National Employer Service

Case Study: Doosan Babcock Energy Limited

The NES Case Study Series

This series of case studies is about employers who contract with the National Employer Service (NES) at the LSC. Researchers at York Consulting LLP gathered the information for the case studies by speaking to senior staff in each company and trainers, tutors, assessors and employees involved with NES funded programmes.

Each case study briefly describes the company and the training programme funded. The focus is on the key challenges the company has faced in relation to the programme and how the company overcame these. In some instances, the programme itself is a response to challenges facing the company as a whole.

Any opinions, findings, conclusions, or recommendations expressed in this report are those of the authors and contributors and do not necessarily represent QIA's views.

About Doosan Babcock

Doosan Babcock is a multi-national engineering and technology company operating in, amongst others, the thermal and nuclear power generation, petrochemical and oil & gas industries.

Since 2002, Doosan Babcock has held a contract with the NES. The contract is predominantly to part-fund the NVQ elements of Advanced Apprenticeship and programmes in engineering and manufacturing delivered through the Train to Gain service. Whilst not exclusively, the majority of trainees on the NVQ programmes have been working towards an Advanced Apprenticeship in Welding.

"We want to invest in and train qualified craftspeople." HR Director

Challenge: Securing the Future

Operating in technologically advanced and capital-intensive industries, high skills levels are important for Doosan Babcock not just now, but also in the future. Large capital projects such as electricity generation plants, whether the proposed carbon capture coal fired stations or the possible next generation nuclear plant, will need significant and long-term maintenance once completed.

Response: Demographic analysis of skill needs

The company analysed the demographics of their workforce in 1996 to identify future gaps and shortages.

The analysis showed a demographic bottleneck for a range of industries and skills, most notably welding where the high average age meant that there was an impending skills shortage in the company. Taking this analysis forwards, a training strategy was implemented to attract and train a new generation of craftspeople.

"We are firmly committed to grass roots training." HR Director

Challenge: Recruiting the Best People

Doosan Babcock operates in industries where in recent history it has been tough to attract young, talented individuals. Without the next generation of craftspeople coming through, the future prospects for the company are limited.

Response: Quality Training as a Recruitment Tool

As a means to attract young people into the company, Doosan Babcock has developed a first class training programme and facilities.

The company goes out of its way to ensure that the trainees have access to the highest quality equipment and are as prepared as possible after training to go out on site.

The tools used at the training facilities are identical to those the apprentices will use when on site. Going the extra mile, the company also tries to create a real world setting for the apprentices to experience at the training facilities. For example, the company will hire a crane at around ± 300 a day so that apprentices can experience working around machinery they will find day to day on site.

The company offers apprentices additional training beyond that required for their role, such as fork-lift truck training, as well as providing support for their life outside work, in the form of a counselling service and debt management courses.

"We believe we have the best welding school in Europe." HR Director

Challenge: Working with an External Training Provider

To achieve the Key Skills and theory element of the Apprenticeship programme as quickly as possible, Doosan Babcock decided that college block release was the best way forward. However the company had little experience of working with the FE sector and initial approaches to their local provider were not positive in terms of the quality and flexibility they could offer.

Response: Proactive Relationship Building with Excellent Colleges

Having seen a presentation at a conference, Doosan Babcock approached Leeds College of Technology to see whether they could work together. What attracted the company to the college were the business-like approach to meeting the company's needs, being prepared to be flexible around timescales and to tailor the programme to Doosan Babcock's requirements.

"Leeds were just more forward looking." NVQ Assessor and Apprentice Instructor

Whilst the initial contacts were positive, what has followed is real example of how to build and strengthen an employer-training provider relationship. For example:

- Doosan Babcock have purchased equipment for the college, to ensure that what the apprentices use in college are the same that they will use elsewhere in their training and on site;
- college tutors have visited the sites that the apprentices will work on, taking photographs to take back to share with their colleagues.

The Doosan Babcock training manager goes up to the college once every three weeks during block release to ensure that maintenance of the quality of training.

Challenge: Integrating Apprentice Training Needs and Business Requirements

Doosan Babcock has to try to balance the training needs of its apprentices against the business demands on the workforce. A critical issue in managing these priorities is that site managers understand the training process and needs of individual apprentices. In this way site managers can determine what tasks and activities should be undertaken by apprentices and how best to allocate coaches.

This is not straightforward, with numbers of staff on site to manage fluctuating between 30 and 500 employees at any one time. This has an impact on the 'on-the-job' training a specific apprentice can undertake and on the need to build a block of skills on a continuous, incremental basis.

Response: Tying the Training Unit Into Forward Resource Planning

The detailed Apprenticeship Training Annual Plan, produced by the Training Unit, is now included in forward resource planning within the company as a whole. This means that the Unit can more effectively tie in operational activities on site with the training needs of apprentices.

"The company is making a significant investment in us." Apprentice

"Doing practical sessions at the school is like being on-site." Apprentice