

Construction Plant Operative Apprenticeship Level 2

Study Mode: Apprenticeship | Course Level: 2

Is this course right for me?

A construction plant operative works in the construction, infrastructure and built environment industry.

The broad purpose of the occupation is to check, prepare and operate a number of construction machines -known as plant -that are used onsite in the construction sector including on railways, demolition and utility works (water/gas/electricity supply).

The operative will work on construction and civil engineering sites and may work on infrastructure projects such as a new motorway or high-speed rail line, giving the operative the opportunity to be involved in high-profile national projects.

An employee in this occupation will be responsible for preparing, setting up and operating designated construction plant types, according to a site plan/method of work, and in most cases will be under direct and indirect supervision. However, in many cases they will be the lead operative working with supporting staff and the only worker who has full understanding of their machine's capabilities and limitations. Operating plant is a safety critical activity and means that the actions of the operative has a direct and significant consequence to the safety and welfare of others, including the general public, therefore a very high level of responsibility comes with the occupation.

Construction plant operatives will be required to travel to and from the site either on a daily or weekly basis and will work exclusively in an outdoor environment in all seasons and weathers, and at variable times which may include overnight, weekend and anti-social hours work to complete projects which have fixed completion timescales such as roadworks, rail maintenance etc.

They will work alongside other workers such a groundworkers who directly help the plant operator by, for example, providing signals and attaching and detaching ancillary equipment. The plant operative however remains in principle ultimately responsible for the execution and completion of the tasks they are undertaking.

In their daily work, an employee in this occupation interacts with a wide range of different stakeholders clients, contractors/customers, members of the public, supervisors, other trades/occupations, supporting occupations (banksman, mechanics etc.), managers, suppliers, safety professionals, manufacturers and administration staff. This apprenticeship involves learning on four common types of construction plant -a 360-degree excavator, dumper/dump truck, ride-on roller and forklift. Each machine can carry out a number of different types of work, however the core role of each is:

- 360-degree excavator -digs or shapes ground to, for example, form trenches for underground pipes, form earthwork embankments and will further load vehicles such as dumpers/dump trucks with earth that has been dug.
- Dumper/dump truck -loaded with earth from the excavator which is transported across a site and

tips the earth from the machine to form stockpiles or tip into an open trench.

- Ride-on roller-rolls and compacts materials such as earth and tarmac for roads, paths etc. by being driven forward and backwards on a defined pattern, which compacts the material according to a specification.

- Forklifts-picks up a range of construction materials (usually on pallets) using the forks of the machine and transports them around a site, placing their load at various locations, sometimes to heights of 17 metres or more

On this apprenticeship, the operative will further undertake a range of non-operational activities with each machine such as:

- Checking, maintaining and cleaning of their machine

- Learn to direct and guide other plant and vehicles; for example, directing the driver of a dump truck where to position themselves when being loaded by the excavator

- How to signal and marshal other plant and vehicles undertaking site deliveries,

- Carry out checks on the work they do

- Help load their plant onto or off a transporter when being delivered to another site.

The ability to operate a core range of plant onsite will enable apprentices to work across a number of projects and provide the basis of upgrading to more specialist plant such as graders, dozers, demolition plant etc.

On completion of the programme, apprentices can progress to becoming a lead operator, supervisor, site or plant manager, or even set up their own contracting company.

Entry Requirements

Determined by employer

What will I learn?

CORE KNOWLEDGE, SKILLS AND BEHAVIOUR REQUIREMENTS

KNOWLEDGE

Apprentices will develop knowledge of:

- Operator-level servicing, checks and maintenance requirements for the range of plant
- How tools and equipment for maintenance, checks, servicing and configuration requirements are to be used and maintained
- How to extract information from the operator's manual and electronic readout systems for to

prepare and use the machine effectively

- How site plans and work programmes are devised, used and disseminated to relevant parties and how they determine how the work is to be carried out
- What resources and ancillary equipment the machine will require to carry out core operational functions
- Function and use of all controls, gauges, switches and performance aids to carry out machine operations
- Characteristics, functions, uses and limitations of use of the relevant item of plant
- Factors that affect the stability and safe operation of the relevant item of plant • How the machine should be manoeuvred and set for operational activities
- Hazards and requirements are for manoeuvring the machine around construction sites and working environment
- Types of planning and communication methods that are relevant and effective in a variety of work situations
- Purpose and layout of site traffic plans, the working areas, exclusions zones and authorized passages for the movement
- Types of hand signals and verbal instructions (including radio use) required for the movement of plant and vehicles
- Manoeuvring characteristics, limitations of manoeuvrability and visibility limitations of plant, supporting plant and delivery vehicles
- How a transporter needs to be set to allow the loading and unloading of plant
- Dangers and precautions when loading and unloading plant from a vehicle bed
- Securing procedures required for a range of plant including tracked, wheeled and smooth-drum types
- Health, safety, wellbeing and environmental requirements and considerations that apply for operational and maintenance activities, such as the control of diesel and oil spills, and reporting procedures for unsafe or environmental situations

- Relevant legislation and regulations including Health and Safety at Work Act, PUWER, LOLER, COSHH and the requirements for, and devising of static and dynamic risk assessments, method statements, COSHH-based assessments and permit-to-work systems

BEHAVIOUR

Apprentices will demonstrate the following behaviours:

Health and safety-first attitude: Aware of the importance of following procedures and following guidance of senior members of the team due to the many risks and hazards present in the work environment. Acts in accordance with health and requirements, constantly evaluating the operation for hazards. Takes appropriate actions whilst following safe systems of work. Avoids taking short cuts that may increase risks.

Working effectively: undertakes work in a reliable and productive manner

Positive customer relationships: Behaves in accordance with the values of the employer. Treats customers and stakeholders with courtesy and responds quickly to their requirements, forming and enhancing customer relationships. Creates and maintains effective working and commercial relationships.

Teamwork and independent working: Works and engages collaboratively and effectively with co-workers of different occupations to achieve requisite results safely and efficiently. Achieves results through independence, resourcefulness and ability. Operates as an effective team member. Under supervision, takes responsibility, accountability and ownership of their own actions and for the completion their own work.

Attitude and discipline: Adopts a professional approach to the work and to colleagues and clients. Shows professionalism whilst being polite and courteous to peers, managers, clients, general public and others. Questions and challenges others when procedures are not being followed.

What skills will I gain?

SKILLS

Apprentices will gain skills to enable them to:

- Extract information from a variety of sources for basic servicing, checks, operational and maintenance requirements
- Select and use tools, lubricants and equipment required for operator-level maintenance, checks, servicing and configuration requirements
- Identify and apply information from a range of sources so that the machine is set for the work and for the work to be carried out
- Identify and source materials, equipment and consumables for operational requirements

- Prepare and set the machine for travelling purposes
- Travel the machine across a range of ground, surfaces and in a range of operational environments and conditions including on inclines and on and off a transporter
- Plan, configure and set the machine to carry out the required work activity
- Operate the machine in accordance with given instructions for excavating, compacting, loading, lifting, moving, discharging and placing activities relevant to the machine being used
- Identify, use and maintain effective communication with co-workers, supporting staff and supervisors to carry out the work safely and efficiently
- Carry out checks (through self and with others) that the work being carried out meets the job requirements and timescales
- Position, configure and shut down the machine when work activities cease and isolate and secure the machine and relevant equipment and structures to prevent unauthorised use or access
- Marshall the movements of a range of plant and delivery vehicles for positioning and safe movement requirements
- Assist in the setting up, configuring and positioning of plant to carry out specific work functions
- Assist in preparing and securing a transporter and the items of plant during the loading and unloading activity for transportation purposes
- Work in accordance with health, safety, welfare and environmental requirements, evaluate the working area and activity according to static and dynamic risk assessments and method statements, and report on unsafe situations following organisational procedures.

How will I be assessed?

Throughout the programme the apprentice will receive expert training from highly qualified staff. A qualified assessor will provide an induction and regular workplace assessments

What can I do next?

On completion of the programme, apprentices can progress to become a lead operator, supervisor, site or plant manager, or even set up their own contracting company.

Delivery

Location: Work-based & College

Start Date:

Day:

Time:

Course Fee:

Course Code: APPCONPLAOP2

Study Mode: Apprenticeship

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