



APPLICATION STORY: INEOS CHLOR, ENGLAND

INEOS Chlor is one of the major chlor-alkali producers in Europe and an acknowledged global leader in chlorine derivatives; consequently, production of chlorine itself is a significant part of their business model. When it became apparent that the existing production facility, although still in use, was reaching the end of its economical working life and would need to be replaced, investment in a more up-to-date and cost effective manufacturing facility was clearly warranted.

Field instrumentation for control of these plants was chosen to embody fieldbus, as this would simplify and speed up the production of diagnostic information. Earlier pilot projects had investigated the technology and the results were found to be very encouraging. Consequently, the engineering team was keen to make the most of the diagnostic capabilities of fieldbus.

At the core of their management system is **Emerson Process Management's DeltaV™**, which was chosen for its known compatibility with **FOUNDATION fieldbus™** and Emerson's previous experience in this field. MTL-Relcom fieldbus products were already known and trusted by the local design team and so it needed little encouragement from Emerson with regard to compatibility to reinforce the decision to stay with this choice.

Field wiring was based upon the use of **MTL-Relcom Megablock** wiring hubs. Located on DIN rail in small **GRP enclosures** around the plant, they provide a simple means of marshalling local connections from the individual field instruments and bringing them onto the bus.

Trunk connections can easily be looped onwards to other Megablocks and, when the end of the bus is reached, a **FOUNDATION fieldbus™** terminator can simply be added to complete the job. Back in the control room the DeltaV™ IO takes charge, aided by MTL-Relcom's **FPS-I fieldbus power conditioners**. The latter provide redundant power conditioning for individual fieldbus networks from bulk DC supplies, while also terminating the fieldbus trunks at the host end.

The individual **IPM power modules** have galvanic isolation between input supplies and the output segments, are alarmed for instant recognition of a component failure and are "hot swappable" without interrupting operation. All of this maximises up-time and helps in the diagnosis and recovery of faults that occur in even the best managed and maintained facilities.



FPS-I REDUNDANT FIELDBUS POWER SUPPLY

