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Newsletter

Energy Saving Irrigation = Money Saving

Since the introduction of the Climate Change Act in 2000's the requirement to save energy has seen Tufts & Whitton design a fully automated variable speed irrigation system. This

standard, giving the operator access to operational data & parameters such as line pressure, pump RPM, cubic meters per hour and a comprehensive fault logging system. All our systems are also available with GSM Mobile remote control.

would reduce its tax bill in the year of purchase by £280. In contrast, for every £1,000 spent, the generally available capital allowance for spending on plant and machinery would reduce your business' tax bill in the year of purchase by £56. In other words, an ECA can provide a cash flow boost of £224 for every £1,000 it spends in the year of purchase.

Irrigation Pump Installation



system varies the speed of the pump to meet water demand and pressure, using less energy when fewer irrigation reels are running. This system comes with a touch screen control as

Enhanced Capital Allowances (ECA)

Enhanced Capital Allowances (ECAs) are a straightforward way for a business to improve its cash flow through accelerated tax relief. The ECA scheme for energy-saving technologies encourages businesses to invest in energy-saving plant or machinery.

So if your business pays corporation tax at 28%, every £1,000 spent on qualifying equipment

Further Reading:-

- www.tuftsandwhitton.co.uk
- www.eca.gov.uk
- www.carbontrust.co.uk

Tufts Develop Automated Pellet Press Controller

The formulation for most feed pellets includes not only the dry feed, but moisture in the form of steam, and molasses. The rate of input of these various ingredients determines not only the formulation of the finished pellets but also the temperature of the meal as it is processed and the load on the electric motor used to drive the die and roller. Each ingredient affects the load on the motor in

a different way with temperature and moisture content being found to be of critical

Automated Press Controller



importance for high quality and quantity production of pellets.

Tufts & Whitton's press control system measures meal temperature, molasses flow and motor load. Using these variables the system automatically increases steam and meal feed rate to achieve maximum press throughput without blocking.

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Tufts & Whitton are members of the NICEIC



Benefits Of Using An NICEIC Registered Contractor.

The NICEIC has been assessing the technical competence of electrical engineers for over 50 years. Their aim is to protect everyone who uses electricity from unsafe electrical installations anywhere. To achieve this, They maintain a register of qualified, competent electricians & electrical engineers.

petence of their key supervisory staff. Once contractors become registered with NICEIC, they are re-assessed on a regular basis to ensure high standards.

& Whitton (Controls) Ltd are suitably qualified to design, install and test control & distribution systems to the British Standard BS7671:2008 (2011) - The 17th Edition Wiring Regulations.

They look at a representative sample of the contractor's work, their premises, documentation, equipment, and the com-

Enrolment with NICEIC is voluntary, but electrical contractors who are conscientious about the service they offer would consider it a priority to enroll.

As members of the NICEIC, Tufts

"As control systems have evolved so has the complexity of the control algorithms and operator interfaces."

PLC, HMI, PC & SCADA Programming

As control systems have evolved so has the complexity of the control algorithms and operator interfaces used.

This has created a vast increase in the use of PLC's & HMI's at the heart of most modern control systems.

Tufts & Whitton (Controls) Ltd are able to offer PLC program-

ming services for the following PLC's—Mitsubishi, Allen-Bradley, Telemecanique, Siemens, Modicon, Omron, Moeller, Crouzet. We also work with the following HMI operator panels—Mitsubishi, Beijer, Siemens Simatic, Schneider Magelis, Telemecanique Vijeo, Omron. Tufts & Whitton are able to design systems with the follow-

ing SCADA & PC based systems—Mitsubishi E-View, Siemens Protool-Pro, Siemens WinCC Flexible, Beijer iX Developer, Wonderware, Satchwell Satchnet, TAC Micronet, VBScripting, Microsoft Visual C++, C++, Microsoft Visual Basic, Microsoft C#, HTML.

Feed Mill Complete Control System Change

2011 saw Tufts & Whitton (Controls) Ltd undertake a complete control panel replacement at Pen Mill Feeds Ltd, one of the leading independent animal feed compounders in the UK. Situated in Yeovil, Somerset manufacturing a large range of dairy feeds, beef, pig, sheep and poultry diets.

motors, ranging from 0.55KW to 150KW, 40 electro-pneumatic slides, numerous level probes, switches & valves this was a mammoth task.

The mill ceased production on the Monday, Tufts engineers were then able to start the process of removing the old control panels & commence the installation of the new control &

distribution panels.

By Monday of the following week Tufts commissioning engineers had arrived on site to start connecting the PLC control system & panels. Initial testing commenced at the weekend, with the mill starting up again on the Monday. Tuesday saw the mill returning back to full production.



Pen Mill Feeds Ltd, Somerset

Tufts and Whitton were established in February 1963, by Peter Tufts and Alec Whitton.

Tufts and Whitton (control systems) Ltd. was formed in 1978 and is now under the direction of:

Mr. Michael Halls (Operations Manager)

Mr. Chris Bland (Design Engineer)

The main activities of the company are the design, manufacture, installation and commissioning of electrical control equipment. Control panel and installation designs are brought to life using the latest in Computer Aided Design systems.

Programming is carried out on a variety of platforms for developing electronic controls, SCADA Systems, PLC Control & HMI Interfaces.

Control panel manufacture is carried out at our new spacious purpose built factory located at North Walsham in Norfolk, by a highly skilled and long serving experienced work force. Every control panel is fully inspected, checked and recorded during all stages of manufacture. On completion each control panel receives a full in-depth electrical safety and functional test.

Electrical installations are carried out by our own team of fully qualified electricians working to the highest standard of safety and quality. Tufts and Whitton (Controls) Ltd. are approved by the National Inspection Council for Electrical Installation Contracting (NIC EIC). All installation, testing & inspection is carried out to BS7671:2008 (17th Edition).

Commissioning of complex control systems are carried out by our very knowledgeable commissioning engineers. Their years of experience commissioning control systems and diagnosing faults ensures any problems are soon resolved.

Tufts & Whitton (Controls) Ltd

Electrical Engineers, Starter and
Control Panel Manufacturers



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Grinder Feeder Control System

Tufts & Whitton (Controls) Ltd have designed and developed an electronic control system for controlling the feed to grinders and hammer mills.

Our new system is designed in a modular fashion which can be incorporated into an existing control panel to replace an obsolete or broken controller, or as a stand alone controller for a new system.

Our system offers:-

- Automatic adjustment of the feed rate by monitoring the electrical current used by the grinder.

- Grinder works at maximum efficiency and throughput without blocking.
- Easy to setup using the graphical touch screen.
- Manual override function.
- Graphical touch screen displays feed speed, grinder load, fault logs and alarm time and date.
- Low level option to stop feeder ramping up when material is not present.
- Output options—Half wave vibrator, Full wave vibrator, 0-10V, 4-20mA.

This system is fully customisable to suit your application. The software is designed to be scalable, this means by just changing a few hardware components several grinders can be driven from just one touch screen interface. With the larger systems full data logging and trending is also available.



**Grinder Feeder
Touch Screen
Control**