

CONTROL ENGINEERING®

Covering control, instrumentation, and automation systems worldwide

Flurry of Innovation

Automation and control manufacturers launched more new products and solutions in 2004 than in recent years. As a result, *Control Engineering's* editors evaluated a larger pool of nominees to choose the 40 winners of the 18th annual Editors' Choice Awards.

Jim Montague, Mark T. Hoske, and
Control Engineering staff

Stock market averages and economic indexes aside, one of the best gauges of the recent industrial sector upswing in the U.S. and globally has to be that many control and automation manufacturers released more new products and solutions in 2004 than they have in recent years—a flurry of innovation.

In fact, at several of 2004's major tradeshow, suppliers that had been exhibiting one, two or no new items previously were suddenly launching a half a dozen or more new products at each event. "2004 turned out to be a great year for the manufacturing industry, both economically and in terms of product innovation. So many great products really hit their stride this past year, in terms of the criteria against which we judge our award winners, that we decided to increase the number of awards given out this year to 40—up from 35 last year," say David Greenfield, *Control Engineering's* editorial director.

Control Engineering's editors again evaluated hundreds of nominees based on service to the industry, technological advancement, and market impact to select the 40 winners of the 18th annual Editors' Choice Awards. Readers should be aware that winning products are not necessarily awarded in their initial year of release. Some are technically advanced enough, but don't have enough impact or deliver significant enough service to their industry until a greater level of adoption occurs a year or two later, or for innovative attributes of later versions.

"Throughout the year, *Control Engineering* editors cover thousands of products in the North American print edition, at our

www.controleng.com Web site, and in our monthly and weekly e-mailed newsletters. Each year, editors review that coverage for products, solutions, and services with exceptional market impact, technological advancement, and service to the industry," says Mark Hoske, *Control Engineering's* editor-in-chief. "The editors nominate what we believe to be the best products based on those criteria, and then cast votes for them. Selecting *Control Engineering* Editors' Choice Award winners isn't getting any easier, especially with the increasing amount of innovation serving the market."

Following the Editors' Choice awards, *Control Engineering's* subscribers again are being asked to vote for their own favorites from among the editors' 40 selections to determine the winners of the second annual Engineers' Choice Awards, choosing the top winner in each of eight product categories. These eight winners will be revealed during the Editors' Choice awards ceremony, held during National Manufacturing Week, March 7-10, in Chicago.

Control Engineering's editorial categories posting awards this year include: Embedded Control; Human-Machine Interface; Instrumentation and Process Sensors; Machine Control and Discrete Sensors; Motors, Drives, and Motion Control; Networks and Communications; Process and Advanced Control; and Software and Information Integration.

Frank J. Bartos, David Greenfield, Dick Johnson, Jeanine Katzel, Vance J. VanDoren, and Michael Babb also contributed to this article.



SIS extends PlantWeb digital for process safety

Emerson Process Management's Smart Safety Instrumented System

Emerson Process Management's Smart Safety Instrumented System (SIS) uses digital intelligence and diagnostics, from sensor to logic solver to final control, to extend PlantWeb digital plant architecture, and help users implement safer process plants. Automated safety-loop testing and other features in SIS reportedly increase system availability, reduce lifecycle costs, and ease regulatory compliance.

SIS solutions are built from PlantWeb technologies and include intelligent field devices, predictive diagnostics, and digital communications. They implement a safety integrity level (SIL) 3 strategy, which includes transmitters and valve controllers certified to IEC 61508 and SIL3-compliant safety systems. SIS may be integrated with mainstream basic process control systems for facility-wide overview, while maintaining separation of safety-critical elements as required by IEC standards. Safety data and alarms are presented on DeltaV operator interfaces, stored in its historians, and passed to AMS Suite: Intelligent Device Manager software for integrated documentation and management.

SIS also includes DeltaV-based SIS systems that communicate with SIS sensors and final control elements; SIS sensors, including Rosemount's 3051S pressure transmitter and 3144P temperature transmitter; final control elements with partial stroke testing, including SIL-PAC emergency



shutdown valves; DeltaV SIS software; and AMS Device Manager software. www.easydeltav.com

- **First digital, smart SIS**
- **First integrated, complete-safety-loop approach**
- **Automates safety loop testing**
- **Enables users to implement safer process plants**
- **Uses PlantWeb technologies**

