

# Manufacturing manager (integrated degree)

**Reference number:** ST0515

**Level of occupation:** 6

**Typical duration of apprenticeship:** 42 months

## Occupational summary

Manufacturing managers work in manufacturing and production sectors.

Products manufactured or produced may be high or low value, bespoke items or items produced at scale. They include automotive and aeronautical, chemicals, consumer goods, green energy, food and drink, and pharmaceuticals.

Manufacturing and production facilities vary in size, number of product lines, and level of automation. Manufacturing managers may oversee an entire plant or a specific area of production. They will be responsible for a small or large team. They spend time in the manufacturing or production area and an office.

The broad purpose of the manufacturing manager's role is to oversee and optimise the manufacturing or production process, ensuring quality and compliance requirements are met. They manage budgets or projects and champion structured problem solving and continuous improvement initiatives. Team and staff recruitment, performance management, training and succession planning is an important part of the role. They also liaise and work closely with other functions and stakeholders and may lead or participate in internal and external audits.

In their daily work, they interact with manufacturing or production personnel. They also have contact with managers and staff from other teams. For example, commercial, marketing, research and design, technical, quality, human resources, and engineering. They may also interact with customers and other stakeholders such as regulators.

They typically report to a senior manager for example, an operations director or general manager.

They are responsible for ensuring products are produced efficiently, safely, on time, within budget, to specification, and in line with regulatory and quality requirements. The product produced will determine which regulatory and quality standards apply. They must also ensure that employment regulations are adhered to. They have a key role to play in supporting sustainability goals.

They may be required to work shifts over a 24-hour basis including weekends and be on call to deal with emergencies.

## Typical job titles

- Area manager
- Continuous improvement manager
- Factory manager
- Manufacturing manager
- Manufacturing shift manager
- Operations manager
- Process co-ordinator
- Production manager
- Production supervisor
- Production team leader
- Production zone manager
- Systems performance manager

## Occupation duties

Duty	KSBs
	<a href="#">K1 K6 K7 K10 K17 K18 K23 K26 K28 K30 K31</a>
<b>Duty 1</b> Plan manufacturing processes to achieve operating targets.	<a href="#">S1 S2 S3 S23 S24 S26 S27</a> <a href="#">B1</a>
	<a href="#">K1 K6 K7 K10 K18 K23 K27 K28 K30 K31</a>
<b>Duty 2</b> Manage manufacturing processes to achieve operating targets.	<a href="#">S2 S3 S21 S23 S24 S26 S27</a> <a href="#">B1</a>
<b>Duty 3</b> Manage compliance with industry standards and the organisation's quality procedures within the manufacturing area including 'Good Manufacturing Practice (GMP) or Good Practice (GxP).	<a href="#">K1 K2 K3 K5 K6 K9 K15 K18 K28 K30 K31</a> <a href="#">S2 S3 S5 S21 S23 S27</a> <a href="#">B2</a>
<b>Duty 4</b> Direct and lead compliance with regulations, standards and procedures for site safety, environmental, sustainability, security, and product requirements.	<a href="#">K1 K2 K3 K4 K5 K6 K9 K11 K12 K13 K14 K15 K18 K28 K30 K31</a> <a href="#">S2 S3 S4 S6 S7 S8 S9 S10 S21 S23 S27</a>

Duty	KSBs
	<a href="#">B2 B3 B4</a>
<b>Duty 5</b> Use data to support decision-making and strategic planning for internal and external stakeholders.	<a href="#">K28 K30 K31</a> <a href="#">S11 S12 S23 S26 S27</a> <a href="#">K3 K18 K19 K28 K29 K31</a>
<b>Duty 6</b> Empower and develop team and staff through recruitment, performance management, training, and succession planning.	<a href="#">S3 S13 S14 S15 S23 S24 S25 S27</a> <a href="#">B5 B8</a>
<b>Duty 7</b> Champion structured problem solving-activities and the delivery of continuous improvement initiatives. For example, to reduce waste, lower costs, and increase productivity.	<a href="#">K7 K10 K13 K15 K16 K17 K20 K21 K22 K25 K26 K28 K31</a> <a href="#">S3 S7 S8 S12 S16 S17 S23 S24 S26 S27</a> <a href="#">B1 B2 B4 B6 B7 B8</a>
<b>Duty 8</b> Manage budgets or projects. For example, related to labour, equipment, materials, maintenance, and asset management variances.	<a href="#">K17 K18 K23 K24 K25 K26 K28 K29 K30 K31</a> <a href="#">S3 S7 S8 S18 S19 S20 S21 S23 S24 S26 S27</a> <a href="#">B1 B2 B5 B7 B8</a>
<b>Duty 9</b> Liaise and work closely with other functions and stakeholders. For example, engineering, quality assurance, supply chain, sales, customer service departments, and unions.	<a href="#">K8 K9 K18 K27 K28 K29 K31</a> <a href="#">S3 S13 S22 S23 S24 S26 S27</a> <a href="#">B8</a>
	<a href="#">K9 K18 K27 K28 K31 K32</a> <a href="#">S3 S23 S24 S26 S27</a>
<b>Duty 10</b> Lead or participate in internal or external audits.	<a href="#">B2 B8</a>
<b>Duty 11</b> Maintain and extend manufacturing manager knowledge and practice.	<a href="#">K33</a> <a href="#">S27 S28</a>

## Knowledge

**K1:** Product supply chain systems and processes: internal and external.

**K2:** Supplier assurance and integrity of raw materials: origin of raw materials; counterfeit materials, traceability, and raw materials vulnerability.

**K3:** Product and employment regulations.

**K4:** Quality assurance systems to produce products to specification.

**K5:** Impact of compliance and quality requirements on manufactured product and process.

**K6:** Principles of processing techniques and controls and factory design and its impact on good manufacturing practice.

**K7:** Principles of engineering to select, operate, maintain and upgrade equipment and machinery to ensure process optimisation.

**K8:** Maintenance approaches and requirements.

**K9:** Safe cleaning practices and use of cleaning materials in a manufacturing environment to ensure component and product safety.

**K10:** Market dynamics and business trends.

**K11:** Health and safety regulations, standards, and practice: Health and Safety at Work Act, Control of Substances Hazardous to Health (COSHH), Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), health and safety risks and risk assessment practices, Safe systems of work, Workplace ergonomics and wellness requirements, emergency preparedness, machine and equipment safety, and change control.

**K12:** Environmental regulations, standards, and procedures.

**K13:** Sustainable Development Goals. Corporate, social and community values.

**K14:** Statutory and regulatory security requirements.

**K15:** Ethical standards and principles.

**K16:** Critical Thinking and Analysis techniques.

**K17:** Conceptual thinking: evaluating outcomes and contingency planning.

- K18:** Leadership, management, and mentoring tools and techniques.
- K19:** Recruitment techniques and considerations.
- K20:** Different problem-solving tools and techniques.
- K21:** Root cause analysis process and techniques.
- K22:** Continuous improvement principles and techniques.
- K23:** Principles of business operation and financial strategy.
- K24:** Project management techniques: budgeting, time management, planning and prioritising tasks, organising resources, stakeholder management, and risk management.
- K25:** Principles of change management.
- K26:** Crisis management and continuity planning considerations.
- K27:** Stakeholder management methods and techniques.
- K28:** Communication styles and information sharing.
- K29:** The Equality Act: requirements on organisations. Social inclusion practices.
- K30:** Principles of Management Information Systems.
- K31:** Document management. General Data Protection Regulation (GDPR) and cyber security requirements.
- K32:** Internal and external audit requirements.
- K33:** Developmental tools and techniques.

## **Skills**

- S1:** Identify, forecast, plan and schedule manufacturing supply requirements.
- S2:** Adjust manufacturing planning to respond to operational requirements.
- S3:** Identify and escalate issues or conflicts to delivery outside of own operational responsibility.
- S4:** Ensure compliance with operating environment's regulatory requirements. For example, GMP, GxP, and British Standards.
- S5:** Ensure compliance with quality standards and product specifications.
- S6:** Create and implement health, safety, and environmental strategies.
- S7:** Seek out opportunities to embed environmental practices.

- S8:** Ensure the delivery of sustainability principles.
- S9:** Ensure compliance with process and site security requirements.
- S10:** Ensure compliance with ethical standards and principles in manufacturing.
- S11:** Analyse, verify, and evaluate information to make timely decisions.
- S12:** Use a risk-based approach to set performance metrics, taking account of operational constraints.
- S13:** Direct and support others in line with company vision and values, recognising different needs.
- S14:** Define required skills and identify suitable personnel through recruitment processes.
- S15:** Support the development of others. For example, enabling training, knowledge transfer, and peer support.
- S16:** Identify, select, and apply problem solving and root cause analysis techniques.
- S17:** Use continuous improvement principles and techniques. For example, process mapping, 6 Sigma, LEAN, and Kaizen.
- S18:** Adhere to budget and act where there are variances. Identify opportunities for cost savings.
- S19:** Apply project management techniques. For example, capital or small projects.
- S20:** Apply change management techniques and lead teams through transition.
- S21:** Respond to incidents, adhering to business-based recovery plans.
- S22:** Identify and build relationships with key stakeholders. For example, external auditors.
- S23:** Select communication methods and information sharing for different stakeholders.
- S24:** Build and sustain collaborative relationships to influence internal and external stakeholders.
- S25:** Apply and promote policies and practices to support equity, diversity, and inclusion.
- S26:** Use information technology. For example, AI and digital.
- S27:** Comply with document management requirements, GDPR, and cyber security requirements.

**S28:** Plan development opportunities to meet personal and organisational objectives.

## Behaviours

**B1:** Adaptable in response to changing manufacturing needs.

**B2:** Take responsibility for the quality of work and enable others to work to high standards.

**B3:** Take personal responsibility for and promote compliance and ethical practice. For example, ensure safe behaviours are rewarded and unsafe behaviours are actively challenged.

**B4:** Take personal responsibility for and promote sustainable working practices.

**B5:** Take accountability for their own and team's decisions.

**B6:** Curious and fosters new ways of thinking and working.

**B7:** Responsive to change.

**B8:** Fosters team and stakeholder collaboration.

**B9:** Take ownership of personal development.

## Qualifications

### English and maths

English and maths qualifications must be completed in line with the [apprenticeship funding rules](#).

### Other mandatory qualifications

A Bachelor's degree that fully aligns to the knowledge and skills in the manufacturing manager occupational standard.

Level: 6 (integrated degree)

## Professional recognition

This standard aligns with the following professional recognition:

- Chartered Management Institute for Member [TBC]
- Institute for Leadership and Management for Member [TBC]

## Progression routes

- [ST0480 Senior leader 1.2 L7](#)

## Consultation

Cogent Skills and National Food Academy Food & Drink are conducting the consultation on behalf of the revision group