

Doosan Babcock Energy Limited

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Background information

Inspection judgements

Inspectors use a four-point scale to summarise their judgements about achievement and standards, the quality of provision, and leadership and management, which includes a grade for equality of opportunity.

Key for inspection grades

Grade 1	Outstanding
Grade 2	Good
Grade 3	Satisfactory
Grade 4	Inadequate

Further information can be found on how inspection judgements are made on www.ofsted.gov.uk.

Scope of the inspection

In deciding the scope of the inspection, inspectors take account of the provider's most recent self-assessment report and development plans, and comments from the local Learning and Skills Council (LSC) or other funding body. Where appropriate, inspectors also consider the previous inspection report (www.ofsted.gov.uk), reports from the inspectorates' quality monitoring or annual assessment visits, and data on learners and their achievements over the period since the previous inspection.

In addition to reporting on overall effectiveness of the organisation, its capacity to improve further, achievement and standards, quality of provision and leadership and management, this inspection focused on specialist provision in:

- Engineering and manufacturing technologies

Description of the provider

1. Doosan Babcock Energy Limited (Doosan Babcock) is a mechanical engineering company which operates in the engineering construction industry. Its main business is the repair and maintenance of major capital plant installations including coal, gas and nuclear power generation, oil refineries, chemical process plant, pharmaceuticals, steelworks and other process plant installations across the United Kingdom and Europe. To meet its contracts within the energy services sector, the company employs 1,750 to 2,400 craft level employees out of a total UK workforce of 3,400. The company's head office is situated in Crawley, West Sussex with the main administration for the Europe region based at a facility in Renfrew, Scotland. The offices in Tipton, West Midlands, provide service support for site and regional activities, as well as being the administrative centre for training. The training centre at Tipton is approved as a centre for the delivery of national vocational qualifications (NVQs) and apprenticeships by the Engineering Construction Industry Training Board (ECITB).
2. The company contracts with the National Employer Service of the Learning and Skills Council. Government funded training accounts for 48% of all NVQ training delivered by the company. At the time of the inspection, 204 learners were following programmes in engineering and manufacturing technologies, four learners were in business administration and law, and three learners were in construction, planning and the built environment. Of those on engineering programmes, 164 were advanced apprentices specialising in welding, steel erecting, pipe fitting or mechanical fitting. Thirty-six adult learners were on a Train to Gain programme and four learners were following an NVQ-only programme. The company contributes to an industry initiative to remedy the national skills shortages by training employees, using a training route leading to ECITB accredited NVQs. Learners are recruited from across the country. Key skills and technical certificate training is subcontracted to Leeds College and Hull College.
3. The operations support manager provides strategic direction for all aspects of the company's work-based learning. He reports to the director of operations support and is assisted by a development manager for craft skills and a small team of administrators. There are 39 assessors and 12 internal verifiers.
4. Most apprentices are referred to the company by Connexions. They attend an interview and if successful, they are invited to a selection and assessment day at the training centre in Tipton. Those offered a place then receive a four day induction at the training centre, followed by a trade-specific induction when they begin their training. Train to Gain learners are referred to the programme by their line manager. They receive an initial assessment, followed by trade-specific NVQ training. Advanced apprentices aim to complete the programme in 42 months. Train to Gain learners usually complete the programme in 24 months.

Summary of grades awarded

Effectiveness of provision	Good: Grade 2
Capacity to improve	Good: Grade 2
Achievement and standards	Good: Grade 2
Quality of provision	Good: Grade 2
Leadership and management	Good: Grade 2
Equality of opportunity	Contributory grade: Satisfactory: Grade 3

Sector subject area

Engineering and manufacturing technologies	Good: Grade 2
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Overall judgement

Effectiveness of provision

Good: Grade 2

5. The overall effectiveness of the provision is good. Achievement and standards, the quality of provision and leadership and management are all good. Provision in engineering and manufacturing technologies is also good. Equality of opportunity is satisfactory. The company's response to social inclusion is satisfactory.

Capacity to improve

Good: Grade 2

6. Doosan Babcock has demonstrated good capacity to improve. Most of the strengths identified during the previous inspection have been maintained. Training in engineering remains good. Overall success rates are high. Few learners leave the programme early. Leadership and management are good. Good progress has been made to improve some aspects of the provision since the previous inspection. However, the company has been slow in tackling weaknesses in internal verification arrangements and aspects of equality of opportunity. The quality improvement plan clearly identifies most of the company's key strengths and areas for improvement. Senior managers set clear improvement targets and regularly monitor progress against identified actions.
7. The self-assessment process is thorough and inclusive. Good use was made of information about learner recruitment and success rates to arrive at sound judgements. The views of staff and learners were taken into account. The company's senior managers moderated the report. The company accurately identified most of the strengths and areas for improvement found by inspectors. However, the self-assessment did not identify weak internal verification arrangements or insufficient training for staff in equality of opportunity as areas for improvement. Inspectors gave a lower grade for equality of opportunity than that in the self-assessment. Inspection grades matched the self-assessment grades for all other aspects of the provision.

Key strengths

- High overall success rates
- Very good development of learners' practical skills
- Well-managed flexible training in the workplace
- Good range and achievement of additional qualifications
- Good support to develop learners' confidence and self-reliance
- Good strategies to train and develop the workforce

Key areas for improvement

- The poor monitoring of learners' progress
- The weak internal verification

- The insufficient training for staff in equality of opportunity

Main findings

Achievement and standards

Good: Grade 2

8. Overall success rates are high and particularly good for this sector, where much of the work is seasonal. This strength is identified in the self-assessment report and in the previous inspection report. Framework success rates for engineering advanced apprenticeships in the previous 12 months is 69%, well above the 2005/06 national average of 48% and still above the provisional national average of 61% for the previous 12 months. Overall success rates on Train to Gain programmes are also high and have been around 75% or higher in each of the last four years. Retention is good and few learners leave their programmes early.
9. Learners' development of practical skills is very good. Tutors at the training centre in Tipton help learners to quickly develop a range of useful skills which they apply effectively on-site. Well-designed training helps them develop basic engineering skills in their chosen trade. Resources to support training in welding and steel erection are of a particularly high standard. Staff are careful to ensure that practical training replicates practice in the workplace. Many learners quickly develop the confidence and ability to work independently with minimal supervision. They carry out routine repair and maintenance work to very exacting standards and some are confident enough to influence changes to specifications, for example, when installing new equipment.

Quality of provision

Good: Grade 2

10. Learners have well-managed flexible training in the workplace. The management and organisation of on-site training is good. Individual training needs are clearly identified. Training plans are developed immediately the learners arrive to take up jobs. Appropriate tasks to meet learners' needs are carefully selected. Learners are relocated when sites are identified that cannot provide the range of work needed. At the training centre in Tipton, learners acquire understanding of job requirements quickly and they complete a series of well-designed tasks to help them develop the basic engineering skills required. Learners are not allowed to progress onto more difficult exercises until they can demonstrate a satisfactory level of proficiency in each task.
11. Learners gain a good range of qualifications, valued within the engineering construction industry additional to the primary qualification target. The skills and knowledge gained by learners helps them to function more effectively as skilled craft workers. Additional qualifications include coded welding certificates, lift truck operations, overhead crane work, slinging and banksman training, abrasive wheels and health and safety awards. Most advanced apprentices study the NVQ Level 2 in Supporting Engineering Activities, which considerably enhances their skills and experience, though the qualification is not a mandatory requirement for the framework.
12. Learners receive good support to develop their confidence and self-reliance. They cope well with the requirement to travel and live away from home for several weeks at a time. Most apprentices stay in approved accommodation and lodgings during the alternate

blocks of training at the training centre and the college. To encourage learners to look after each other and to combat homesickness, they are always accommodated in hotels in groups of two or more. Learners support each other well and become increasingly self-reliant. Throughout training, the learners work under the close supervision of experienced colleagues and the support given extends beyond course requirements. Where learners have experienced difficulties with workshop tasks, the company offers individual support. Learners are encouraged by their workplace supervisors to seek pastoral support in matters relating to social and domestic matters. Female apprentices are introduced to experienced female engineers who provide help and support and who act as a positive role model.

13. Advice and guidance for apprentices and their parents on joining the programme is comprehensive. Prospective apprentices receive very clear and informative advice about careers in the heavy engineering industries, which helps them to make an informed choice. Learners on Train to Gain programmes receive satisfactory advice and guidance about the benefits of NVQ study.
14. Monitoring of learners' progress is poor. Procedures for recording learners' achievement of specific NVQ units and elements are weak. Staff do not have enough information to enable them to make judgements about the progress of individual learners. Staff do not always adhere to progress review schedules for advanced apprentices. Adult learners have only recently begun to receive progress reviews. The review paperwork does not specifically identify the elements or units that the learner has achieved since the previous review. The outcomes of the review consist of general statements and lack specific targets for the completion of units or elements of the qualification. Reviews are sometimes combined with assessment activities, which cause unnecessary confusion for some learners.
15. Internal verification is weak. This area for improvement is not identified in the self-assessment report, but internal verification arrangements were found to be weak at the previous inspection. Internal verification is not effectively planned. Assessors are not clear about when internal verification will take place or who will carry it out. There is insufficient guidance for internal verifiers and assessors about the company's expectations of internal verification activity. Learner portfolios are often verified only after they have been completed. Feedback to assessors is not always sufficiently detailed. Some areas for improvement in assessment practice are not identified by the internal verification process. Progress in tackling this weakness has been slow.

Leadership and management

Good: Grade 2

Equality of opportunity

Contributory grade: Satisfactory: Grade 3

16. Doosan Babcock's senior managers have developed good strategies to train and develop the workforce. The company recognises that the current workforce is aging and many craft employees are likely to leave the industry in the next five years. A good range of training programmes in welding, pipe fitting, mechanical fitting, steel erecting and plating has been developed to deal with these issues. Significant investment has been made in training and developing staff to manage, train and assess the programmes. Most tutors

based at Tipton are trained assessors and have been trained in instructional techniques. None of the tutors have any teaching qualifications. Managers work with appropriate bodies to help develop the NVQ standards and apprenticeship frameworks. The company has made considerable investment in off-the-job training resources, including specialist equipment and plant, to match those used in the workplace. Sixty modern welding bays have been built for learners to develop their skills and a specialist rig has been recently constructed to train erectors.

17. Quality assurance arrangements are satisfactory. A quality assurance manual and a separate procedures manual for all of the activities on the advanced apprenticeship and Train to Gain programmes have been produced. The manual is part of the company's quality assurance system which is approved to an international quality assurance standard and is audited regularly. Staff use a good range of methods to gain feedback from apprentices, including questionnaires, although feedback from adult learners has only begun to be collected recently.
18. Arrangements for literacy, numeracy and language support are satisfactory. The company has a rigorous apprenticeship selection and recruitment process and few learners have literacy, numeracy or language support needs. Initial assessment of apprentices is thorough and includes a range of assessment activities, for example, mechanical comprehension assessments, literacy and numeracy exercises and skills tests. These are used effectively to place apprentices on an appropriate occupational programme. On Train to Gain programmes, prospective learners are referred to the programme by their line manager. Initial assessment for these learners is satisfactory, though the process is not formally structured as it is for apprentices.
19. Senior managers are strongly committed to promoting a diverse workforce. The company employs a small number of NVQ learners aged over 60. In recent months the company recruited a group of eight ex-offenders onto the adult learning programme. Though only one learner from this cohort remains on the programme, he now works as a skilled grinder and is making good progress towards an NVQ at Level 2. Appropriate arrangements are made to meet learners' cultural and religious needs. For example, a Muslim learner was given an alternative work schedule during Ramadan.
20. Training for staff in equality of opportunity is insufficient. This area for improvement is not recognised in the self-assessment report. No equalities training has been carried out since the previous inspection. Staff have a rudimentary understanding of equality of opportunity. Many lack the confidence to promote and reinforce equality and diversity matters to learners. Learners receive appropriate information about equal opportunities during induction. The company delivers a range of promotional and marketing activities to recruit learners from under-represented groups. Management information on applications for apprenticeships from women and minority ethnic groups is carefully monitored. The proportion of applicants from under-represented groups has increased but numbers on programme remain low.

What learners like:

- 'Training at Tipton is unbeatable'
- 'The training is second to none'
- 'Get a career out of it'
- 'The opportunity to learn a trade'
- 'Opportunity to better myself'
- Good working relationships

What learners think could improve:

- 'The boring but necessary induction'
- 'The length of the programme...it's too long'
- The cross-referencing of log books
- The amount of time available to meet other apprentices

Annex

Learners' achievements

Success rates on **work-based learning 'apprenticeship' programmes** managed by the provider/college 2004 to 2006

Programme	End Year	Success rate	No. of learners*	Provider/c college NVQ rate**	National NVQ rate**	Provider/college framework rate**	National framework rate**
Advanced Apprenticeships	03-04	overall					
		timely					
	04-05	overall					
		timely					
	05-06	overall	6	67%		67%	
		timely	25	0%***		0%***	
Apprenticeships	03-04	overall					
		timely					
	04-05	overall					
		timely					
	05-06	overall					
		timely					

* Learners who leave later than originally planned are counted in the year they actually leave. This group of learners are then added to the learners who planned to complete in a given year and did so or left earlier than planned

** College and national qualification success rates are calculated using LSC published data derived from the 'Individual Learning Record'

*** Published data unreliable in 05-06, first full year of completions (4 year programme)

Success rates on **work-based learning 'Train to Gain' programmes** managed by the provider/college 2006 to 2007

Programme	End Year	Success rate	No. of learners*	Provider/college NVQ rate**
Train to Gain ***	05/06	overall	60	97%
		timely	37	68%
	06/07	overall	42	74%
		timely	22	29%

* Learners who leave later than originally planned are counted in the year they actually leave. This group of learners are then added to the learners who planned to complete in a given year and did so or left earlier than planned

** College and national qualification success rates are calculated using LSC published data derived from the 'Individual Learning Record'

*** Includes 'Train to Gain' long course NVQ provision, but not 'Skills for Life'