INFO QUOTATION

VSAS Offer #215-01

Engineering Computer Systems
1149 N. Geyer Rd. Kirkwood, MO 63122 (314) 966-8313  edco@gagetalker.net

Visual SPC Administrative Suite ver 4.61
Ten Module Suite Complete
Unlimited Seat Licenses

Project: GageTalker Visual SPC Version 4.61
Reference: Special Offer
Date: October 22, 2015
Prepared for: VSPC Legacy end users

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<tr>
<td>1</td>
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<td>Visual SPC Analyst</td>
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<td>Visual SPC Reports</td>
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<td>Visual SPC Attributes</td>
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<td>Visual SPC Designer</td>
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<td>6</td>
<td>Visual SPC Wizard</td>
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<td>7</td>
<td>Visual SPC Importer</td>
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<td>8</td>
<td>Visual SPC Monitor</td>
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<td>9</td>
<td>Visual SPC MSA</td>
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<tr>
<td>10</td>
<td>Visual SPC Data Base Files</td>
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Delivery: In stock
Terms: MasterCard, VISA, AMEX

Respectfully,

Ed Ciarniello
GageTalker Distributor
This Quote is for one Administrator release of the Visual SPC 4.61 Suite.

The software is packaged on CDROM with VSPC Complete 10-digit key. The CDROM maybe duplicated for backup and install use. All software applications are enabled by assigned Key Code. The modules contained on the CDROM may be installed on unlimited computers at a single site. The End User is bound by terms of GEIP (General Electric Intelligent Platforms) license agreement upon installation.

Installation screens are depicted below.
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Sample run chart with subgroup information
Please see next fourteen pages for extensive product descriptions.
**GE Fanuc** GageTalker’s **VisualSPC** family of data collection software is built from the factory floor up to reflect how you work. This Windows™-based 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. Easy-to-read graphics provide instant feedback about the process. And, with **VisualSPC MSA™** you can evaluate variations in your measuring system.

**VisualCal™** helps with scheduling and managing calibrations on your gages, test equipment and measurement standards.

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

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

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

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

**VisualSPC Wizard™** creates setups automatically: enter a few facts and you’re done.

**VisualSPC Designer™** 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 all 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 clear and immediate process feedback. Color-coded readings make critical information pop out: red indicates out-of-spec, yellow is a warning, and green is good.

Operators new to the Windows environment will be able to run VisualSPC ShopFloor instantly, without a mouse. Additional features are easy to pick up, with our on-line manual and context-sensitive help always available for a little extra assistance. And by using our entire VisualSPC family of products, you can provide truly paperless operator support, including system-embedded 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 enter data. Operators use the grid exactly like they do when collecting data manually. If a mistake is made, they can go back to the reading and make a change; all data collection and editing tasks are performed in a single mode. VisualSPC ShopFloor’s tabbed, notebook-style pages give operators easy access to multiple views of the data and to additional in-depth information that clarifies the data or the operator’s work. This information might be inspection method sheets, part drawings, flow diagrams, routing sheets, acceptable workmanship standards or 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, machine or line, tool, shift, or operator. They can also tag data with events that occur during manufacturing. These may include process events such as assignable causes, corrective actions and adjustments. VisualSPC ShopFloor offers an unlimited number of traceability categories, and up to 32 characters in each field for total flexibility.

Easy, automatic gage input

When gages are connected using CimWorks GageTalker’s FlashCables™ and GagePorts, VisualSPC ShopFloor provides automatic gage recognition. The gage prompt originates from a user-programmed memory chip in the gage cable. The data collection screen can specify the gage to use for each characteristic. The gage calibration date can also be stored in the gage cable, and VisualSPC ShopFloor warns you when it’s time for a gage to be recalibrated.
Live column display replaces column gages

Now you can view multiple columns at once, instantly spotting deviations, without column gages. Traffic light color coding instantly shows you the status of each reading: green signals indicate that the reading is within 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 require, it also enhances the at-a-glance 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 monitor up to 32 probes and display up to 32 columns simultaneously on a single screen. A simple mastering routine allows you to quickly generate, store, and recall master readings for each fixture.

Built-in alarms

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

With our Attributes option for VisualSPC ShopFloor you can track multiple categories of defects (visual, functional, etc.), mixing variable and attributes data in the same set-up. You can set up multiple levels of categories (Class I versus Class 2 Scratches, for example, to classify the severity of defects). You can also weight defects. VisualSPC ShopFloor will display defect data as Pareto charts or control charts (p, c, np, and u-Charts), or provide summary statistics.
Visual SPC Measurement System Analysis

This VisualSPC option lets you evaluate variations in your measuring system before or during data collection. It is AIAG-compliant and satisfies ISO-9000 requirements.

The three studies available include simple Repeatability; Range and Average, which analyzes both Repeatability 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 error-free with direct input of readings from electronic gages, randomization of parts, and automatic sequencing. The structured studies prevent omissions by prompting for trials, operators, parts, and characteristics. All statistics are calculated automatically, saving you hours.

VisualCal™ Schedule and manage gage calibrations

VisualCal allows you to track both calibration and Gage R&R studies, gage usage, gage requirements for parts and even calibration procedures. The software offers a complete history of calibration due dates and it can issue records for tracking gage locations. VisualCal offers a wide range of reports to track calibration schedules, gage usage, gage R&R summary, and more. VisualCal Administrator contains a database of complete step-by-step calibration procedures covering everything from gage blocks to micrometers and calipers. Also available is a 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 helps your company to comply with domestic and international quality standards such as ISO-9000, ANSI Q90, AIAG, MIL-STDs.
**VisualSPC Monitor:**

Get an overall picture of what 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. This on-line process reporting tool for your data collection network monitors all active processes. It lets you immediately spot improvement or trouble by providing a summary picture of what is happening on the production floor.

Customize your view of the plant floor by selecting the summary statistics you want to view and how you want information grouped. You may, for example, want to prioritize the summary statistics by station name 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 help you quickly identify problem areas.

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

<table>
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<tr>
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<th>Characteristic</th>
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**VisualSPC Analyst:**

**Comprehensive, flexible data analysis**

Histograms show the frequency distribution relative to the upper and lower tolerance and sigma (±3, ±6 or both) limits. Control charts help you monitor your process using Xbar-R and Xbar-S statistics. Other charts include Individual X and Moving R, Pareto, p, np, c and u-Charts.

The Query feature allows you to precisely select the data you want to analyze. You can select data by time/date range (relative dates such as last 30 days, for example) or select particular characteristics (the five most critical characteristics in an area, for example). You can also save queries and run repetitive reports, or use 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 data grouped by a traceability category across a number of data fields. You could, for example, group by operator 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 1; operator 2, 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 control the design of the report, to give you the customized reporting you need. This open approach allows you to design a different template for each management group so Production Managers, for example, can access different 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 production performance. Process Events by Trace Category, Graphical Ppk, Percent in Spec by part and characteristic, and Process Events by part and characteristic, are just a few of these standard reports. You can also contract CimWorks GageTalker or a third-party developer to write reports.

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

**State-of-the-art SPC software technology**

Now you can use SQL (Structured Query Language) to access your SPC data. VisualSPC was developed with C++, Visual Basic, and Microsoft’s Data Access Objects (DAO) for fast access to our native Microsoft Access database. DAO, in turn, uses ODBC to store your SPC data in other databases such as SQL Server and Oracle. VisualSPC also takes advantage of OLE technology, so you can easily embed graphics and text information into your data collection program.

OLE technology can play an important role in helping you meet ISO-9000 requirements. With OLE linking, 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 version of any critical document.

OLE Automation allows CimWorks GageTalker or other Visual Basic developers to create custom setup Wizards and real-time analysis procedures for your special applications without compromising the integrity of the main program.

**VisualSPC Wizard:**

**The automatic setup generator.**

Creating part setups has always been a data collection challenge. Now, system managers can simply enter a few facts and the VisualSPC Wizard produces the setup automatically. Operators can quickly generate new setups, as they need them, using previously saved templates. Virtually no training is required.
VisualSPC Designer:  
The ultimate "have-it-your-way" design software  
Customizing the look of screens and reports has long been a dream of data collection managers. Standard programs, no matter how flexible, have never before been able to meet each company's unique requirements. VisualSPC Designer offers complete customization; and it's easy to do. (Of course the on-line help is there to assist you if you need more information.)
Design your own screens
Use VisualSPC Designer’s on-screen tool box to design your own screens using the standard chart types provided. Create the simplest “traffic light” display or multi-window displays combining gage readings, charts, process information and graphics. Parts drawings can even include “call-outs” for features to be measured or measurement sequences.

Use our standard Wizard data collection screen to get you started. Vary the elements, change their position, change 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 only large color-coded readings unless an alarm condition is violated. Then a control chart could pop up with prompts to enter a process event. This total control of visual elements lets you communicate more clearly with operators, and gives them better support at each step.

Use OLE to integrate your own graphics and text help files.
Using the built-in power of OLE technology and tabbed, notebook-style pages, you can make your own unique files instantly accessible to the operator. These files could include photos of the setup, inspection method sheets, part drawings, flow diagrams, routing sheets, acceptable workmanship standards or troubleshooting guides. Integrate word processing documents, scanned images, CAD drawings, input from digital cameras or even video clips into your data collection setup. You now have the power to build truly paperless on-line documentation and operator assistance. And it’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. Include gages, 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, X-Bar, and Sigma. Customize your statistics by presenting only those that are important to your operation.

Design your own custom reports
VisualSPC Designer provides pre-designed reports for your use. You can design your own formats, customizing reports for each customer, or each department, building reports that exactly suit their needs. By selecting the appropriate statistics, charts and adding logos and graphics, information can be presented in the most effective way for each workgroup.

VisualSPC System Requirements
• Windows: 98, NT 4.x, 2000, XP
• Pentium class processor or higher
• 64 MB RAM
• SVGA Monitor
• 800 x 600 or higher resolution
• Keyboard and pointing device
• Access to CD-ROM drive

VisualSPC Pricing
VisualSPC ShopFloor $995
VisualSPC Attributes $295
VisualSPC MSA $195
VisualCal $995
VisualSPC Importer $295
VisualSPC Monitor $995
VisualSPC Analyst $995
VisualSPC Reports $495
VisualSPC Wizard $195
VisualSPC Designer $995
This knowledge has shaped every feature of VisualSPC. Developed originally by GageTalker, the VisualSPC software suite is a complete Windows®-based approach to collecting, monitoring, and analyzing plant floor quality data. In addition to being extremely easy to use, VisualSPC is outstanding for its flexibility. This open software suite is easily customized without any programming, giving you the ability to match your data gathering system to your plant-floor processes. With VisualSPC, you control the process of translating enterprise-wide data into decision critical information.

Gather Data from Virtually Any Available Source. In addition to accommodating keyboard entry, VisualSPC capitalizes on GE Fanuc’s leadership in Open Connectivity—you can connect to hundreds of gaging devices using the GagePort™ family of interface modules, import files directly from CMMs and other intelligent devices, harvest data from portable data collectors, and synchronize easily with our Zipper™ hand-held data collector. Equally important, VisualSPC offers OPC connectivity to intelligent controllers, software applications, specialty gauging devices and a wide array of industrial communication networks and I/O systems.
Create the Operator Interface That Works Best for You. With VisualSPC, you can easily arrange your screens the way that makes it easiest for operators to collect and evaluate your data, using OLE to integrate your own graphics and text, incorporating selected statistical calculations and color coding information. By organizing screens that meet your needs, you can dramatically reduce operator training and implementation time.

Maximize Your Existing Investment. VisualSPC is an exceptionally open product. It integrates smoothly with all major hardware and software devices found on the plant floor and integrates seamlessly into your existing networking architecture. As a result, you can incorporate VisualSPC without adjusting or compromising manufacturing processes perfected over the years.

Meet Critical Regulations and Customer Requirements. VisualSPC is a crucial tool that can drive up product quality, while reducing scrap, rework, and repairs. At the same time, it can provide the documentation you need to meet stringent government regulations or customer requirements.

Control the Way You Collect, Organize, and Analyze Your Data.
The VisualSPC family of data collection software includes:
• VisualSPC ShopFloor™
• VisualSPC Measurement System Analysis™
• VisualSPC Attributes™
• VisualSPC Importer™

Collect Data Easily
At GE Fanuc, our insight into the actual challenges our customers face in collecting data is reflected in
every aspect of VisualSPC ShopFloor. This element of our VisualSPC suite is designed not merely to
accommodate the gathering of data, but to enhance it.

With VisualSPC you can:
• Select the data you want to collect
  and organize custom screens to
  reflect operator skills and plant floor
  characteristics with VisualSPC Designer.
• Accommodate a wide variety of gages
  and measuring devices through our
  industry-standard GagePort technology.
• Use the Zipper hand-held data
  collector to collect data and automati-
  cally transfer the information into our
  standard database.
• Import files generated by CMMs and
  other measuring systems directly into
  a standard database using VisualSPC
  Importer.
• Access information residing on other
devices and applications, via our OPC
connectivity.
• Evaluate variations in your measuring
  system using VisualSPC MSA.
• Track multiple categories of attribute
data with VisualSPC Attributes.
Monitor Information in Real-Time
Get an overall picture of active production floor processes from any PC on your network. VisualSPC Monitor will search multiple databases for the data you specify and present it in the form that is most useful to you. Process changes and problems are pinpointed instantly, allowing operators to adjust processes or enlist assistance.

With VisualSPC you can:
• View and control your processes in real-time from anywhere on your network or on the Internet using Internet Explorer.
• Generate e-mails on the basis of alarms and other events.
• Mine your process data using drill-down analysis to determine the root cause of process variation.

Apply Powerful Analytic Tools
VisualSPC Analyst gives you the ability to apply a wide range of sophisticated statistical analysis strategies to your data. In fact, many other business tools may have links to this reliable program. You can also export your data into such industry-standard programs as Excel, Access, or MiniTab.

With VisualSPC you can:
• Enhance enterprise connectivity through seamless integration with SQL Server™ or Oracle® thanks to VisualSPC’s support for ODBC standards.
• Generate standardized reports using VisualSPC Reports or easily create customized reports for your needs.