

# AMELEC's history in the Nuclear Sector



## Brief Summary – Nuclear Sector

Amelec is a wholly owned British design, manufacturing and supply company specialising in the analogue signal conditioning market, providing a very high level of quality and service over the past 35 years. As an international supplier across the globe, AMELEC supply process monitoring & control instrumentation for use within the general process control & safety systems across all areas of plant. The flexibility allows our customisable products to be used in numerous applications, incl:

- Nuclear Island Equipment & Systems
- Reactor Monitoring & Control Systems
- Steam Turbine & Generator Equipment & Systems
- Fuel Route Systems
- Waste & Used Fuel management & Handling Systems
- General Balance of Plant control systems

Our proven track record over the past few decades shows that we can support all types of projects from each of our customers. AMELEC supply to all the major companies in the nuclear industry sector, incl:



AMELEC has both the flexibility and capability to meet the demands of our customers within a given time period. We are so confident that our products can satisfy all the plant needs and process demands, that they are manufactured and supplied with up to 10 year warranty! We provide that peace of mind to our customers and the faith that we have worked hard to maintain high quality standards, also having gained a wealth of experience from working with major nuclear sites in the UK. Our range of services extends beyond the designing, manufacturing and supplying of signal conditioning instruments, they also include calibration/repair and refurbishment services, system life extensions/ upgrades and obsolescence-retrofit solutions.

## Brief Summary – Nuclear Sector (cont'd)

The flexibility and fast response technical support offered by AMELEC enables our safe and sound products to be easily configured to meet bespoke requirements. With regard to ongoing maintenance & support, we have detailed archives dating back to when AMELEC first started trading and therefore are able to also offer extensive engineering traceability.

Within the vast range of instrumentation produced by AMELEC, products are available suitable for use in SIL 1, SIL 2 & SIL 3 rated safety loops, systems and applications. All of the instruments are fully tested and calibrated to customer requirements in the UK factory prior to shipment, with test &/or full calibration certificates available upon request.

We are compliant to the ISO 9001:2008 Quality Management system and in addition have recently been awarded '**100% in Quality**' through the UVDB Verify scheme, empowered by Achilles.

AMELEC customers recognise the incredible quality, predictability and reliability of the instruments through our design techniques used and the history we have built. The design principles are based on analogue techniques, using readily available discrete components to greatly meet our expanding customer's needs, both here in the UK and across the globe.

Our core principles of outstanding quality and service led us to successfully manufacturing and supplying to the last UK Nuclear New Build project, the Sizewell B Power Station in Suffolk. AMELEC delivered in the region of **3,000** modules for use within various monitoring, control and safety systems across the plant, and to this day we are proud to still be providing support to the station operations and maintenance engineers.

AMELEC also produce instruments which have the full Seismic qualification, products that were qualified on a tri-axial seismic table to the Sizewell B spectra, being shaken to 0.25g & 0.4g all sites spectra, passing all tests and giving the engineers involved with the Sizewell B new build project considerable confidence in our seismic capability. Furthermore the AMELEC range of instrumentation has been tested in line with IEEE323 & IEEE344 standards and all of the AMELEC '**K**' option products comply with the **Radio Frequency Immunity** tests in accordance with the CEGB's DN5, IEC801-3 & IEC61000-4-3 standards.