



## **PRESS RELEASE**

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FOR IMMEDIATE RELEASE

## **SIS-TECH Announces Automated Independent Backup System**

### **System meets SIL3 requirements and is less costly than a Safety PLC**

Houston, Texas—January 29, 2010— SIS-TECH announces DIAMOND-SIS automated independent backup (AIB), a low-cost, standalone safety instrumented system (SIS) that backs up current process control trip logic and meets the requirements of IEC 61511. The system includes an IEC 61508 logic solver that is functionally independent from the process control system, supplements existing logic, and meets all appropriate safety standards.

DIAMOND-SIS AIB provides high integrity and process reliability. It is available in single, dual, and triplicated channel configurations with on-line diagnostics, testing, and maintenance capabilities. The single and dual channel systems are acceptable for SIL 2, while the triplicated channel system is certified by Factory Mutual to SIL 3. This means that DIAMOND-SIS can meet the fault tolerance and PFavg requirements of any application.

With its 5A output rating, the system can de-energize multiple final elements including motor control circuits and/or solenoid operated valves. Local or remote manual reset ensures controlled process re-start after shutdown.

DIAMOND-SIS AIB is particularly useful with legacy control systems that do not meet current SIS standards. Typically, during the early days of digital control, users implemented safety logic within their process control systems. Today, they do not want to impose SIS requirements or management restrictions within the existing systems.

Instead, they need an independent backup safety logic system that connects easily to existing plant equipment, meets all safety standards and requirements, and requires no reprogramming of process logic. DIAMOND-SIS AIB fulfills all of those requirements.

### **Easier to install and maintain than a Safety PLC**

A single channel DIAMOND-SIS AIB system includes a pre-mounted and wired DIN-rail signal isolator, a Model 340 logic solver, a fuse block, and five terminals ready to accept existing wiring. All components are rated for -30 to 75 degrees C and Class I Div II operation, and meet the mechanical integrity requirements of IEC 61511.

The system can typically be mounted in an existing DCS marshalling cabinet, and the user wires the logic solver contacts in series with the DCS contacts. The logic solver then independently backs up the trip functionality of the DCS.

Each DIAMOND-SIS logic solver module can accept virtually any analog input. Its two field adjustable trip points allow the process to be shut down on high and/or low process variables, or to detect an out of range signal fault. The number of inputs and the voting architecture—such as 1oo1, 1oo2, 2oo2 or 2oo3—can be adjusted to meet performance requirements. The process shut-down signal from the logic solver can be sent to both the DCS, and directly to a shut-down device such as a relay or solenoid.

The installation does not require any reprogramming of the existing DCS. In addition, the installation cost of a DIAMOND-SIS AIB is 80% less than that of an equivalent Safety PLC with the same number of loops. Maintenance costs are also greatly reduced as it's not necessary to purchase, implement and renew programming software.

The Safety Requirements Specification, including Safety Integrity Level (SIL) verification documentation, can be supplied as an option. This makes the DIAMOND-SIS AIB the perfect packaged solution to address low I/O SIS needs, and the low cost alternative to safety PLCs.

For more information on the DIAMOND-SIS AIB, download a data sheet at [http://www.sis-tech.com/diamond\\_sis.html](http://www.sis-tech.com/diamond_sis.html).

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#### **ABOUT SIS-TECH**

SIS-Tech is committed to providing our customers with the best safety related products and systems in the industry. Our thorough understanding of safety instrumented systems allows us to design and build products that meet all requirements and standards. Our products are easy to use, cost effective to implement, and extremely reliable. Our deep knowledge of the process industries enables us to always design products with the application in mind.

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