

Quality & Productivity Solutions

SPC

OEE

MONITORING

TRACEABILITY

WIP TRACKING

Factory



Systems

SPC Charts

Email Alarms

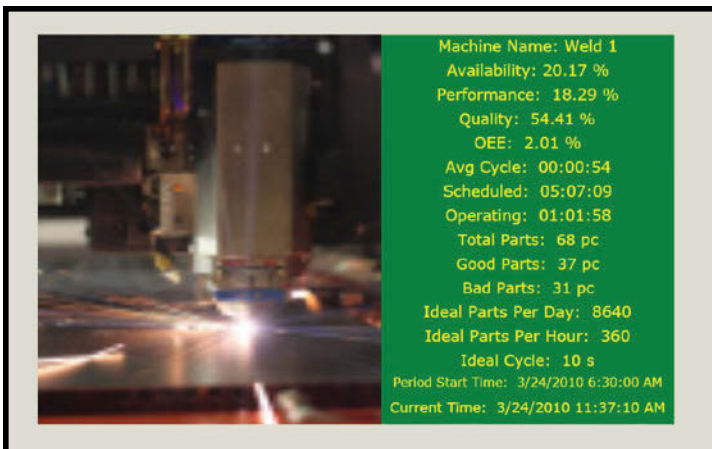
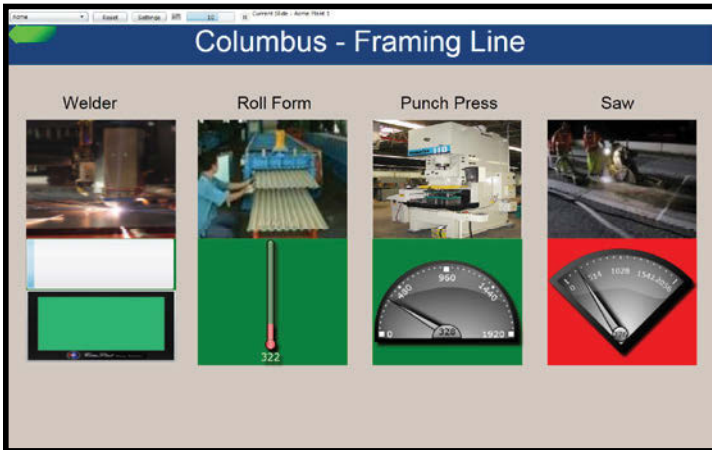
Data Collection

Gauge Interfacing

Production Reports

Monitoring

FACSMonitor™ gives you the opportunity to view processes, current production rates and machine efficiencies in **real time**. All data collected is maintained in MS SQL, Oracle or similar databases for long term storage and historical analysis.



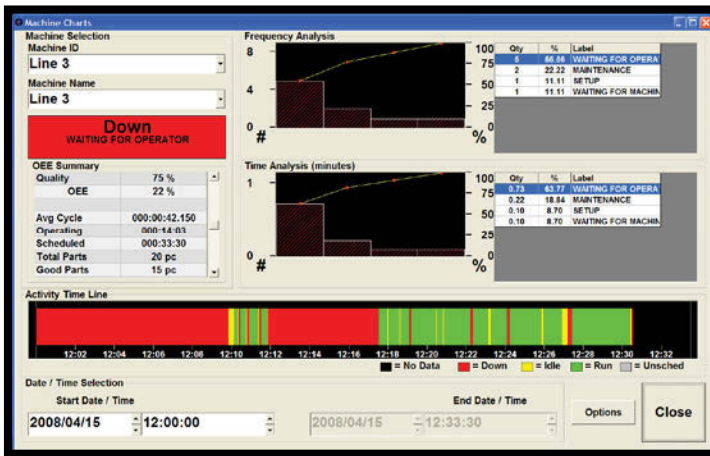
FACSMonitor™ Features

- Machine up / down, run / idle times graphically and numerically
- Real-time events / alarms notification via:
 - E-mail alarm notifications
 - Digital paging / TXT messaging
 - Windows messaging
- Drill down to specific:
 - Country, state, plant, department, cell, workstation, machine, process and feature
- Automatically drill down for selected events
- Change displays to zoom in on priority events / alarms
- Production parts counts to plan
 - Know where you stand before you get behind
 - Be aware that you will need to run overtime well in advance
- Graphs by hour, shift, day, week or month
- All displays are user configured
 - Use any standard JPG, GIF, TIFF or BMP files
 - Take pictures of your actual cells and machines
- Multiple plants, departments and cells
 - Alternate displays between plants in different states
- Scan each department periodically
 - Temporarily zoom in on a problem department
- Banner messages
 - Congratulate the team with the best safety record
 - Welcome the newest associate to the company
 - Announce a birthday, anniversary or meeting

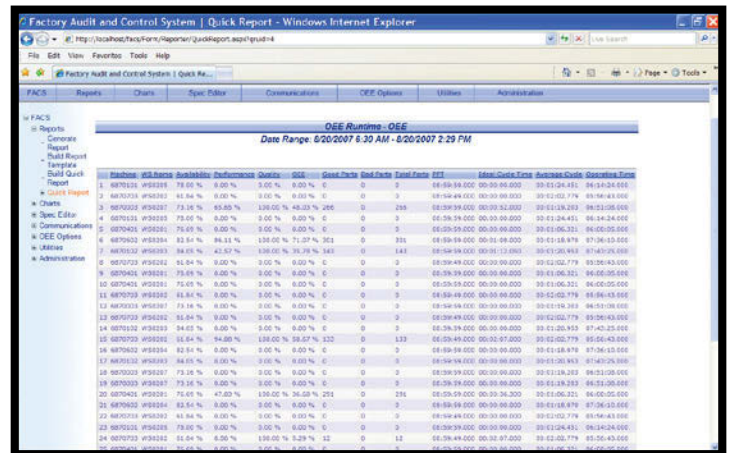
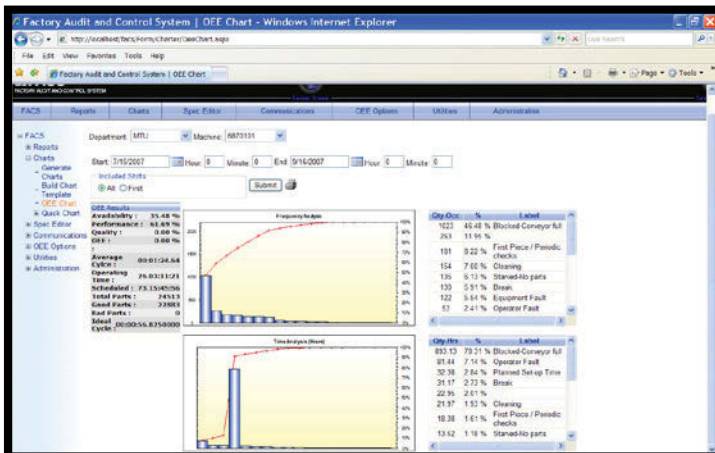
OEE

You can keep an eye on the Overall Equipment Effectiveness (OEE) of your plant or department as well as the details regarding availability, performance and quality of each machine. OEE Data is collected on the floor using the FSWorks Software. Machines can be connected using OPC, TCP/IP, RS-232 or by using discreet switches.

OEE Collection



When a machine goes down or becomes idle, the operator can be prompted to select the cause of the work stoppage.

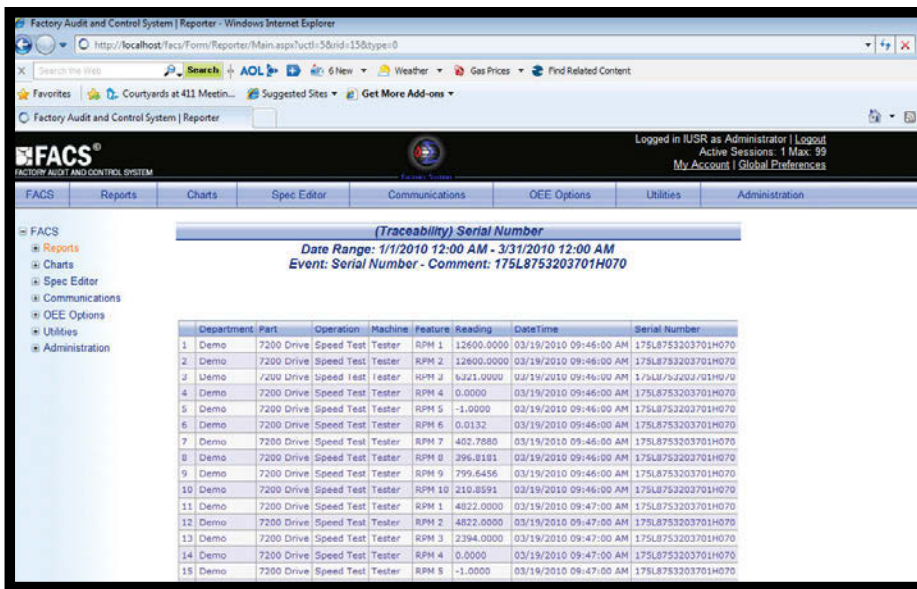


Graphical charts and detailed reports will assist in identifying bottlenecks in productivity. Both charts and reports can be exported to Excel™ to share with other quality applications and/or for further analysis.

TRACEABILITY & TRACKING

FACS™ reports can also trace a single part identified by a unique serial number through each operation of the production process. Scanning a serial number in FSWorks allows for real time tracking of part location in a predefined workflow.

TRACEABILITY



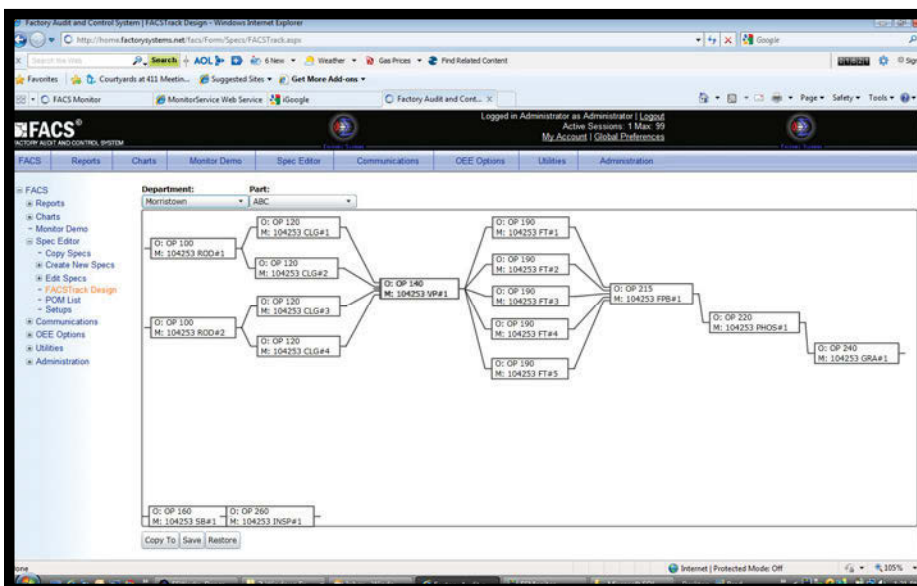
The screenshot shows the FACS Traceability report interface. The title is "(Traceability) Serial Number" with a date range of "1/1/2010 12:00 AM - 3/31/2010 12:00 AM" and an event comment "175L8753203701H070". The table below lists 18 operations for a "Demo" part.

Department	Part	Operation	Machine	Feature	Reading	Date/Time	Serial Number	
1	Demo	7200 Drive	Speed Test	Tester	RPM 1	12600.0000	03/19/2010 09:46:00 AM	175L8753203701H070
2	Demo	7200 Drive	Speed Test	Tester	RPM 2	12600.0000	03/19/2010 09:46:00 AM	175L8753203701H070
3	Demo	7200 Drive	Speed Test	Tester	RPM 3	6321.0000	03/19/2010 09:46:00 AM	175L8753203701H070
4	Demo	7200 Drive	Speed Test	Tester	RPM 4	0.0000	03/19/2010 09:46:00 AM	175L8753203701H070
5	Demo	7200 Drive	Speed Test	Tester	RPM 5	-1.0000	03/19/2010 09:46:00 AM	175L8753203701H070
6	Demo	7200 Drive	Speed Test	Tester	RPM 6	0.0132	03/19/2010 09:46:00 AM	175L8753203701H070
7	Demo	7200 Drive	Speed Test	Tester	RPM 7	402.7880	03/19/2010 09:46:00 AM	175L8753203701H070
8	Demo	7200 Drive	Speed Test	Tester	RPM 8	396.8181	03/19/2010 09:46:00 AM	175L8753203701H070
9	Demo	7200 Drive	Speed Test	Tester	RPM 9	799.6456	03/19/2010 09:46:00 AM	175L8753203701H070
10	Demo	7200 Drive	Speed Test	Tester	RPM 10	210.8591	03/19/2010 09:46:00 AM	175L8753203701H070
11	Demo	7200 Drive	Speed Test	Tester	RPM 1	4822.0000	03/19/2010 09:47:00 AM	175L8753203701H070
12	Demo	7200 Drive	Speed Test	Tester	RPM 2	4822.0000	03/19/2010 09:47:00 AM	175L8753203701H070
13	Demo	7200 Drive	Speed Test	Tester	RPM 3	2394.0000	03/19/2010 09:47:00 AM	175L8753203701H070
14	Demo	7200 Drive	Speed Test	Tester	RPM 4	0.0000	03/19/2010 09:47:00 AM	175L8753203701H070
15	Demo	7200 Drive	Speed Test	Tester	RPM 5	-1.0000	03/19/2010 09:47:00 AM	175L8753203701H070

Parts can be traced by lot, batch, serial number or even by operator. Trace reports can show at what time and date a particular part or batch was processed at each operation.

If a customer has a question about a particular serial number, a trace report can show the actual dimensions for that part at time of manufacture.

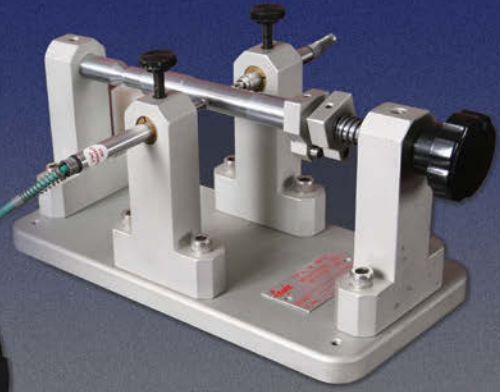
TRACKING



Once the operational workflow is defined, FACSTrack can track a part through the production process and alternately alert the operator if a part was skipped or failed a previous operation.



CimStat™ NEMA 4x
Touchscreen PC



SPC

FSWorks™ runs on the latest version of Windows. The FSWorks™ data entry screen can be easily configured by the user to show real time bar graphs for virtually any number of variable features as well as the actual readings in numeric format and a continually updating graph. The bar graphs change colors depending on whether the readings are within spec, out of spec or out of control. You can take a picture of your parts and include them on the data entry screens. Screens may also allow for entry of attribute data such as Go / No Go and specific defects.

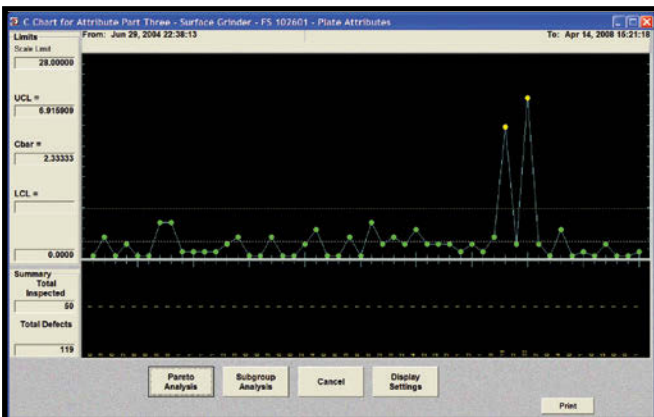
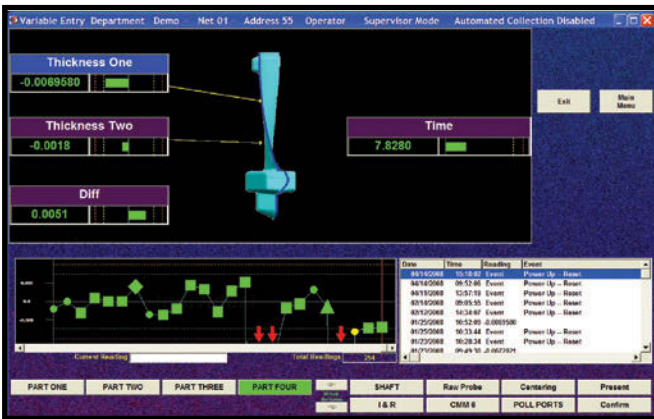
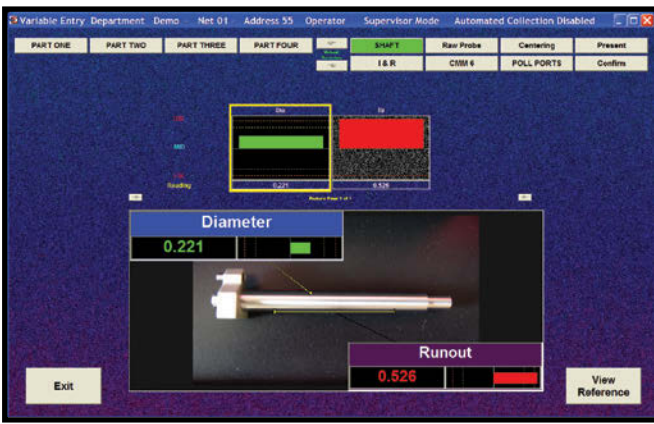


Standard
Touchscreen PC



FSWorks™ Features

- Change parts at the touch of a button
- Data entry methods:
 - Manual data entry via keyboard or touch screen keypad
 - Probes, fixtures and gauges
 - Serial Ports
 - Virtual Ports (files)
 - ODBC
 - OPC
- Monitor machine or work center efficiency:
 - Record machine up / down / run / idle
 - Part counters
- Switches
- Timers
- Discrete outputs
- User programs executed based on events
- GR&R
- Erroneous data detection
- User configured alarms
- Charts and Reports:
 - Xbar
 - Individuals
 - Histograms
 - Moving Average
 - Cumulative Sum
 - Collection History
 - Box and Whiskers
 - Process Overview
 - Production History
 - C-Chart
 - P-Chart
 - NP-Chart
 - U-Chart
 - Pareto
- Triggers for external enunciators
- User definable trend levels
- Operator notification



Quality & Productivity Solutions

www.factorysystems.net



Quotation Services

We can quote from blueprints and sample parts as well as on-site visits to determine the system to meet the customer's needs, both technical and budgetary.

Custom Programming

Factory Systems can program their equipment to interface with virtually any electronic device. Custom programming can also simplify the use of the system.

Custom Hardware

Factory Systems provides fixtures and control panels to further simplify operation. Common tasks are reduced to single push buttons.

Installation

Factory Systems staff can come to your site and fully install the equipment, complete with programming for your specifications.

Training

On-site training is available with the initial installation. More advanced training, as well as courses for new users are available, both on-site, and at our facility in South Carolina.

Technical Support

Our staff is available to support the customer's needs via a toll-free number. Complete remote access support via VPN or other secure networks.



Factory Systems, LLC

Columbia, South Carolina

www.factorysystems.net

sales@factorysystems.net

toll free 800-868-7481

