Latest news

Medal winning investment for UK

The outstanding success of the UK's athletes this year was not the only cause for the country to celebrate. UKTI used the occasion to announce major projects by leading companies in the petrochemical sector, bringing welcome investment and jobs to many parts of the country.

These projects include a £1.4-billion development plan for extracting shallow water gas in the southern North Sea by a partnership involving GDF SUEZ, Centrica and Bayerngas. This should create around 1,200 jobs. Meanwhile, Versalis is investing £40 million to expand its elastomer production plant in Scotland, creating new jobs, and BP has announced a £50 million partnership with leading universities, centred around the University of Manchester to develop advanced materials and coatings at a new International Centre for Advanced Materials.

Predictive maintenance for heart patients!

An innovative software program, developed at the University of Manchester, could significantly reduce the risks to heart patients and cut the cost of treatment for the NHS.

Researchers have studied techniques from the aviation industry, where data from hundreds of sensors is analysed to predict when aircraft systems will fail. Combining these techniques with a reference database of over 30,000 medical records and real-time information from diagnostic equipment monitoring each patient's vital signs, allows doctors to predict the most likely outcome in a given situation. They can then, for example, make a decision to release a patient from hospital or to keep them under observation for a longer period.

Dated and dull?

A recent survey carried out by ABB found that almost half of plant control systems are over ten years old. Perhaps of greater concern was the finding that although not all instrumentation was classified as intelligent, more than 40% of engineers who have intelligent control systems, normally based on HART, Fieldbus or Profibus, fail to use them either to their maximum capability or indeed at all.

It's generally accepted that intelligent systems can play a vital role in effective plant monitoring and predictive maintenance. It's also widely recognised that a proactive maintenance regime is a major contributor to plant reliability and staff safety.

Given the ageing nature of much of the UK's process plant, there would seem to be a powerful argument in favour of improving the use of intelligent monitoring systems, and of linking this to the specialised maintenance and facilities services offered by ERIKS to maximise uptime and safety while minimising operating costs.

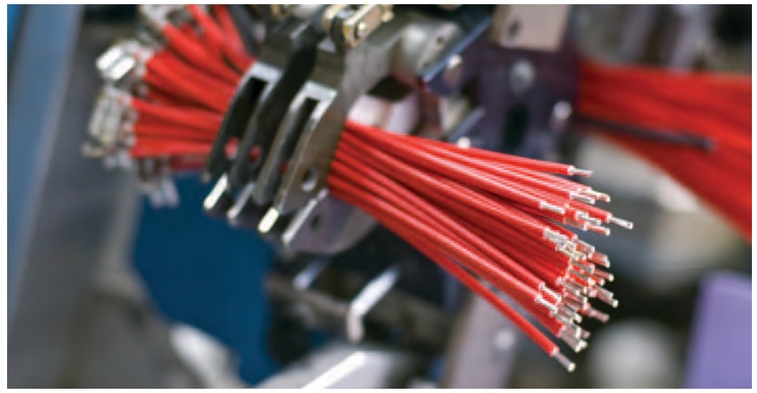
Automation key to future success

2011 was a record year around the world for the sales of industrial robots and automation systems, according to the International Federation of Robotics. China, Germany and the USA are leading the way.

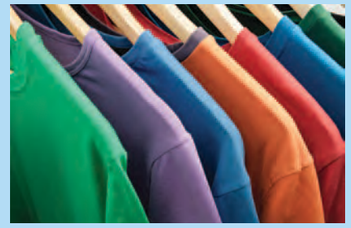
Worryingly, according to a separate study by the Engineering and Machinery Alliance, the UK is falling behind many of its international rivals. Although we have a large installed base of robotics systems in the automotive sector, other areas of manufacturing have been slow to invest in the latest technology. The report cites low awareness, aversion to risk and lack of skills as being the main barriers to change.

At ERIKS, we're already working with customers to meet these challenges and have established a dedicated Automation Division, for the design, manufacture and long-term support of automated systems.

To learn more, visit our dedicated website at *www.eriks.co.uk/automation.*



Rechargeable T-shirts!



Scientists at the University of South Carolina are developing a fascinating concept, to use our clothes for storing energy that could then be released to charge mobile phones.

The trial project used a cheap T-shirt, purchased in a local shop. This was soaked in fluoride and baked to carbonise the fabric without affecting its flexibility. Individual fibres were then coated with manganese oxide to create what is effectively a high performance capacitor that can be recharged multiple times.

Scientists hope that by developing this idea further, with multiple layers, they should be able to create a fabric capable of storing sufficient energy to charge an electrical device.