



High availability at a glance

HIMax from HIMA as a visualisation and operation component at INEOS Köln

(14 October 2009)

HIMax, the safety system produced by HIMA for maximum system availability, is now in use at INEOS Köln (Germany, Cologne) as a high-availability operating and visualising component for remote monitoring of safety technology in a production plant. The challenge in this application is the length of the optical fibre used for high-speed data transmission.

The plant produces cyclopentane, isopentane and methyl propadiene. The safety-related functions are performed by two existing HIMA H51q safety controllers that serve as Emergency Shutdown (ESD) systems for controlling loading (non-redundant) and quick stops (redundant). Operation and visualisation of the safety technology was implemented using HIMax in order to ensure that the controller level and safety level were separate.

The complete installation of the HIMax safety system was carried out by HIMA. The job included engineering work, programming the visualisation of the touch panels and the HIMax controller, the Factory Acceptance Testing (FAT) and commissioning the system. According to INEOS Köln, the project was executed professionally, with each quality and schedule target met. Since commissioning, the HIMax system has been running without incident and to the operator's full satisfaction.

HIMax allows the existing optical fibres to be used for remote data transmission, which involves a redundant distance of just over a kilometre. The HIMax system includes a redundant master CPU and a remote module, which

communicate with one another via optical fibres. The system handles around 140 I/O signals. The use of optical fibre technology enables extremely fast and secure data exchange between the two HIMax components.

The H51q controllers are connected to the HIMax system via Modbus TCP. The safety system is operated and activated using two TFT touch panels in the control room. HIMA was asked to structure the visualisation so that the control room team – experienced with panel displays only – would quickly get used to the system. The programmers succeeded in developing an intuitive operating system based visually on a panel display, a concept well received by the operating personnel.

About HIMA

HIMA is the world's leading designer and manufacturer of automated safety solutions in the process industry.

HIMA solutions can be found in more than 80 countries around the world, protecting people and keeping plants, factories and buildings operating safely and without interruption.

What distinguishes HIMA solutions from the rest is the combination of maximum safety and maximum availability. Through permanent safety and uninterrupted operation, HIMA's clients are able to achieve their business goals. HIMA solutions are based on practical and focused safety consulting, broad application experience, a comprehensive product range and the ability to successfully integrate safety solutions into almost any automation environment.

All HIMA systems and solutions comply with the latest international and local safety standards like IEC 61508 and IEC 61511, EN 954, EN ISO 13849 and are suitable for SIL 3 and even SIL 4, Cat. 4 and PL e applications.

Further information about HIMA can be found online at **www.hima.com.au**