



Prize Picks

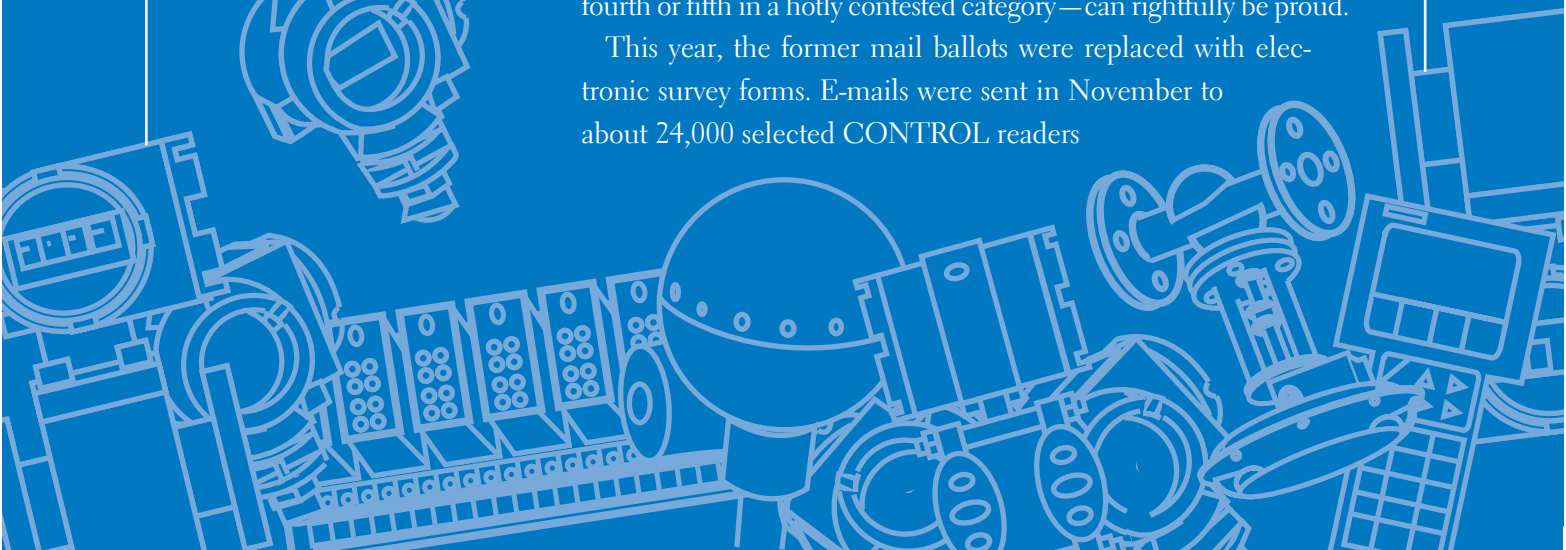
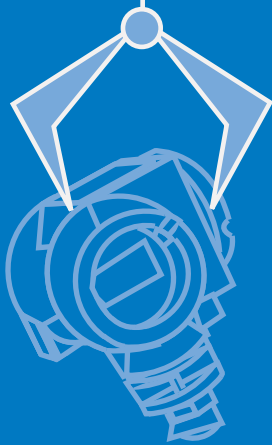
By Dave Fusaro, Executive Editor

Times are difficult enough without unreliable suppliers pushing substandard products on harried process control engineers...who are doing the work of three people, instead of just two.

Especially in trying times, it's good to find vendors who can provide solutions (excuse the buzzword) instead of problems that need to be rendered useful and integrated into the plant control scheme. That's exactly what the next nine pages show: the cream of the process control, automation, and instrumentation crop.

As we have every year since the survey's inception, CONTROL asked its readers to name the vendors of the best technologies in 65 categories and rate their customer service. These are the people whose opinions really count: They have the first-hand experience with how these instruments function, and they carefully spend their companies' increasingly scarce funds for instrumentation and controls. Any supplier that finds its name on the following pages—even fourth or fifth in a hotly contested category—can rightfully be proud.

This year, the former mail ballots were replaced with electronic survey forms. E-mails were sent in November to about 24,000 selected CONTROL readers



Process Control Professionals Tell Who Offers the Best Technologies and Service in Our 11th Annual Readers' Choice Awards

VENDORS OFFERING EXCEPTIONAL SERVICE (5 = EXCELLENT, 1 = POOR)

4.8

Munger/MimicSoftware, Simulation

4.6

Emerson Process Management . . .Software, Human-Machine Interface
Emerson Process ManagementSoftware, SCADA

4.5

Emerson Process AutomationControl System, Safety/
Emergency Shutdown
Emerson Process ManagementSoftware, Neural Network
Rockwell AutomationSoftware, SCADA

4.4

Emerson Process ManagementControl System, Hybrid
Emerson Process ManagementInput/Output System
Emerson Process ManagementSoftware, Batch
Control/Management
Emerson Process ManagementSoftware, Expert System
Emerson Process ManagementSoftware, Loop Tuning
Emerson Process ManagementSoftware, Process Control
Emerson/Micro Motion . . .Process Analyzer, Density/Concentration
Emerson/RosemountResistance Temperature Detector
Emerson/RosemountThermocouple
Endress + HauserLevel Switch, Point
Rockwell AutomationIndustrial Computer
Rockwell AutomationPanel Display
Rockwell AutomationSoftware, Batch Control/Management
Rockwell AutomationSoftware, Human-Machine Interface
Rockwell AutomationSoftware, Process Control
WeidmullerTerminal Block
YokogawaProcess Analyzer, pH/ORP/Conductivity

4.3

Emerson Process ManagementControl System, Process
Emerson/Fisher ControlsControl Valve
Emerson/RosemountPressure Transmitter
Emerson/Rosemount AnalyticalProcess Analyzer, Stack
Gas/Emissions
Emerson/Saab-RosemountLevel Gauge, Inventory Grade
Honeywell Industry SolutionsSoftware, Loop Tuning
Phoenix ContactSignal Conditioner
Rockwell AutomationInput/Output System
Rockwell AutomationOperator Interface Terminal
Rockwell AutomationTerminal Block

4.2

DellIndustrial Computer
DellOperator Interface Terminal
Emerson Process ManagementSoftware, Asset Management
Emerson Process Management . . .Software, Calibration Management
Emerson Process Management . . .Software, Design/Documentation
Emerson Process ManagementSoftware, Simulation
Emerson/Fisher ControlsLevel Gauge, Float/Displacer

Emerson/Micro MotionFlowmeter, Coriolis Mass
Emerson/RosemountFlowmeter, Magnetic
Emerson/RosemountFlowmeter, Vortex
Emerson/Rosemount Analytical . . .Process Analyzer, Chromatograph
Invensys/WonderwareSoftware, Batch Control/Management
PyromationResistance Temperature Detector
Rockwell AutomationControl System, Hybrid
Rockwell AutomationControl System, Process
Rockwell AutomationElectric Motor Drive
YokogawaFlowmeter, Magnetic

4.1

ABBFlowmeter, Magnetic
Ametek DrexelbrookLevel Gauge, Electrical Property-Based
Ametek DrexelbrookLevel Gauge, Ultrasonic
Ametek DrexelbrookLevel Switch, Point
Bently NevadaVibration Instrumentation
Emerson Process ManagementController, Process Loop
Emerson/Rosemount AnalyticalProcess Analyzer,
pH/ORP/Conductivity
Emerson/Saab-RosemountLevel Gauge, Radar
Honeywell Industry SolutionsRemote Terminal Unit
KrohneFlowmeter, Magnetic
Mettler ToledoWeighing System/Load Cell
Ohmart/VegaLevel Gauge, Radar
Omega EngineeringThermocouple
OSI SoftwareSoftware, SCADA
Phoenix ContactTerminal Block
Rockwell AutomationController, Programmable Logic
Rockwell AutomationRemote Terminal Unit
YokogawaRecorder

4.0

ABBControl System, Process
Emerson/Brooks InstrumentFlowmeter, Thermal Mass
Emerson/Brooks InstrumentFlowmeter, Variable Area
Emerson/RosemountTemperature Transmitter
Fluid Components InternationalFlow Switch
GE FanucSoftware, PLC Programming
Hoffman EngineeringEnclosure
Honeywell Industry SolutionsControl System, Hybrid
Honeywell Industry Solutions . . .Software, Batch Control/Management
Honeywell Industry SolutionsSoftware, Simulation
Intellution/GE FanucSoftware, Process Control
Invensys/FoxboroProcess Analyzer, pH/ORP/Conductivity
Invensys/WonderwareSoftware, SCADA
Ohmart/VegaLevel Gauge, Nuclear
Rockwell AutomationControl System, Safety/Emergency Shutdown
Rockwell AutomationSoftware, PLC Programming
Siemens Energy & AutomationInput/Output System
Siemens Energy & AutomationOperator Interface Terminal
Sola Hevi-DutyPower Supply
Thermo MeasureTechLevel Gauge, Nuclear
YokogawaFlowmeter, Vortex

who say they have the authority to specify, recommend, or buy the instrumentation and control equipment and software involved in this survey. Responses were received from 823.

The simple question was: "Please identify by name the best supplier, in your opinion, in each of the following technology categories." Beyond that starting point, respondents may weigh cost versus benefit, ease of use, performance, reliability, service life, even who and how big the supplier is. And a lot depends upon the application. Then there is the consideration of customer service. If the engineer, his company, or anyone he knows has had an experience, good or bad, with a given vendor, that can weigh pretty heavily.

The survey also asked respondents to rank that aspect of their chosen suppliers on a scale of 1 (poor) to 5 (excellent). Vendors that provide excellent service (average rating of 4.0 or higher) are listed in the accompanying table.

The Usual Suspects

It should come as no surprise that the biggest company in the process control world also won the most categories. But the number that Emerson Process Management swept is remarkable: 28 categories. And that number is up from the 21 categories the company won last year.

Rockwell made its annual impressive showing, capturing seven categories including the Programmable Logic Controller category it has dominated for many years. As evidence that General Electric is growing its interest in process control, GE topped three categories, all via recent acquisitions. In addition to Intellution in SCADA, GE Panametrics led in Humidity/Moisture Analyzer and in Ultrasonic Flowmeter. Also winning three categories were Ametek (Annunciator, Electrical Property-Based Level Gauge, and Point Level Switch) and Siemens (Process Loop Controller, Open Channel Flowmeter, and Ultrasonic Level Gauge).

Every year there are dominators in some areas. Category killers with more than 50% of the vote in a product grouping include Emerson/Fisher in Control Valve (63%); Emerson/Micro Motion in Coriolis Mass Flowmeter (81%); Emerson/Brooks Instrument in Variable Area Flowmeter (59%); Emerson/Rosemount in Pressure Transmitter (60%); Emerson in Asset Management Software (56%), in Calibration Management Software (51%), and in Neural Network Software (54%); Hoffman Engineering in Enclosure (65%); Fluke, which acquired competitor Altek/Transmation, in Portable Calibrator (73%); Rockwell in PLC (65%) and PLC Programming Software (60%); Bebeco in Purge System (64%); Bently Nevada in Vibration Instrumentation (76%); and Belden in Wire & Cable (63%).

Despite the fact that this is a quest for the best, voting requires familiarity with the products involved. So, to some extent, this is a measure of installed base. It also is not immune to sustained marketing efforts on the part of

supplier organizations.

But it is the voice of our readers. And it is one measure of how good a supplier is...or could be, to an engineer looking for a new supplier or a new type of product. These days, you can use all the help you can get.



MSA'S ULTIMA

ANALYZER, AMBIENT GAS DETECTOR

- | | |
|------------|-----|
| 1. MSA | 37% |
| 2. Draeger | 9% |



EMERSON'S GCX

ANALYZER, CHROMATOGRAPH

- | | |
|---------------------------------|-----|
| 1. Emerson/Rosemount Analytical | 36% |
| 2. ABB | 18% |
| 3. Siemens Applied Automation | 10% |



MICRO MOTION'S ELITE SERIES

ANALYZER, DENSITY/CONCENTRATION

- | | |
|-------------------------|-----|
| 1. Emerson/Micro Motion | 40% |
| 2. Thermo MeasureTech | 14% |
| 3.* Ohmart/Vega | 7% |
| Electron Machine | 5% |
| Mobrey/Solartron | 5% |



PANAMETRICS' MOISTURE IMAGE SERIES

ANALYZER, HUMIDITY/MOISTURE

- | | |
|--|-----|
| 1. GE Panametrics | 21% |
| 2. Emerson/Rosemount Analytical | 15% |
| 3.* Vaisala | 10% |
| Honeywell Industrial Measurement & Control | 8% |
| 5. General Eastern | 5% |
| Thermo Moisture Systems | 5% |



EMERSON'S PH/ORP/CONDUCTIVITY FAMILY

ANALYZER, PH/ORP/CONDUCTIVITY

- | | |
|---------------------------------|-----|
| 1. Emerson/Rosemount Analytical | 44% |
| 2. Invensys/Foxboro | 13% |
| 3. Yokogawa | 11% |

* Differences of less than 3% are of marginal statistical significance.



ABB'S PUV23402 AND PIR3502

ANALYZER, SPECTROMETER

- | | |
|--------------------------------------|-----|
| 1. ABB | 23% |
| 2. Emerson/Rosemount Analytical Hach | 18% |
| | 18% |



EMERSON'S DELTAV

CONTROL SYSTEM, PROCESS

- | | |
|---------------------------------|-----|
| 1. Emerson Process Management | 45% |
| 2. Honeywell Industry Solutions | 15% |
| 3.* Rockwell Automation | 9% |
| Invensys/Foxboro | 8% |
| 5.* Siemens Energy & Automation | 6% |
| ABB | 5% |



ROSEMOUNT ANALYTICAL'S MICROCEM

ANALYZER, STACK GAS/EMISSIONS

- | | |
|---------------------------------|-----|
| 1. Emerson/Rosemount Analytical | 27% |
| 2. Ametek Thermox | 13% |
| 3.* Siemens Energy & Automation | 7% |
| ABB | 5% |
| Teco | 5% |



TRICONEX'S TRIDENT

CONTROL SYSTEM, SAFETY/EMERGENCY SHUTDOWN

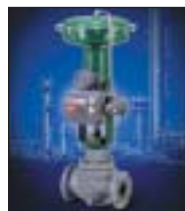
- | | |
|----------------------------------|-----|
| 1. Invensys/Triconex | 27% |
| 2. Siemens Energy & Automation | 16% |
| 3.* Honeywell Industry Solutions | 11% |
| Rockwell Automation | 10% |
| 5. Emerson Process Automation | 5% |



AMETEK/PANALARM'S SERIES 90

ANNUNCIATOR

- | | |
|-------------------------|-----|
| 1. Ametek Panalarm | 38% |
| 2. Ronan Engineering | 18% |
| 3.* Rockwell Automation | 6% |
| Beta Hathaway | 5% |



FISHER'S W8119

CONTROL VALVE

- | | |
|----------------------------|-----|
| 1. Emerson/Fisher Controls | 63% |
| 2.* Flowserve/Valtek | 6% |
| Dresser Masoneilan | 5% |



SIEMENS' 353

CONTROLLER, PROCESS LOOP

- | | |
|---|-----|
| 1. Siemens Energy & Automation | 24% |
| 2. Honeywell Industrial Measurement & Control | 19% |
| 3. Emerson Process Management | 12% |
| 4.* Yokogawa | 9% |
| ABB | 8% |
| Invensys/Foxboro | 7% |



ALLEN-BRADLEY'S POWERFLEX

ELECTRIC MOTOR DRIVE

- | | |
|--------------------------------------|-----|
| 1. Rockwell Automation/Allen-Bradley | 39% |
| 2.* ABB | 9% |
| Siemens Energy & Automation | 9% |
| GE Power Systems | 7% |
| 5. Schneider Electric | 5% |
| Baldor | 5% |



ROCKWELL'S CONTROLOGIX

CONTROLLER, PROGRAMMABLE LOGIC

- | | |
|-----------------------------|-----|
| 1. Rockwell Automation | 65% |
| 2. Schneider Electric | 13% |
| 3. GE Fanuc | 6% |
| Siemens Energy & Automation | 6% |



HOFFMAN'S WATERSHED SERIES

ENCLOSURE

- | | |
|------------------------|-----|
| 1. Hoffman Engineering | 65% |
| 2. Rittal | 20% |



EMERSON'S DELTAV

CONTROL SYSTEM, HYBRID

- | | |
|---------------------------------|-----|
| 1. Emerson Process Management | 41% |
| 2. Rockwell Automation | 17% |
| 3. Honeywell Industry Solutions | 12% |
| 4. Siemens Energy & Automation | 8% |



MICRO MOTION'S CORIOLIS OFFERINGS

FLOWMETER, CORIOLIS MASS

- | | |
|-------------------------|-----|
| 1. Emerson/Micro Motion | 81% |
| 2. Endress + Hauser | 7% |



ROSEMOUNT'S SERIES 8700

FLOWMETER, MAGNETIC

1. Emerson/Rosemount	36%
2. Invensys/Foxboro	15%
3.* Krohne	10%
Endress + Hauser	9%
Yokogawa	9%
6. ABB	7%



FLUID COMPONENTS' ST98
FAST RESPONSE

FLOWMETER, THERMAL MASS

1. Fluid Components Intl.	50%
2. Emerson/Brooks Instrument	17%
3. Kurz Instrument	13%
4. Sierra Instruments	8%



SIEMENS MILLTRONICS' OCM

FLOWMETER, OPEN CHANNEL

1. Siemens Milltronics	30%
2. Ametek Drexelbrook	19%
3.* ISCO	9%
Emerson/Rosemount	8%
4. Endress + Hauser	6%
Invensys/Foxboro	6%



DANIEL'S MODEL 1200

FLOWMETER, TURBINE

1. Emerson/Daniel	25%
2. Hoffer Flow Control	14%
3. Invensys/Foxboro	8%
4. A.O. Smith	5%



BROOKS' MODEL BM10

FLOWMETER, POSITIVE DISPLACEMENT

1. Emerson/Brooks Instrument	49%
2. A.O. Smith	11%
3. Badger Meter	7%



PANAMETRICS' DIGITALFLOW GC868

FLOWMETER, ULTRASONIC

1. GE Panametrics	34%
2. Controlotron	13%
3. Daniel	9%
Peek Polysonics	7%
Siemens Milltronics	7%

* Differences of less than 3% are of marginal statistical significance.



BROOKS' MODEL MT 3809

FLOWMETER, VARIABLE AREA

- | | |
|------------------------------|-----|
| 1. Emerson/Brooks Instrument | 59% |
| 2. ABB | 7% |
| Dwyer Instrument | 7% |



ROSEMOUNT'S MODEL 8800CR

FLOWMETER, VORTEX

- | | |
|----------------------|-----|
| 1. Emerson/Rosemount | 34% |
| 2. Yokogawa | 28% |
| 3. Invensys/Foxboro | 19% |
| 4. Endress + Hauser | 5% |



FLUID COMPONENT'S
NUTEC INDUSTRIAL

FLOW SWITCH

- | | |
|---------------------------|-----|
| 1. Fluid Components Intl. | 33% |
| 2. GEMS | 11% |
| 3.* IFM Efector | 7% |
| Magnetrol | 7% |
| Dwyer Instrument | 5% |
| McDonnell Miller | 5% |
| SOR | 5% |



DELL'S POWEREDGE 2650

INDUSTRIAL COMPUTER

- | | |
|-----------------------------|-----|
| 1. Dell | 27% |
| 2.* Rockwell Automation | 7% |
| Xycom | 6% |
| Advantech | 5% |
| Siemens Energy & Automation | 5% |



ALLEN-BRADLEY'S I/O FAMILY

INPUT/OUTPUT SYSTEM

- | | |
|--|-----|
| 1. Rockwell Automation/
Allen-Bradley | 33% |
| 2. Emerson Process Management | 16% |
| 3. Siemens Energy & Automation | 8% |
| 4. Opto 22 | 6% |



MTL'S 8000 SERIES

INTRINSIC SAFETY BARRIER

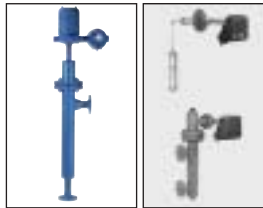
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|--------------------|-----|
| 1. MTL | 32% |
| 2. R. Stahl | 20% |
| 3. Pepperl + Fuchs | 17% |
| 4. Phoenix Contact | 5% |



DREXELBROOK'S UNIVERSAL III

LEVEL GAUGE, ELECTRICAL PROPERTY-BASED

- | | |
|-----------------------|-----|
| 1. Ametek Drexelbrook | 40% |
| 2. Emerson/Rosemount | 16% |
| 3.* Endress + Hauser | 9% |
| Magnetrol | 7% |



MAGNETROL'S ES II MODULE
FISHER'S W3121

LEVEL GAUGE, FLOAT/DISPLACER

- | | |
|-------------------------|-----|
| 1.* Magnetrol | 31% |
| Emerson/Fisher Controls | 29% |
| 3.* GEMS | 13% |
| K-Tek | 13% |
| 5. MTS | 5% |



SAAB'S TANKRADAR REX

LEVEL GAUGE, INVENTORY GRADE

- | | |
|---------------------------|-----|
| 1. Emerson/Saab-Rosemount | 30% |
| 2. Endress + Hauser | 13% |
| 3.* Enraf | 10% |
| Invensys/Foxboro | 8% |



TEXAS NUCLEAR'S LEVELPRO

LEVEL GAUGE, NUCLEAR

- | | |
|-----------------------|-----|
| 1. Thermo MeasureTech | 44% |
| 2. Ohmart/Vega | 35% |
| 3.* Ronan Engineering | 7% |
| Berthold | 5% |



SAAB'S PRO ITG

LEVEL GAUGE, RADAR

- | | |
|---------------------------|-----|
| 1. Emerson/Saab-Rosemount | 31% |
| 2. Ohmart/Vega | 24% |
| 3. Endress + Hauser | 11% |
| Magnetrol | 11% |
| 5.* Krohne | 7% |
| Ametek Drexelbrook | 6% |



SIEMENS MILLTRONICS' MULTIRANGER

LEVEL GAUGE, ULTRASONIC

- | | |
|------------------------|-----|
| 1. Siemens Milltronics | 37% |
| 2.* Endress + Hauser | 14% |
| Ametek Drexelbrook | 13% |
| 4.* Ohmart/Vega | 6% |
| Emerson/Rosemount | 5% |
| Magnetrol | 5% |



DREXELBROOK'S THE POINT

LEVEL SWITCH, POINT

1. Ametek Drexelbrook	20%
2. Endress + Hauser	15%
3.* Magnetrol	9%
Thermo MeasureTech	9%
Bindicator	8%
5. K-Tek	5%
SOR	5%



BEBCO'S PURGE FAMILY

PURGE SYSTEM

1. Bebcos	64%
2. Expo-Telektron	5%
Pepperl + Fuchs	5%



ALLEN-BRADLEY'S PANELVIEW PLUS 1250

OPERATOR INTERFACE TERMINAL

1. Rockwell Automation	30%
2. Dell	12%
3.* Siemens Energy & Automation	9%
GE Fanuc	8%
5. Emerson Process Management	5%
Honeywell Industry Solutions	5%



YOKOGAWA'S DX200 DAQSTATION
HONEYWELL'S MINITREND

RECORDER

1.* Yokogawa	27%
Honeywell Industrial	25%
Measurement & Control	
3. Invensys/Eurotherm Chessel	14%
4. ABB	8%



ALLEN-BRADLEY'S IN-VIEW

PANEL DISPLAY

1. Rockwell Automation/ Allen-Bradley	27%
2.* Red Lion	10%
Siemens Energy & Automation	8%
4. Precision Digital	5%



ALLEN-BRADLEY'S SLC 500 SERIES

REMOTE TERMINAL UNIT

1. Rockwell Automation/ Allen-Bradley	24%
2. Emerson Process Management	15%
3.* Honeywell Industry Solutions	7%
Bristol Babcock	5%
Siemens Energy & Automation	5%



FLUKE'S MODEL 744

PORTABLE CALIBRATOR

1. Fluke/Altek/Transmaton	73%
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MOORE'S MODEL ECT

SIGNAL CONDITIONER

1. Moore Industries	26%
2. Invensys/Action Instruments	20%
3. Phoenix Contact	9%
4.* M System Technology	6%
Acromag	5%



SOLA'S POWER SUPPLY GROUP

POWER SUPPLY

1. Sola Hevi-Duty	27%
2. Acopian	22%
3. Phoenix Contact	9%
4.* Power One	6%
Invensys/Lambda	5%



EMERSON'S AMS

SOFTWARE, ASSET MANAGEMENT

1. Emerson Process Management	56%
2. Honeywell Industry Solutions	5%
SAP	5%



ROSEMOUNT'S MODEL 3051S

PRESSURE TRANSMITTER

1. Emerson/Rosemount	60%
2.* Invensys/Foxboro	9%
Honeywell Measurement & Control	7%
4. Yokogawa	5%



EMERSON'S DELTAV BATCH

SOFTWARE, BATCH CONTROL/MANAGEMENT

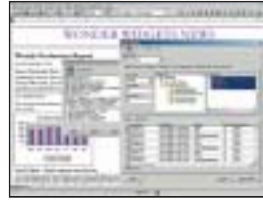
1. Emerson Process Management	42%
2.* Rockwell Automation	13%
Honeywell Industry Solutions	12%
4. Invensys/Wonderware	9%



EMERSON'S CALIBRATION ASSISTANT

SOFTWARE, CALIBRATION MANAGEMENT

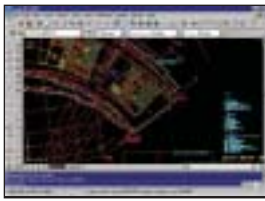
- 1. Emerson Process Management 51%
- 2. Honeywell Industry Solutions 12%



WONDERWARE'S INSQL

SOFTWARE, HUMAN-MACHINE INTERFACE

- 1. Invensys/Wonderware 29%
- 2. Intellution/GE Fanuc 23%
- 3. Rockwell Automation 15%
- 4. Emerson Process Management 9%
- 5. Honeywell Industry Solutions 6%



AUTODESK'S AUTOCAD 2002

SOFTWARE, DESIGN/DOCUMENTATION

- 1. AutoDesk 31%
- 2. Emerson Process Management 14%
- 3. Intergraph 9%
- 4.* Siemens Energy & Automation 6%
- Microsoft/Visio 5%



EMERSON'S DELTAV TUNE
EXPERTUNE'S ANALYZER & TUNER

SOFTWARE, LOOP TUNING

- 1.* Emerson Process Management 33%
- Expertune 31%
- 3. Honeywell Industry Solutions 8%



EMERSON'S DELTAV INSPECT

SOFTWARE, EXPERT SYSTEM

- 1. Emerson Process Management 27%
- 2. Gensym 19%
- 3. Honeywell Industry Solutions 16%

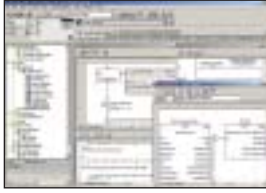


EMERSON'S DELTAV NEURAL

SOFTWARE, NEURAL NETWORK

- 1. Emerson Process Management 54%
- 2. Pavilion Technologies 7%

* Differences of less than 3% are of marginal statistical significance.



ROCKWELL'S RSLOGIX 5000

SOFTWARE, PLC PROGRAMMING

1. Rockwell Automation	60%
2. Schneider Electric	14%
3.* Siemens Energy & Automation	7%
GE Fanuc	6%



EMERSON'S DELTAV

SOFTWARE, PROCESS CONTROL

1. Emerson Process Management	40%
2. Honeywell Industry Solutions	12%
3. Rockwell Automation	9%
4.* Intellution/GE Fanuc	6%
AspenTech	5%
Invensys Wonderware	5%



INTELLUTION'S IFIX

SOFTWARE, SCADA

1. Intellution/GE Fanuc	17%
2.* Emerson Process Management	12%
Invensys/Wonderware	11%
Honeywell Industry Solutions	10%
4. Rockwell Automation	9%
5.* OSI Software	6%
AspenTech	5%



EMERSON'S DELTAV SIMULATE PRO

SOFTWARE, SIMULATION

1. Emerson Process Management	23%
2.* Munger/Mimic	12%
AspenTech	11%
4.* Honeywell Industry Solutions	7%
ABB	5%
Hyprotech	5%
Rockwell Automation	5%



RAYTEK'S MID

TEMPERATURE SENSOR, INFRARED

1. Raytek	28%
2. Ircon	23%
3. FLIR Systems	8%
Land Infrared	8%
Omega Engineering	8%



ROSEMOUNT'S RTDS

TEMPERATURE SENSOR, RTD

1. Emerson/Rosemount	30%
2. Pyromation	12%
3. Omega Engineering	8%
4. Invensys/Foxboro	5%

* Differences of less than 3% are of marginal statistical significance.



ROSEMOUNT'S THERMOCOUPLES
OMEGA ENGINEERING'S THERMOCOUPLES

TEMPERATURE SENSOR, THERMOCOUPLE

1.* Emerson/Rosemount	17%
Omega Engineering	15%
3.* Pyromation	6%
Invensys/Foxboro	5%
Sandeliuss	5%



ROSEMOUNT'S 3144P

TEMPERATURE TRANSMITTER

1. Emerson/Rosemount	49%
2.* Invensys/Foxboro	8%
Honeywell Industrial Measurement & Control	8%
Moore Industries	7%
5. Omega Engineering	5%
Yokogawa	5%



PHOENIX CONTACT'S MINI SPRING CAGE FAMILY

TERMINAL BLOCK

1. Phoenix Contact	34%
2.* Weidmuller	22%
Rockwell Automation	20%
4. ABB/Entelec	10%



BENTLY NEVADA'S SYSTEM 1

VIBRATION INSTRUMENTATION

1. Bently Nevada	76%
2. PMC/Beta	7%
Rockwell Automation/Entek IRD	7%



BELDEN'S INDUSTRIAL ETHERNET CABLING

WIRE & CABLE

1. Belden	63%
2. Anixter	6%



METTLER TOLEDO'S Q.I.

WEIGHING SYSTEM/LOAD CELL

1. Mettler Toledo	29%
2. BLH Electronics	18%
3. Hardy Instrument	14%
4. Kistler Morse	9%
5. Rice Lake	5%

* Differences of less than 3% are of marginal statistical significance.