

The AES Guide to

Control & Automation

INCREASING PRODUCTION EFFICIENCY

Modernising production operations to maximise output efficiencies.

Using state-of-the-art solutions, we can help you increase your production efficiency and improve equipment reliability. The more efficient your production line, the greater the production output and the more profit for your business.



Call Us On..... 01924 283 737

Control & Automation

Control and automation is an area of business that has significantly boomed over the last two decades as technology has advanced. Huge strides in technological development, modern, user friendly interfaces and the latest functionality are extremely beneficial to manufacturers.

What is control & automation?

Control

Control is about designing a production process which controls and minimises risks within a specific working environment and requires interaction from a user to manage the operation. This considers all inherent dangers and ensures complete safety for all staff involved in the production process. This could be relevant to new equipment installation, updating an existing process to make it more reliable, and including various layers of control



Automation

Automation looks at specific stages within a production process to see what sequence of steps can be automated. This is based on the intelligent logic from the results of the previous stages, such as opening and closing of valves and activating switches. Historically, these would be manual checks carried out by an individual, which may have led to human error, safety concerns, or slowing down of the production process.



How can control & automation benefit manufacturers?

With **improved reporting functionality on production output efficiency**, the latest control and automation systems **improve reliability, minimise downtime, and provide a safer working environment**. AES favour Siemen's technology with its simple user dashboard-style interface and a clear graphical representation of the production process.

Where production processes require the introduction of various elements and ingredients at various stages, weights and temperatures, automation can be hugely beneficial. Even **marginal** gains in production efficiency and consistency can provide a competitive edge.

Control and automation solutions can be developed for single motor control panels and multiple motor control sectors with the associated HMI (Human Machine Interface). The web-user interface enables internal personnel to control the user interface remotely meaning any **potential issues can be identified and rectified quickly** (with an alarm logging feature), **minimising production downtime.**

Control & Automation

How AES can help

When you purchase new machinery from an OEM or a reseller, they don't usually assist with the electrical installation of the equipment. This is where AES comes in, and is the reason we added control and automation to our range of specialist services.

AES will conduct a **free site survey** to assess your production process and fully understand which areas can benefit most from control and automation enhancements. This will often centre around those processes where the equipment is unreliable or keeps breaking down, disrupting the process and having a considerable impact on production outputs. **We can also survey new installations.**

AES can offer a complete end-to-end service to manufacturing businesses to review production process and recommend control and automation enhancements.

- Free site survey
- Free quote and top-level process overview
- Detailed designs
- Programming production process logic
- Software configuration and control panel manufacture.
- On-site build and installation
- Testing of system
- User-training



Our highly experienced team use the latest computer design software to ensure that the designs comply with the relevant British and European standards.

Once a quote is accepted, we proceed to the detailed design stage, which will be presented to you for approval. We will then start programming the logic to control the production process, configuring existing software, and manufacturing the control panel(s) in our quality-assessed engineering workshop.

Once programming has been completed, we will typically require two days on-site to build and install the control panel and user interface and thoroughly test the whole system. After testing, we provide on-site user training and supply you with a bespoke user manual.



Empowering Performance

AES Ltd, Pildacre Lane, Ossett, West Yorkshire, WF5 8HN

- T: 01924 283 737
- E: info@advancedelectrical.org.uk

Advanced Electrical Services

W: advancedelectrical.org.uk















