

COMPETENCY PROFILE:

ELECTRIC VEHICLE PRODUCTION MANAGER

ROLE OVERVIEW

The electric vehicle (EV) production manager oversees the production of the organization's electric vehicles and batteries, ensuring that operations are efficient, and that product quality meets the company's standards. A manager's key role involves managing and organizing staff to enhance processes and discover efficiencies.

EV production managers allocate human and material resources to meet production demands, including but not limited to regularly evaluating workers and processes to maintain a smooth production flow. Managers ensure the organization adheres to legal, regulatory, and financial requirements by monitoring key performance indicators and collaborating with senior leadership to foster continuous improvement and success.

EV production managers collaborate with other management team members to align production with the company's objectives. Managers, individually and as a team, ensure the timely production and efficiency of the company's electric battery and vehicle products. They work to find methods to maximize the organization's output efficiency and reliability, evaluate manufacturing equipment, set and review goals with the team, oversee team performance, and report on forecasts and diagnostics.

Depending on their role, EV production managers oversee the entire plant or specific production areas.

ALSO KNOWN AS:

- Industrial Production Manager
- Industrial Production Supervisor
- Production Control Manager
- Production Manufacturing Manager
- Operations Manager
- Quality Control Manager
- Supply Chain Manager

NATIONAL OCCUPATIONAL CLASSIFICATION:

- 90010 – Manufacturing managers

EDUCATION AND EXPERIENCE

- Typically, a bachelor's degree is required in business management, technical fields, or engineering to provide foundational knowledge of production processes and managerial aspects.
- In some cases, a combination of relevant experience and education can substitute for a formal degree, allowing candidates with extensive industry experience to qualify.
- Prior experience in the electric vehicle (EV) industry is highly advantageous, as it offers a deeper understanding of sector-specific challenges and opportunities.
- Familiarity with the latest technologies, production techniques, and industry standards in the EV sector.
- Knowledge of EV market trends, supply chain logistics, regulatory compliance, and sustainability practices is valuable.
- Combination of educational achievement and practical experience equips an EV production manager to oversee manufacturing processes, manage resources, ensure product quality, and contribute to the organization's success in the evolving EV market.

TECHNICAL



Budget and Cost Management

Manages their area against the overall operational plans to create, monitor, and evaluate operational budgets and costs to account for all project activities and spending to sustain operations.

- Approves expenditures for supplies, materials, and human resources to ensure that all available resources are used efficiently to meet production targets.
- Manages the team's use of resources and either negotiates materials prices with suppliers or works with the procurement team to obtain necessary resources at a cost to the operational budget.
- Optimizes operational costs and productivity consistent with safety and environmental variances to ensure compliance and determine if and how the current budget plan needs to change.
- Prepares and presents reports on production operation costs and budget metrics to track potential profits and losses.
- Ensures budget and cost information are correctly complied with and reported to support senior leaders in decision-making.

Production Management

Organizes, oversees, and manages the activities and resources required for manufacturing electric vehicles, ensuring they meet the company's cost, quality, and quantity specifications.

- Participates in project strategy sessions to develop and implement initiatives on sustainability practices.
- Implements production changes as required by the organization and the team's performance to meet production goals.

- Determines and approves resource allocation (such as workforce, raw materials, etc.) to improve and streamline production.
 - Works with senior leadership to develop a long-term production plan for each planning cycle to create actionable items and track deliverables.
 - Evaluates, adjusts, and creates new production site policies and procedures to promote effective operations.
-

Personnel Management

Hires, schedules, evaluates, and oversees staff to build and foster a team of effective workers.

- Arrange staff schedules to ensure coverage of required positions, aiming to meet production targets and enhance productivity wherever possible.
 - Hires and onboards qualified personnel to expand or fill a team of skilled workers.
 - Provides staff with training on job duties, safety procedures, and company policies to set clear performance expectations. In larger companies, coordination with a training manager may occur to maintain training standards.
 - Supervises and evaluates the performance of production personnel to foster growth and personnel development.
 - Maintains personnel records to keep track of each employee's performance and measure the team's efficiency.
-

Quality Assurance and Control

Follows appropriate processes, as directed by organizational best practices, to ensure quality is maintained throughout recycling management operations.

- Applies statistical techniques and calculations to monitor and track the acceptability of quality control results.
- Monitors the execution of manufacturing activities to assess the performance of supervised team members and production quality.
- Analyzes the team's production performance and product quality to identify where improvements in the manufacturing process are needed
- Ensures that all completed products meet quality standards by creating and overseeing a quality control inspection system to meet client's expectations of the vehicles.



Communication

Communicate with various people involved in the EV production process to ensure that everyone is aligned around company production requirements.

- Works with other managers to formulate objectives and understand production requirements.
 - Communicate production and work expectations with team members to ensure activities remain on schedule to meet production needs.
 - Leads and encourages staff to increase production efficiency through their actions and work ethic.
 - Communicate with team members to improve any shortfalls in their expected work output and quality.
-

Collaboration

Works with many groups and individuals to align production activities with overall organizational objectives and foster effective working relationships.

- Collaborates with team members to set and assess goals.
 - Collaborates with the production team to meet any production quotas and deadlines.
 - Work with engineers, supervisors, and executives to align production activities with organizational objectives.
 - Develops and maintains effective working relations with stakeholders and agencies to encourage cooperative partnerships or facilitate information findings and interpretations.
 - Share feedback from stakeholders and senior management to ensure work performance and expectations transparency.
-

Leadership

Oversees the production department and provides guidance and accountability to production team members to ensure that the department runs successfully, and performance targets are achieved.

- Supervises and evaluates the performance of production personnel to foster growth and personnel development.
- Encourages team members to contribute their knowledge, expertise, or efforts to increase production efficiency.
- Shares relevant and valuable knowledge, experience, or expertise to aid team members in accomplishing their objectives more efficiently or effectively.

Problem-Solving

Identifies problems and uses logic, judgment, and evidence to evaluate alternative scenarios and recommend solutions to achieve a desired goal.

- Analyzes production metrics to understand trends and potential areas of concern to take appropriate actions where required.
- Considers the impact on the organization and environment when analyzing specific project objectives and goals.
- Analyzes operational production data to evaluate operations, understand trends, and identify potential areas of concern, then takes appropriate action on the production line where required.
- Analyze employees' performance metrics to create and implement production policies and procedures as needed to increase efficiency and improve safety.



Health, Safety and Environment (HSE) Compliance

Carries out inspections, remedial action oversight, and reporting for the site to ensure that the operation complies with regulatory requirements, internal policies, procedures, and client expectations.

- Conducts site audits to ensure adherence to safety and environmental regulations.
- Maintains records to demonstrate compliance with safety and environmental laws, regulations, or policies.
- Develops or enforces procedures for the regular operation of manufacturing systems to ensure employees understand and follow the expected standard.
- Drives consistency in approach and application of directives and strategies across all teams to establish clear expectations and requirements of staff.
- Develops business cases and makes recommendations to senior management to enhance the organization's sustainability efforts.
- Plans and implements proactive strategies and policies to reduce the occurrence of workplace safety incidents.
- Contributes findings and key environmental social governance performance indicators to improve sustainability efforts and inform senior management for decision-making.



Sustainability Reporting

Reports on the progress of sustainability efforts within the production department to ensure decision-makers can adjust the ESG strategy as needed.

- Identifies key metrics in tracking environmental performance to collect and present valuable data and analysis.
- Provides updates to senior management on key metrics, tracking any variations in performance over time.
- Suggests new changes in operating procedures to improve environmental performance.
- Abide by any environmental legislation to ensure that reporting captures all necessary information to provide a transparent look at business practices.

This profile is a living document. If you have any feedback or would like to help us improve the profile, please reach out to research@eco.ca.