# The Swarm Training Programme

Improvement Technician

Level 3

Improvement Technicians are responsible for delivery and coaching of improvement activity within an area of responsibility, often associated with Lean and Six Sigma methodologies. They can be found across all industry sectors and functions including automotive, banking, engineering, food products, IT, property, retail, telecoms Local and County Councils, NHS, Voluntary / Charity, Utilities, Pharmaceuticals, Insurance, Hospitality etc. This apprenticeship develops the knowledge and competences for Improvement Technicians

## The Programme

Typically, Technicians work as a member of an operational team to resolve problems - preventing re-occurrence, engaging others in issues affecting them and to support the improvement of performance. Typical activities include:

Engaging team members in the identification of improvement opportunities and relevant countermeasures and controls

Initiating and facilitating improvement activities through to confirmed resolution

Providing local expertise in business improvement methods and basic tools to team

There are a variety of job titles associated with the occupation, these include, but are not limited to: Business Improvement Co-ordinator, Continuous Improvement Executive, Process Technician, Operational Excellence/Lean Engineer, Lean Six Sigma Yellow belt and Quality Control Analyst, Environmental Compliance Technician, Environmental Construction Oversight, Environmental Health and Safety Inspector, and Transportation Planner.

**Level:** Level 2

**Duration:** 12-13 months of learning plus up to 12 weeks of End Point Assessment Process.

- Apprentices without level 2 English and Maths will need to achieve this level prior to taking the end-point assessment.

**Delivery Model:**

- Hybrid of classroom workshops and remote webinars (depending on number of learners).

- One on One monthly mentoring and tutoring sessions to support in application of knowledge, skills and behaviours.

- Progress Reviews every 4 months.

## The Standard

Apprenticeship standards are based on occupational standards. An occupational standard is a short and concise document that describes what someone who is competent in the occupation normally does – 'duties', and the 'knowledge, skills and behaviours' (KSBs) required to carry out these duties competently; along with any qualifications that must be taken and alignment with professional recognition if applicable.

## Knowledge

- **Compliance:** Legislative and customer compliance requirements including environment and health and safety

- **Team formation & leadership:** Improvement team roles and responsibilities in a change environment

- **Self-development:** Different sources for knowledge development

- **Project management:** Project charter, Gantt chart, reporting documentation, Red Amber Green (RAG) status, communication (verbal and non-verbal channels) and implementation plans

- **Change management:** Roles of the manager and leader within change. Influencing, reinforcement and coaching principles

- **Principles & methods:** Six Sigma principles per ISO13053 (International Organisation for Standardisation), interim containment actions, Lean principles

- **Project selection & scope:** Selection matrix, scoping tree

- **Problem definition:** Exploratory data analysis, data collection planning, problem and goal statements

- **Process mapping & analysis:** Supplier Input Process Output Customer (SIPOC), process mapping, value and waste analysis, performance metrics - discrete data

- **Data acquisition for analysis:** Data stratification, sampling theory, data types, variation types and sources, data collection tools, operational definition and principles of measurement error

- **Basic statistics & measures:** Control charts - discrete data

- **Process capability & performance:** Capability analysis - continuous data

- **Root cause analysis:** Histograms

- **Experimentation:** Active analysis versus one factor at a time, Plan Do Check Act

- **Identification & prioritisation:** Brainstorming, selection criteria

- **Sustainability & control:** Process

# Skills

- **Compliance:** Work in accordance with organisational controls and statutory regulations

- **Communication:** Share improvement progress through appropriate reporting

- **Project management:** Plan, manage and implement improvement activities. Identify and support management of risks. Develop the business case for improvement activity and implementation

- **Change management:** Engage through communications. Reinforce – positively and negatively. Effectively coach peers

- **Principles and methods:** Use a structured method and appropriate improvement tools engaging with subject matter experts to deliver business benefits

- **Project selection and Scoping:** Identify and scope improvement projects and establish clear measurable objectives

- **Problem definition:** Develop a problem/ opportunity statement supported by validated data

- **Voice of the customer:** Apply techniques to identify customers, their requirements and translate these to metrics

- **Process mapping & analysis:** Apply process mapping tools to visualise processes, analyse process performance establishing key insights for performance improvement

- **Lean tools:** Apply techniques such as identification and removal of 8 wastes, 5S (Sort, Shine, Set, Standardise, Sustain), standard work, kaizen, visual displays and controls, error proofing, preventative maintenance

- **Data acquisition for analysis:** Develop data collection plan and validated measurement processes to understand performance

- **Basic statistics & measures:** Establish patterns and trends in data over time using tally, pie, run/trend and pareto charts

- **Data analysis-statistical methods:** Identify common and special cause variation

- **Process capability & performance:** Analyse product/process performance using good quality data

- **Root cause analysis:** Use cause and effect diagrams, technique of 5 whys and graphical analysis to understand and verify root causes

- **Identification & prioritisation:** Identify and prioritise improvement solutions

- **Benchmarking:** Recognise the value of sharing best practice

- **Sustainability & control:** Create control and reaction plans with detection measures, identify opportunities to embed changes to leverage benefit to the business.

## Behaviours

- **Drive for results:** Clear commitment for identifying opportunities and delivering improvements, pays attention to detail

- **Team-working:** Helps when asked, works effectively in a diverse team, considers impact of own actions on others, motivates peers

- **Professionalism:** Acts in a moral, legal and socially appropriate manner, aligns behaviours to the organisations values, trusted to working on own when appropriate

- **Continuous development:** Acts upon feedback, reflects on performance and has a desire for learning

- **Safe working:** Ensures safety of self and others, challenges safety

## Delivery Timeline

### Phase 1: On Programme Training and Learning

#### Developing the Knowledge

The knowledge training is primarily delivered via classroom workshops & webinars (numbers dependent) or 121 via tuition. The content of this is based on the main knowledge outcomes that provide a depth of understanding for the skills. Employer collaboration/involvement is key to supporting some of the workshops/content as many will need to be bespoke to meet the employer specifics.

#### Skills Development and Portfolio Building

Evidence to demonstrate the performance of knowledge, skills and behaviours will be supported via 121 tuition and mentoring with evidence collected via our E portfolio system. The development of the skills aims will be done throughout the programme and evidence of performance will be gathered to create a showcase portfolio required by the End Point Assessment.

### Reviews

Every twelve weeks the tutor will conduct a progress review with the learner and line manager to support in keeping the progress on track, identify any issues and plan the next phase of collaborative earning.

### English & Maths

Apprentices without level 2 English and maths will need to achieve this level prior to taking the End-Point Assessment. For those with an education, health and care plan or a legacy statement, the apprenticeship's English and maths minimum requirement is Entry Level 3. A British Sign Language (BSL) qualification is an alternative to the English qualification for those whose primary language is BSL.

### Phase 2: Gateway and End-Point Assessment

### EPA Gateway

When all learning has been completed and evidence in the portfolio has been gathered, the next process is to conduct the Gateway review.

The gateway review is when the learner, employer and provider agree the learners readiness to progress to End point Assessment.

### The End-Point Assessment Process

The EPA consists of three distinct assessment methods:-

- Multiple choice examination – to assess knowledge elements of the standard

- Project report, presentation & questioning – to holistically assess knowledge, skills and behaviours (KSBs) in the standard

- Professional discussion underpinned by log – to holistically assess KSBs across the standard. Performance in the EPA will determine the apprenticeship grade of fail, pass, merit or distinction

The EPA must be completed within 2 months of completion of the EPA gateway. By the end of month one, the apprentice must have submitted their log and project portfolio to their EPAO and have prepared their project report and presentation. The project report, presentation & questioning and professional discussion underpinned by the log will take place during month two with a minimum notice period of 2 weeks required.  The multiple choice examination can take place at any point during the EPA period.

## Employer Support:

- Dedicated Senior Account Manager
- Quarterly Cohort Reviews with Senior Account Manager
- Employer Showcase in Swarm media and news
- Access to view Learners  progress via our E-portfolio

## Costs:

Full Apprenticeship Cost Per Learner: £4000

(Maximum Funding Band)

For more information please don't hesitate to contact us.

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