



ENVIRONMENTAL TECHNOLOGY

Training Overview

Mainly limited to UK based group companies and employees only. (No external training and no internal training provided outside of the UK is included.)

The group has been an accredited/audited Investor in People since 1994 and a vast array of more normal training activities is not included in this overview.

Summary

It has been widely reported that between 2017 and June 2023 AESSEAL plc has recruited 233 apprentices. We have always recruited apprentices for workshops, and by that, I mean for 30 years or more. The change in 2018 was that we decided to recruit apprentices for all areas of the business, not just our Rotherham Workshops.

When we purely look at the machining side of our workshops in Mill Close Rotherham, we had 91 machinists in total in 2017 in SPD including HCC, Volume Production and Bearing Protection. Year-to-date 2023 that number has grown to 115.

When reviewing our apprentice intake, and I am currently being specific to the Rotherham Workshops only, we look at retention of apprentices, which is currently running at around 75%. We also look at the fact that we lose around 10 existing members of staff a year for a variety of reasons, one of the most significant of which is retirement.

We carefully review the apprentices we currently have in full time training and those who are on day release. Most importantly, however, we look very closely at our ability to supervise, mentor, and provide external and internal training for all apprentices, not just Workshop apprentices.

The conclusion, after careful analysis, is that we will recruit 8 Workshop apprentices a year, over the next 5-year period. We have also concluded that we are not at apprentice saturation level. We hope that the expensive equipment on order will continue to improve productivity, but we know, that even with this level of apprentice intake, we will still need to occasionally recruit CNC Operators in the marketplace.

This summer it is our intention to hire 33 apprentices 25 of whom will not be for Rotherham workshops. That headline number includes Bradford, who will recruit 5 to 6 a year for the next 5-years, Derby, AVT and every other area of the U.K. business outside of the Workshops in Mill Close.

We recruit apprentices because we need to train our own. In the last five years the cost of apprentice training has been £5.4 million taking into account external training fees, mentoring, management costs, and the salary cost for day release training.

We train apprentices to compensate for the lack of training and skills development from other businesses and to secure our ability to provide customer service in the future and we consider the £5.4 million not as a cost, but a necessary investment in our future.

MPDS Monitored Professional Development Scheme

AESSEAL plc is accredited by the IMechE to operate an MPDS scheme to train and develop engineers from technician level to Chartered Engineer status. Part of the criteria for accreditation is that the scheme must have Board level support and/or be championed from the highest level of the business. Of the 516 employees in AESSEAL plc (out of 1930 in the Group) 161 are engineers (HNC, HND and above), 7 of which are Chartered Engineers. Since its introduction, 5 employees have successfully completed the MPDS scheme and achieved Chartered Engineer status.

The act of producing this report identified weakness in our Outreach programme particularly with the two Sheffield Universities and as a result we will now do more to provide vacation roles, placements and first job opportunities.

Management Development Training

The purpose is to train the next generation global business leaders.

In the last year alone two events have been held in Sheffield, each involved 10 candidates from AESSEAL® businesses around the world. The cost of external trainers was £40,000 and flights, hotels meals and other expenses an additional £45,000. The time cost for the 20 people was £25,000.

The value to the business is that succession has been planned in many of our 70 International Operating businesses.

Fast Track Management Development – UK

The programme started in 2010 as a reaction to “it is impossible to hire graduates, it is impossible to replace any part of my tasks with capable people and there is a dearth of management skills that cannot be trained”. To this my normal response is, “ the harder we work the better chance we have of overcoming real or imagined difficulties”.

The process involves hiring university graduates with high potential to create the business leaders of the future for society or the group. We always expected a high churn as we were the first employer.

The mentoring/oversight is a semi formal best practice sharing weekly event every Friday afternoon about 1 hour long and is led by the Group M.D.

As the most important requirement for a future business leader is to hire, develop, train, and retain people who are better than themselves in at least some activities, the successful candidates were obligated to hire their own replacements no later than one year after entering the programme.

Two of the “graduates” from the programme are group company directors, one of a £30 million and one of a £75 million business, but one of our original apprentices has also been appointed as a director of a group company.

AVT Reliability

AVT Reliability Ltd had 67 full time employees in the UK at the end of May 2023.

The training listed below is stellar and makes the team the most skilled condition monitoring experts globally as they have been cross trained in multiple disciplines, not just vibration analysis. The training period covered is from 2018 to 2023. In an Industry with massive skills shortage AVT has a waiting list of professionals desperate to join the best trained team in the business.



Vibration Analysis:

Total number of AVT staff trained: **63**

Number Progressed from VA1 to VA2: **25**

Number Progressed from VA2 to VA3: **10**

Number Progressed from VA3 to VA4: **1**

3 staff members will attend the VA4 course run by MINA in Knoxville in October 2023

There are only very few VA4s in the entire world and at the end of 2023 AVT, a fully owned subsidiary will have 4 full time plus one part time and one lapsed as promotion to a director discontinued the day-to-day use of the skill.

Asset Reliability Practitioner:

Total number of AVT staff trained: **35**

Number Progressed from ARP-A to ARP-E: **0**

Number Progressed from ARP-E to ARP-L: **1**

34 of 35 staff are currently trained to the ARP-A level which is most appropriate for our requirements. One is trained to the ARP-L as required to deliver the training sessions.

Mastering Lubrication Analysis:

Total number of AVT staff trained: **46**

Number Progressed from MLA-1 to MLA-2: **4**

MLA Level 1 is the most appropriate level for most staff. Those who are doing Lube Assessment surveys or dealing with large quantities of oil analysis have been trained to MLA Level 2

Infrared Thermal Imaging:

Total number of AVT staff trained: **8**

Number Progressed from IRT Level 1 to IRT Level 2: **1**

One has been trained to Level 2 as he is the IRT engineer for offshore oil and gas contracts. Level 1 is the most appropriate level for most staff.

Ultrasound Analysis:

Total number of AVT staff trained: **8**

Number Progressed from UA Level 1 to UA Level 2: **0**

At present there is only a Level 1 accredited course for Ultrasound Analysis.

Opinion on the cost and value of training

Spending £5.4 million on apprentice training and millions more on many other training activities has not been a cost. It is an investment in a skilled and trained workforce, that is making the business millions as we are competing with companies who have a huge skill shortage. As a result of training and development and the apprenticeship programme is only a part of the investment in people, the AES Engineering Ltd Group does not register skills shortage as even on the top ten list of opportunities for improvement.

The report was produced for internal consumption and as a gap analysis from which we identified Outreach to local Universities as an opportunity for improvement.

A decades long approach to training works if the leadership intends to be around for decades to enjoy the benefits, so the report may have limited relevance to members of the “CEO Networking Club”. It should probably be retained for internal use only, unless someone else thinks it might encourage others to do more to solve their skills shortage.

Best regards

Chris Rea, CBE, DL, BSc, CEng, HonFIMechE

Managing Director

On behalf of AES Engineering Ltd. Group of Companies