

## EVALUATION AND REFURBISHMENT OF THE BABCOCK BRISTOL LTD. SERIES 4 MODULES



### Challenges

Our customer required evaluation, assessment and refurbishment of a range of analogue control modules at two different sites, as part of a larger Plant Life Extension Strategy Programme.

The equipment dates from the 1980s, comprising of a range of rack-mounted analogue electronic function and signal conditioning modules in a range of configurations, with accompanying power supplies and operator interfaces.

The original Equipment Manufacturer (OEM), Babcock Bristol Limited (BBL), no longer manufactures or provides support for these devices. Therefore, ageing and obsolescence is a risk to the associated systems' ability to continue to operate reliably.

### Decision-making process

After an extensive customer requirements' capture exercise, a phased approach was agreed.

Module assessment and evaluation was prioritised allowing us to define the process and plan a refurbishment schedule that aligned with our customer's requirements.

### Solution

We conducted a comprehensive ageing and obsolescence evaluation, design review, test procedure generation and refurbishment of Babcock Bristol Ltd Series 4 modules across our customer's sites.

The work package included the evaluation of 42 module types covering input and output conditioning and controlling function, assessment of available options, risks to continued support and defined available mitigation measures. A full refurbishment and delivery plan for 372 modules was developed with our recommendations for long-term maintenance, support and storage.

Throughout the whole process, our customer's system and QA engineers reviewed the quality of the documentation and the refurbished modules.

### Results

We took a collaborative approach with our customer to ensure the deadline was met. A customer-focused delivery and a flexible resource approach was taken to ensure work was delivered to the highest quality within five months.

Understanding the requirements, having a good ability to plan, maintaining a critical path mentality and communicating effectively internally and externally, were vital for project success.

We worked to deliver high quality evaluations, assessments and refurbishments to ensure longevity for safety related systems. This robust, thorough and detailed piece of work offered a cost effective alternative to re-engineering or wholesale replacement