

GE Fanuc Gage Talker's Visual SPC family of data collection software is built from the factory floor to reflect how you work. This Wind was don't software incorporates extensive capabilities that provide you with the flexibility and control you need for data collection, analysis and reporting.

VisualSPC ShopFloor™ makes collection of both variable and attributes data easier. Operators enter data with a simple input grid. Easytoread graphics provide instant feedback about the process. And, with VisualSPC MSA™ you can evaluate variations in your measuring system.

VisualCal<sup>™</sup> helps with scheduling and managing calibrations on your gages, test equipment and measurement standards.

VisualSPC Importer<sup>™</sup> allows you to import flat ASCII files generated by CMMs and other measuring systems directly into our standard VisualSPC database.

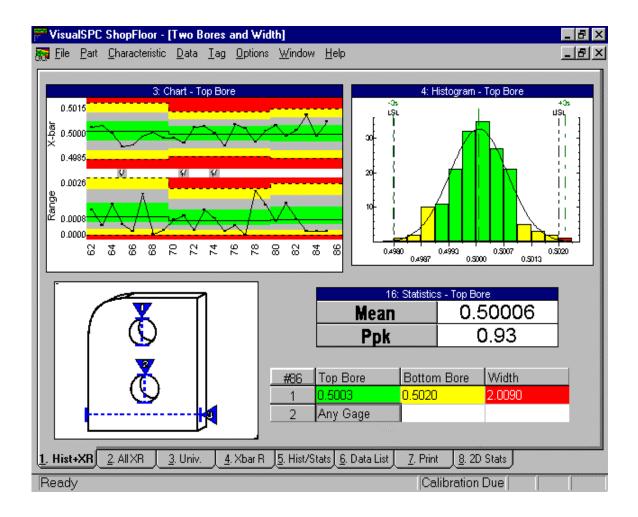
VisualSPC Monitor<sup>™</sup> lets you easily monitor what's happening on the production floor from any PC or the network. You can monitor all active processes and immediately spot improvement or trouble.

VisualSPC Analyst<sup>™</sup> offers simple, flexible historical reporting of the data collected by VisualSPC ShopFloor. Histograms, Control, Pareto and other charts give you detailed information about every pand process throughout your plant. The ability to customize reports lets you put the information in i most useful form.

VisualSPC Reports<sup>™</sup>, a collection of standard summary reports, gives you the big picture with easily interpreted information about trends across your entire SPC program.

VisualSPC Wizard<sup>™</sup> creates setups automatically: enter a few facts and you're done.

VisualSPC Designer<sup>™</sup> lets you quickly customize data collection screens and printed reports that look exactly the way you want them to. Together, CimWorks GageTalker's family of SPC software gives you the data collection, analysis and reporting features you need.



# **VisualSPC ShopFloor:**

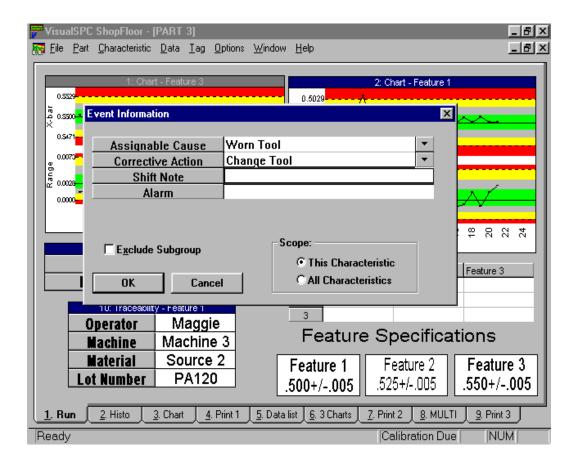
### Fast, easy data collection

After studying our customers' work processes and listening to their feedback, we designed VisualSPC ShopFloor with one thought foremost: exceptional ease of use. VisualSPC ShopFloor gives operators immediate process feedback. Colorcoded readings make critical information pop out: red indicates o yellow is a warning, and green is good.

Operators new to the Windows environment will be able to run VisualSPC ShopFloor instantly, withouse. Additional features are easy to pick up, with our online manual and contextsensitive help always available for a little extra assistance. And by using our entire VisualSPC family of products, you can truly paperless operator support, including systemembedded part drawings and text files.

# Input Grid for easy data entry

Our Input Grid, the spreadsheet approach to capturing information, makes it easy and natural to end Operators use the grid exactly like they do when collecting data manually. If a mistake is made, they back to the reading and make a change; all data collection and editing tasks are performed in a single VisualSPC ShopFloor's tabbed, notebookstyle pages give operators easy access to multiple views of the and to additional indepth information that clarifies the data or the operator's work. This information inspection method sheets, part drawings, flow diagrams, routing sheets, acceptable workmanship state troubleshooting guides.



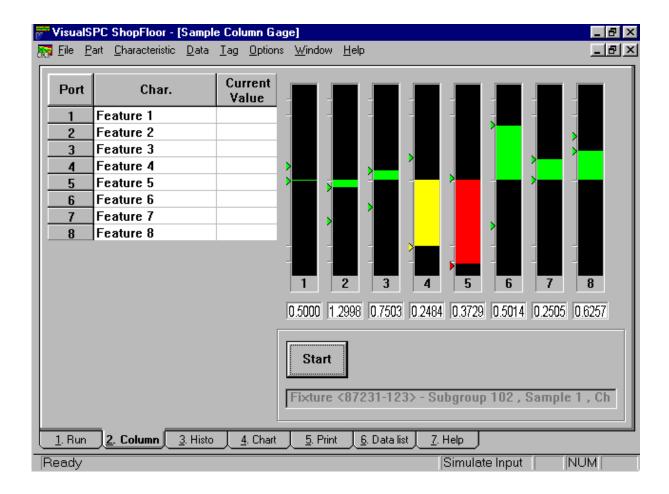
A wealth of information is just one tab away

### Multiple ways to tag data

In VisualSPC ShopFloor, operators can tag data with traceability information such as lot number, making, tool, shift, or operator. They can also tag data with events that occur during manufacturing. The include process events such as assignable causes, corrective actions and adjustments. VisualSPC Shopfers an unlimited number of traceability categories, and up to 32 characters in each field for total flat.

#### Easy, automatic gage input

When gages are connected using CimWorks GageTalker's FlashCables™ and GagePorts, VisualSPC S provides automatic gage recognition. The gage prompt originates from a userprogrammed memory c gage cable. The data collection screen can specify the gage to use for each characteristic. The gage ca date can also be stored in the gage cable, and VisualSPC ShopFloor warns you when it's time for a gar recalibrated.



### Live column display replaces column gages

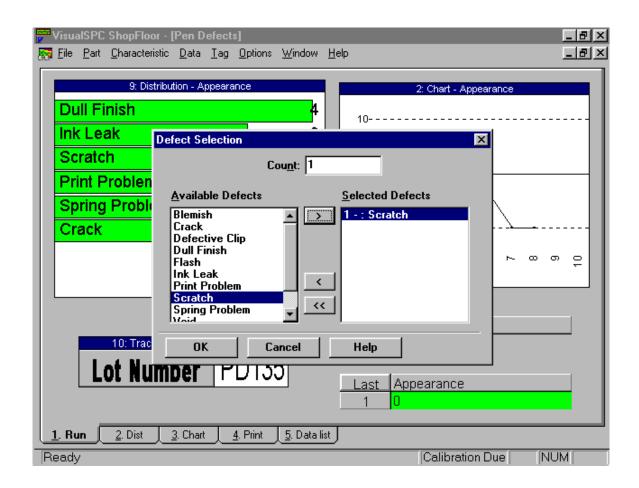
Now you can view multiple columns at once, instantly spotting deviations, without column gages. Tracolor coding instantly shows you the status of each reading: green signals indicate that the reading is limits, yellow is a warning and red indicates that the reading exceeds the specified limits.

Live column display not only saves the expense of columns and the valuable work space they requestion enhances the ataglance power of columns with traceability information and key process event tags.

The live column feature, when used in conjunction with the LVDT GagePort expansion unit, can it to 32 probes and display up to 32 columns simultaneously on a single screen. A simple mastering rout you to quickly generate, store, and recall master readings for each fixture.

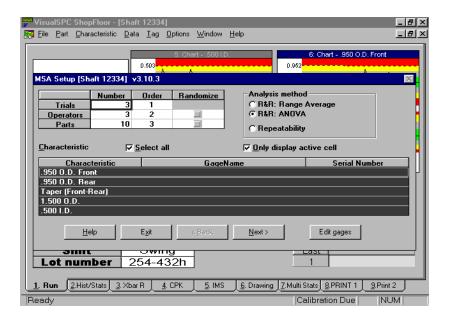
#### **Builtin** alarms

All standard tests for outofcontrol conditions (Western Electric Tests) are incorporated into VisualSI ShopFloor. When an alarm is triggered, the operator can be required to enter a process event. You can create your own custom test conditions. You could, for example, set an alarm to trigger if a preset run average is exceeded by more than 10%.



### VisualSPC Attributes<sup>TM</sup>

With our Attributes option for VisualSPC ShopFloor you can track multiple categories of defects (vis etc.), mixing variable and attributes data in the same setup. You can set up multiple levels of categor versus Class 2 Scratches, for example, to classify the severity of defects). You can also weight defects ShopFloor will display defect data as Pareto charts or control charts (p, c, np, and uCharts), or provide statistics.

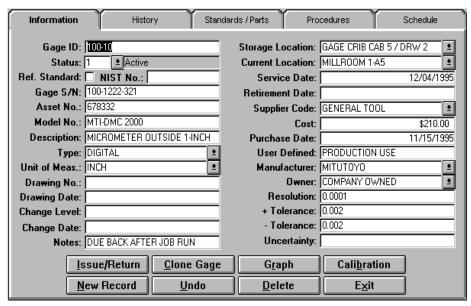


# **Visual SPC Measurement System Analysis**

This VisualSPC option lets you evaluate variations in your measuring system before or during data collect AIAGeompliant and satisfies ISO9000 requirements.

The three studies available include simple Repeatability; Range and Average, which analyzes both Rep and Reproducibility (R&R); and Analysis of Variance (ANOVA).

With a Wizard to prompt you for simple parameters, setup is easy. And data collection is fast and errors direct input of readings from electronic gages, randomization of parts, and automatic sequencing. The structure prevent omissions by prompting for trials, operators, parts, and characteristics. All statistics are cautomatically, saving you hours.



# VisualCalschedule and manage gage calibrations

STDs.

VisualCal allows you to track both calibration and Gage R&R studies, gage usage, gage requirements for p and even calibration procedures. The software offers a complete history of calibration due dates and it carrecords for tracking gage locations. VisualCal offers a wide range of reports to track calibration schedules usage, gage R&R summary, and more. VisualCal Administrator contains a database of complete stephystericalibration procedures covering everything from gage blocks to micrometers and calipers. Also available complete calibration label kit giving you the ability to print calibration labels. VisualCal increases quality through accurate and reliable gaging, reduces costs by avoiding mistakes and measurement errors and he company to comply with domestic and international quality standards such as ISO9000, ANSI Q90, AIAG, M

L SHAFT DEMOSR			
[Station] {Part} Characteristic	Cpk Box-Whisker	Cok	Mean
Machine Cell 294] {PEN} Appearance	орк вол и лиско	0.52	2.89
Machine Cell 294] {DOWNTIME} Downtime		0.68	56.94
Machine Cell 294] {DEMO SR} Feature 4 SG1		0.69	0.00
Machine Cell 294] {DEMO SR} Feature 2 SG3		0.80	0.00
Machine Cell 294] {Shaft 12334} .950 O.D. Rear		0.83	0.95
Machine Cell 294] {Two Bores and Width} Top Bo		0.88	0.50
Machine Cell 294] {PEN} O.D.		0.91	0.35
Machine Cell 294] {Shaft 12334} .500 l.D.		0.92	0.50
Machine Cell 294] {PEN} Length		0.92	5.25
Machine Cell 294] {DEMO SR} Feature 1 SG5		0.97	0.00
Machine Cell 294] {Two Bores and Width} Width		0.99	2.00
Machine Cell 294] {Shaft 12334} 1.500 O.D.		1.02	1.50
Machine Cell 294] {Shaft 12334} .950 O.D. Front		1.04	0.95
Machine Cell 294] {Two Bores and Width} Bottom		1.05	0.50
Machine Cell 294] {DEMO SR} Feature 3 SG1		1.14	0.00
Machine Cell 294] {Gage Control} Bore Gage .750		1.17	0.00
Machine Cell 294] {Monitoring Gage Stability} OD		1.28	0.50
Machine Cell 294] {Shaft 12334} Taper (Front-Re		1.39	0.00
Machine Cell 294] {PART 3} Feature 2		1.43	0.53
M I. CHOM (DADED) C . 2		4 00	0.55

#### **VisualSPC Monitor:**

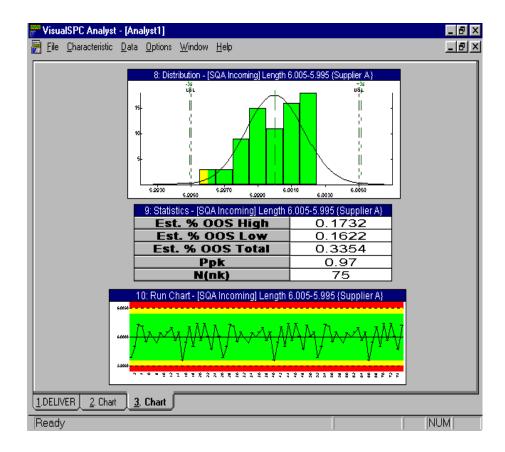
Get an overall picture of what is is happening on the production floor from any PC on the network

VisualSPC Monitor puts all the right information into your hands just when you need it: right now online process reporting tool for your data collection network monitors all active processes. It lets y immediately spot improvement or trouble by providing a summary picture of what is happening on t production floor.

Customize your view of the plant floor by selecting the summary statistics you want to view and he want information grouped. You may, for example, want to prioritize the summary statistics by station which would group all parts and characteristics by their manufacturing area.

Color coded statistics, i.e. green is good, yellow is caution, red is warning, serve as a visual aid to quickly identify problem areas.

VisualSPC Monitor will search a specified database based on a range you select from a predeterm or a range you custom define. Users with multiple databases can easily specify which database to us active database. VisualSPC Monitor scans the specified database and updates the screen.



# **VisualSPC Analyst:**

Comprehensive, flexible data analysis

Histograms show the frequency distribution relative to the upper and lower tolerance and sigma (±3 both) limits. Control charts help you monitor your process using XbarR and XbarS statistics. Other cinclude Individual X and Moving R, Pareto, p, np, c and uCharts.

The Query feature allows you to precisely select the data you want to analyze. You can select data time/date range (relative dates such as last 30 days, for example) or select particular characteristics most critical characteristics in an area, for example). You can also save queries and run repetitive reuse templates you've created in VisualSPC Designer for data analysis.

One of the most powerful features of VisualSPC Analyst is Group By, which allows you to look at a grouped by a traceability category across a number of data fields. You could, for example, group by and generate separate reports of the data collected by three different operators for three different characteristics. The resulting nine reports will give you specific detail on operator 1, characteristic characteristic 1; operator 3, characteristic 1, etc.

VisualSPC Analyst makes data analysis simpler by using the same user interface and concepts as VisualSPC ShopFloor, so no extra training is necessary. And it's flexible. With our templates, you can the design of the report, to give you the customized reporting you need. This open approach allows y design a different template for each management group so Production Managers, for example, can addifferent information than Quality Control.

# **VisualSPC Reports:**

Customized reports puts data in your favorite format

VisualSPC Reports provides a full set of the standard reports you need for weekly tracking of product performance. Process Events by Trace Category, Graphical Ppk, Percent in Spec by part and characteristic, are just a few of these standard reports. You can also CimWorks GageTalker or a thirdparty developer to write reports.

VisualSPC Reports shares the same powerful Query feature of VisualSPC Analyst to allow you to the data the way you want, giving you both the "big picture" view and the detailed analysis.

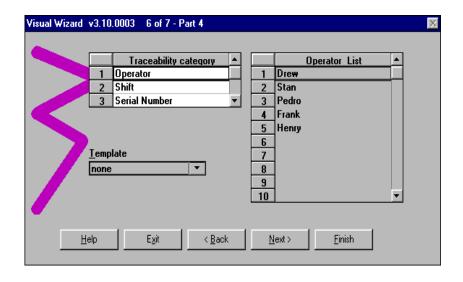
# Stateoftheart SPC software technology

Now you can use SQL (Structured Query Language) to access your SPC data. VisualSPC was develop C++, Visual Basic, and Microsoft's Data Access Objects (DAO) for fast access to our native Microsoft Adatabase. DAO, in turn, uses ODBC to store your SPC data in other databases such as SQL Server and VisualSPC also takes

advantage of OLE technology, so you can easily embed graphics and text information into your data program.

OLE technology can play an important role in helping you meet ISO9000 requirements. With OLE setups can access master documents every time they are run. Any changes to a master document are automatically reflected at run time. This guarantees that operators always use the most current vers critical document.

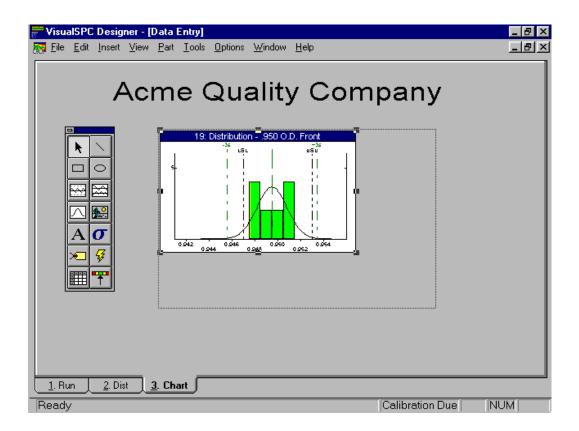
OLE Automation allows CimWorks GageTalker or other Visual Basic developers to create custom Wizards and realtime analysis procedures for your special applications without compromising the in the main program.



#### **VisualSPC Wizard:**

The automatic setup generator.

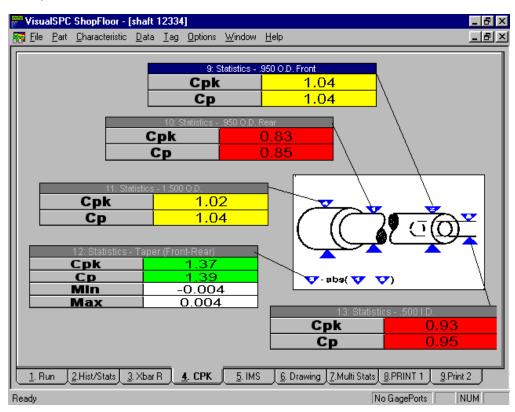
Creating part setups has always been a data collection challenge. Now, system managers can simply few facts and the VisualSPC Wizard produces the setup automatically. Operators can quickly genera setups, as they need them, using previously saved templates. Virtually no training is required.



# **VisualSPC Designer:**

The ultimate "haveityourway" design software

Customizing the look of screens and reports has long been a dream of data collection managers. Standard matter how flexible, have never before been able to meet each company's unique requirements. VisualSPC offers complete customization; and it's easy to do. (Of course the online help is there to assist you if you ne information.)



# Design your own screens

Use VisualSPC Designer's onscreen tool box to design your own screens using the standard chart types proceed the simplest "traffic light" display or multiwindow displays combining gage readings, charts, proceed information and graphics. Parts drawings can even include "callouts" for features to be measured or measured or measured or measured even include "callouts" for features to be measured or measured or measured even include "callouts" for features to be measured or measured even include "callouts" for features to be measured or measured even include "callouts" for features to be measured or measured even include "callouts" for features to be measured or measured even include "callouts" for features to be measured or measured even include "callouts" for features to be measured or measured even include "callouts" for features to be measured or measured even include "callouts" for features to be measured or measured even include "callouts" for features to be measured to be even include "callouts" for features to be even include "callouts" f

Use our standard Wizard data collection screen to get you started. Vary the elements, change their post the type sizes. You can also create your own screens from the ground up.

All charts and other objects in VisualSPC Designer are scalable. For example, you could choose to display coloreoded readings unless an alarm condition is violated. Then a control chart could pop up with prompt process event. This total control of visual elements lets you communicate more clearly with operators, and better support at each step.

## Use OLE to integrate your own graphics and text help files.

Using the builtin power of OLE technology and tabbed, notebookstyle pages, you can make your own uniquinstantly accessible to the operator. These files could include photos of the setup, inspection method sheet drawings, flow diagrams, routing sheets, acceptable workmanship standards or troubleshooting guides. In processing documents, scanned images, CAD drawings, input from digital cameras or even video clips into collection setup. You now have the power to build truly paperless online documentation and operator assitit's as easy as cutting and pasting in Windows.

It's also easy to create part templates comprising all the information about the data collection process. inspection sequences, subgroup size, traceability, scrap sorting, process events and other data.

### Select the statistics you need

Display any of over 50 different standard statistical calculations such as Ppk, Cpm, XBar, and Sigma. Cust statistics by presenting only those that are important to your operation.

#### Design your own custom reports

VisualSPC Designer provides predesigned reports for your use. You can design your own formats, customi for each customer, or each department, building reports that exactly suit their needs. By selecting the app statistics, charts and adding logos and graphics, information can be presented in the most effective way fo workgroup.

### VisualSPC System Requirements

- Windows: XP Serv Pack 3, Win 7 Pro (XP compatibility mode)
- Pentium class processor or higher
- SVGA Monitor
- 1024 768 or higher resolution
- Keyboard and pointing device
- CDROM drive

VisualSPC Pricing for stand alone software modules, per seat:

VisualSPC ShopFloor \$1695 VisualSPC Monitor \$1242

VisualSPC Admin \$3235

VisualSPC Admin Includes 6 Modules listed below:

VSPC Analyst-Reports-Wizard-Designer-Importer