block, with/without line number
Whether a machine is idle or 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 current bit value, or 32/64 bit word value of an address
The currently selected controller mode
Whether block skip mode is on or off
Determine if a program has stopped due to an M1 or M0 code
The current part count from the specified Okuma part counter
Search the active program header for a part number
The current path feed rate
Search for a specific comment in the active program
The file name of the active program
The current main program loaded
The current executing program
The current rapid override as a percentage
Whether single block mode is currently on or off
Spindle load as a percentage for the specified spindle
The active spindle override as a percentage
The current spindle speed as a value or a percentage
The current value held by a specific common variable

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**
- Cycle Status**
- Dry Run**
- E-Stop State**
- Executing Program Name**
- Feed Rate Override**
- Macro Variables**
- Main Program Name**
- Optional Stop or Program Stop**
- Parameters**
- Path Feedrates**
- Program Line**
- Rapid Override**
- Running State**
- Single Block**
- Spindle Load**
- Spindle Override**
- Spindle Speed**
- Sub Program Name**
- System Variables**
- Tool ID**
- Tool Offsets**
- Work Offsets**

On Demand Data

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