# WHAT WILL I BE DOING AS PART OF MY ROLE?

### **OVERVIEW**

This section outlines which type of activities you will be undertaking as part of your new role at Nissan. It includes key roles and responsibilities within the different employment functions found at Nissan: Direct, Semi-Direct and Indirect.

### DIRECT

Direct roles typically include those found in production, such as manufacturing staff.

### **SEMI-DIRECT**

Semi-direct roles are those with cross-over between office and production environments, such as QA and maintenance technicians.

### **INDIRECT**

Indirect employees are classified as those working in office environments.



#### DIREC

### TRIM AND CHASSIS 1 & 2

Trim & Chassis is when the painted body becomes a car.

The name of the shop describes what takes place there:

- **Trim** fits parts to the painted body shell, such as body harness, carpet, cockpit module, interior trim and glazing
- Chassis fits parts to the trimmed body, such as suspension, engine and wheels, as well as filling the car with fluids

Joining us as a manufacturing employee gives you the opportunity to develop skills in Lean Manufacturing techniques and Workshop Controls, as well as increasing your own personal dexterity while fitting key parts to the car. These skills go hand-in-hand with automation in the shop, which ultimately gives you a finished car ready for the customer.

### WHAT WILL YOU BE DOING?

Your responsibilities will be dependent on the section of Trim & Chassis to which you are assigned, but include:

- Processing of the car through various assembly stations within the shop
- Inspecting and processing of finished cars
- Parts kitting & sequence
- Self assurance of own work and quality checks
- Suggesting ideas and improvements to our process

#### DIRECT

### **UNIT ASSEMBLY**

Unit Assembly is the manufacturing of an engine from scratch, incorporating headline, bareline, mainline assembly processes and a final hot testing stage to confirm the quality conformance of the engine. Joining us as manufacturing staff gives you the opportunity to develop in a number of manual skills that support our balance between automation and highly-skilled teams.

### WHAT WILL YOU BE DOING?

Your responsibilities will be dependent on the section of Unit Assembly to which you are assigned, but include:

- Processing engines through various assembly processes
- Inspecting engines to ensure that they are high quality
- Parts kitting to sequence
- Hot testing of engines
- Carrying out Total Production Maintenance (TPM) tasks

16 — Getting Started Getting Started — 17

#### DIRECT

### **UNIT MACHINING**

In Unit Machining we have 2 separate machining lines, producing 6 different variants of cylinder heads. These parts are either used in Unit Assembly or shipped to Renault and Dacia. These are both complex and precision products that require constant quality checks to ensure the product reaches the customer in the highest quality.

### WHAT WILL YOU BE DOING?

Your responsibilities will include a variety of quality checks and result interrogation, feeding back concerns to the relevant departments. These will include:

- Using a number of different Co-ordinate Measurement Machines (CMM) for dimensional checks
- Part cleanliness checks using a PALL Wash and Microscope for analysis
- Measuring surface finish of cylinder head features using Mitutoyo R.a gauges
- Prioritising part measurement to minimise production losses during breakdowns
- Working closely with other departments so any concerns identified can be rectified
- Carrying out Total Production Maintenance (TPM) tasks



#### DIRECT

### PRESS, PLASTICS, ED AND BATTERY

The Press business unit is a very diverse manufacturing shop, which ranges from metal raw material coming into the shop, to being cut and pressed into all body panels to supply the Body Shop. We also have an injection moulding zone, which supplies injection-moulded bumpers direct to bumper paint. Alongside supporting the current model vehicle build we have a small painting process which ED (Electrophoretic deposition) coats service panels to the aftermarket. We have a battery assembly process that supplies directly to trim and chassis.

### WHAT WILL YOU BE DOING?

Your responsibilities will be dependant on the section of Press to which you are assigned, but include:

- Using a number of different Co-ordinate Measurement Machines (CMM) for dimensional checks
- Operating presses to achieve output and quality panels or bumpers
- Inspection of components in all areas (key focus across the shop)
- Potential of forklift operations across the areas
- Carrying out TPM tasks and kaizen-type activity once trained
- Assembly type manufacturing in the battery plant
- Maintaining quality painted parts throughout the ED process



### UNIT AXLES

Unit Axles is the manufacturing of front and rear axle/suspension parts from pressed child parts. The parts go through welding, painting and then finally bush pressing before shipment to vehicle assembly.

#### WHAT WILL YOU BE DOING?

Your responsibilities will be dependent on the section of Unit Axles to which you are assigned, but include:

- Loading/setting child parts into jigs/fixtures
- Quality checking both in line and offline
- Material handling/movement of parts and stock control
- Training and development of staff
- Carrying out Total Production Maintenance (TPM) tasks

### PAINT SHOP

Paint shop provides some key operations to the vehicle manufacturing process to complete the overall look of the vehicle body. These processes include: anti-corrosion coatings, sealants to guarantee water tightness and spraying operations, delivered by an innovative mix of automation and a highly-skilled team.

### WHAT WILL YOU BE DOING?

Your role will be dependent on the section of the Paint shop to which you are assigned, but will include:

- Sealant and anti-corrosion application
- Vehicle and bumper paint spraying
- Robot programming and robot quality activities
- Masking process to create a two-tone finish
- Paint/Bumper final inspection
- Paint refinish and repair
- Managing and maintaining your own work station, tools, jigs and elements of the facility



20 — Getting Started Getting Started — 2

#### DIRFC

### **CASTINGS**

Castings at Nissan Sunderland is fundamentally a foundry. Using raw materials, sand and aluminium, we produce aluminium cylinder heads for Nissan and Renault. We mix the sand with a resin to create a solid-shaped sand core, then melt aluminium at 750°C and pour it into the casting furnace, which creates an aluminium cylinder head. The sand is removed and the cylinder head then is prepared for our customer, Unit Machining.

### WHAT WILL YOU BE DOING?

There are 4 key activities you will undertake in this process:

- Core Making Making of the sand core
- Melting Melting of the aluminium ingot
- Casting The forming of the cylinder head
- Finishing Removal of the sand core pack and first-stage dressing of the cylinder head

#### DIRECT

### **BODY SHOP**

Body shop is a mainline shop, receiving the pressed metal panels from press shop and manufacturing the vehicle body at pre-paint stage. Sub-assembly lines feed automated mainlines, which directly supply a manual metal line fitting cover parts. Body shop has 96% automated welding, with the new Qashqai having 100% automated welding.

### WHAT WILL YOU BE DOING?

Your responsibilities will depend on the section of Body shop to which you are assigned, but will include:

- Parts Load
- Parts Fit
- Quality Confirmation
- Inspection
- Robot Programming
- Metal Repair

#### **SEMI-DIRECT**

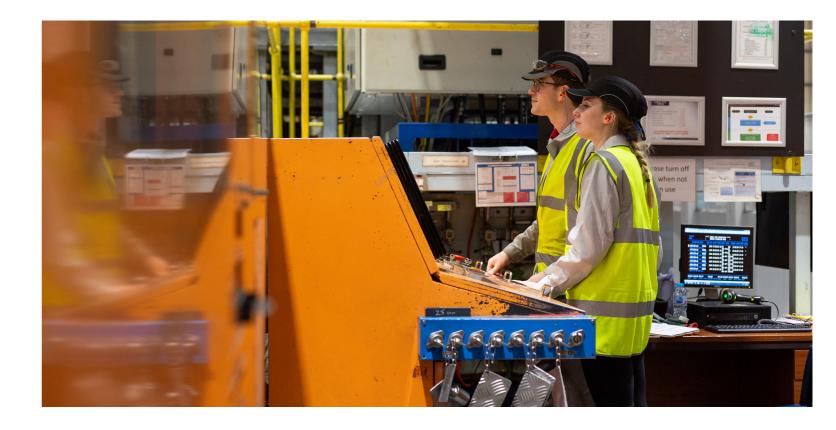
## NISSAN DISTRIBUTION SERVICES (NDS) MARSHALLING - WASHINGTON / PORT OF TYNE

NDS Marshalling is a fast-paced environment where the completed vehicle is passed from the plant Manufacturing to our team for management of international distribution and logistics. Based at the plant and the Port of Tyne, no 2 days will be the same contributing to the efficient delivery of vehicles to our global customers - we are the final step in the process before a vehicle reaches Global Alliance customers.

### WHAT WILL YOU BE DOING?

Your daily duties will include:

- Transfer of vehicles
- Battery management
- Haulier interaction
- Quality overchecks
- European Vehicle Logistics system operations
- Vehicle inspection
- Vehicle enhancement
- Suggesting improvement ideas and implementation



#### **SEMI-DIRECT**

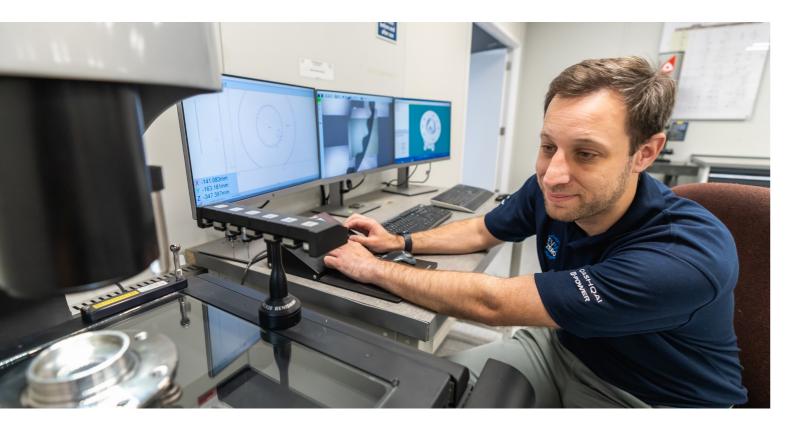
### PARTS QUALITY ASSURANCE (PQA)

The core function of the Parts Quality Assurance (PQA) department is to ensure total customer satisfaction to internal and external customers. You will receive training on PQA's high technology equipment, alongside a suite of internal and external training opportunities.

### WHAT WILL YOU BE DOING?

Your responsibilities will vary depending on the area in PQA to which you are assigned, but will include:

- Concern containment
- Supporting Right First Time Production
- Plant Equipment Management
- Reworking to adopt Early Design Change
- Non-Conformance Management



#### **SEMI-DIRECT**

### **VEHICLE QUALITY ASSURANCE (VQA)**

Vehicle Quality Assurance (VQA) is mainly involved in the confirmation of the final vehicle quality after the production process. This involves a series of visual and functionality checks to confirm the vehicles meet design intent prior to release to the sales network. Areas within the VQA department include Tester Line, OK Line, Road Test, Vehicle Test, Engine Test and Emissions Test.

### WHAT WILL YOU BE DOING?

- Confirming the vehicle systems function correctly with the aid of facilities
- Static final visual inspection and specification checks
- Dynamic evaluation of the vehicles on a test track
- Working within the production process, carrying out quality confirmation checks
- Emissions testing
- Engine testing



24 Getting Started Getting Started - 2

#### **SEMI-DIRECT**

### **FACILITY MAINTENANCE**

The Facility Maintenance department's key responsibility is to maintain the plant and equipment to prevent failure and improve manufacturing performance, through utilisation of maintenance techniques and application of Global Management Best Practice (GMR).

### WHAT WILL YOU BE DOING?

Your main responsibilities working in Facility Maintenance are:

- Maintaining a safe plant within legislative standards
- Performing basic maintenance and servicing of production equipment
- Maintaining an effective plant to deliver business targets and products for our customers
- Utilising planned and predictive maintenance methodologies such as PPM, PdM and CBM
- Providing rapid response and resolution of equipment failures, breakdowns and plant stoppages
- Investigating equipment failures with identification of root cause and reoccurrence prevention
- Developing and using analytics tools to improve plant performance
- Confirming new plant and equipment meets expected standards to support future performance

#### **SEMI-DIRECT**

### **MATERIAL HANDLING**

Material Handling is an important function within the business, working hand-in-hand with both production control and the production department to ensure parts arrive line-side at the correct quality level and the right time. Employees are fully trained in a variety of our core roles such as goods receiving, parts sequencing, parts kitting, sub-assemblies and linefeed.

### WHAT WILL YOU BE DOING?

Your responsibilities will depend on the section of Material Handling to which you are assigned but will include:

- Parts Receipt to plant (Forklift Driving)
- Parts delivery to point of fit (Tow Tractor Driving)
- Parts kitting & sequence
- Stock management
- Quality checks
- Area housekeeping
- New model preparation
- Zone Improvements



#### **SEMI-DIRECT**

### **DIE MAINTENANCE**

Die Maintenance departments are responsible for the maintenance of stamping, casting and injection tools across the plant. This tooling supports the manufacturing of parts across the vehicles built at Nissan Sunderland. Die Maintenance ensure the quality and dimensional accuracy of the parts produced and have a major impact on the quality of the final vehicle.

Joining Die Maintenance as either an apprentice or technician will give you the opportunity to develop a wide variety of maintenance and toolmaking mechanical skills. These include CAD/CAM, machining, fitting, and welding. You will be working alongside a team of highly-skilled technicians.

#### WHAT WILL YOU BE DOING?

Your responsibilities will vary greatly within a department with many diverse and bespoke skills. These include:

- Breakdown call-out and recovery
- Planned Preventative Maintenance (PPM)
- Tooling design changes
- Mechanical skills including hand fitting and welding (MMA, TIG & MIG)
- Machining including 3 & 5 axis CNC milling
- CNC programming
- CAD/CAM
- Using simulation software
- Problem solving
- Tooling Try-out

26 Getting Started Getting Started - 27

#### **INDIREC**

### **HYPERCOMP**

Hypercomp is a team developed to support the Shape Sunderland challenge to deliver 100% kitting within T&C shops.

The advantages of kitting systems are:

- Removes NVA (None Value Added) work from both the Production and Material Handling process
- Improves plant flows by bringing kit systems closer to the Receiving areas
- Allows inventory reduction on site
- Improves pedestrian safety by minimising manual delivery
- Improves 5S and operator mindset
- Makes multi-model complexity easier to manage

### WHAT WILL YOU BE DOING?

- Developing a Master schedule for both T&C shops
- Data collection for all new and optimised Kitting systems
- Individual kit planning and communication with the customer
- Space clearance and allocating kit systems to the right place to reduce NVA
- New kit and current kit installation and optimisation
- Kit box design and AGV build
- Delivery quality control



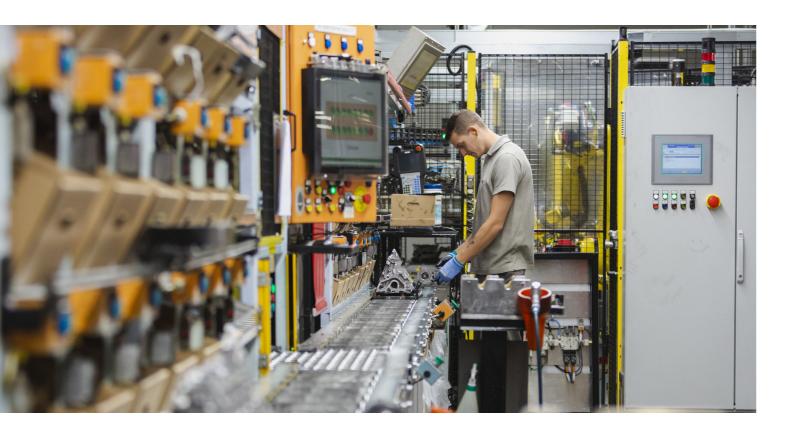
### **SUPPLY CHAIN MANAGEMENT**

As part of our Supply Chain Management function, you will be part of the team that ensures successful plant operations through effective management of global supplies. You will operate in a highly-diverse, multi-dimensional division, covering logistics, inventory control, project management and supplier relationship management.

### WHAT WILL YOU BE DOING?

We are an integral part of Nissan and are responsible for getting the right parts and vehicles to the right place at the right time and for the right cost. There are a variety of roles available within the SCM function:

- Production Planning: working with internal production shops to schedule their production, and interface with the Sales & Marketing team to understand customer demand
- Parts Control: managing the inbound supply of components from a global supply base while maintaining lean inventory levels
- Design Change Control: working as an interface between the Design team and the manufacturing plant to ensure the smooth introduction of material changes
- Inbound Logistics: liaising daily with logistics providers to design and engineer innovative and cost-effective global logistics solutions





28 Getting Started Getting Started Getting Started 9

INDIRECT

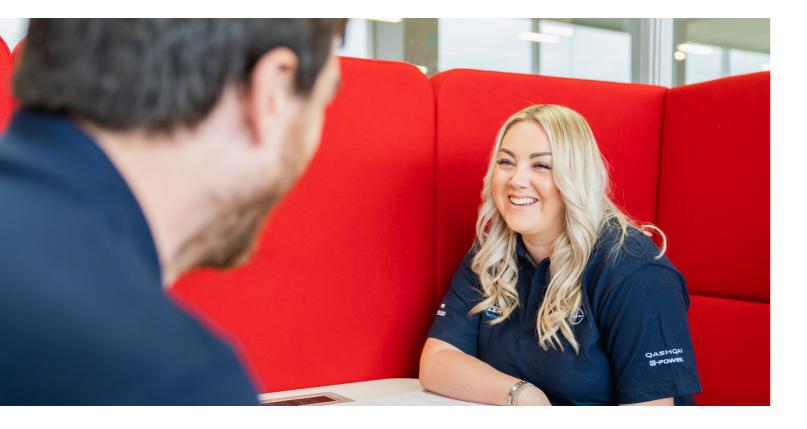
### **HUMAN RESOURCES**

HR is a key function within the business, working hand-in-hand with all departments to attract, develop and engage a Nissan workforce with the correct skills and people to continue our world-class operations. Joining us in the HR department, you'll gain exposure to a wide range of roles and have opportunities to influence Nissan on a European and global scale. Areas within our HR department include Talent Acquisition, Employee Relations, Health & Safety, Payroll Pensions, Planning, L&D, Talent Development and Contracts.

### WHAT WILL YOU BE DOING?

Your responsibilities will be dependent on the section of Human Resources in which you will be working. These may include:

- Ensuring Nissan Sunderland is a safe place to work
- Employee support, advice and guidance
- Internal and external recruitment
- Training course development and delivery
- Apprenticeship scheme support and management
- Talent Acquisition and Management (inc. Graduate and Industrial Placements)
- Managing HR and Nissan Sunderland contracts and services
- Projects, strategy and planning
- Employee engagement and reward initiatives



#### NDIRECT

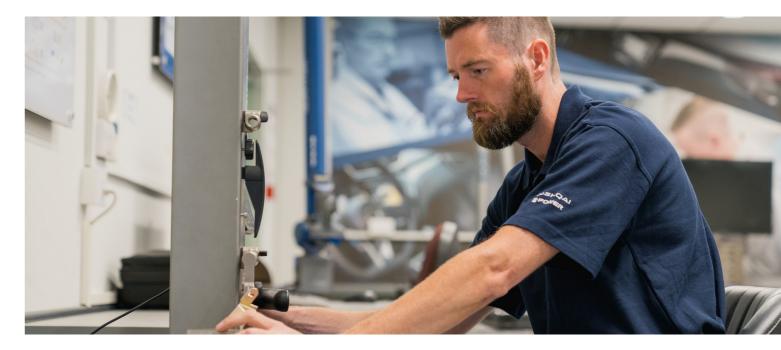
### **ENGINEERING**

Engineering is a core function within the business, involved in the early stages of the product development to ensure the manufacturability of the design of new products. Once the design of the product is agreed, we work out required processes and facility to implement the new model into our existing production lines. Joining us in the Engineering department, you'll gain exposure to a wide range of roles and have opportunities to influence Nissan on a European and global scale. Areas within our Engineering department include Process Planning, Facility Management, Quality Engineering, Industrial Engineering, Construction and Services, Environmental Management, and Digital Innovation.

### WHAT WILL YOU BE DOING?

Your responsibilities will be dependent on the section of Engineering department in which you will be working. These may include:

- Vehicle and powertrain production process and facility design
- Design change adoption
- New facility installation and commissioning
- OEE/Volume delivery
- Conformity of Production, ISO 9001 Auditing, Supplier Quality Assurance
- Technical support to Production and Maintenance
- Support shop safety and ensure facility compliance with legislation
- Productivity improvement through shop floor study and analysis (inc. process flow optimisation and process automation)
- Data Science and Digital Innovation
- Energy management
- Construction management
- Environmental system management and compliance



30 Getting Started Getting Started Getting Started - 31

INDIRECT

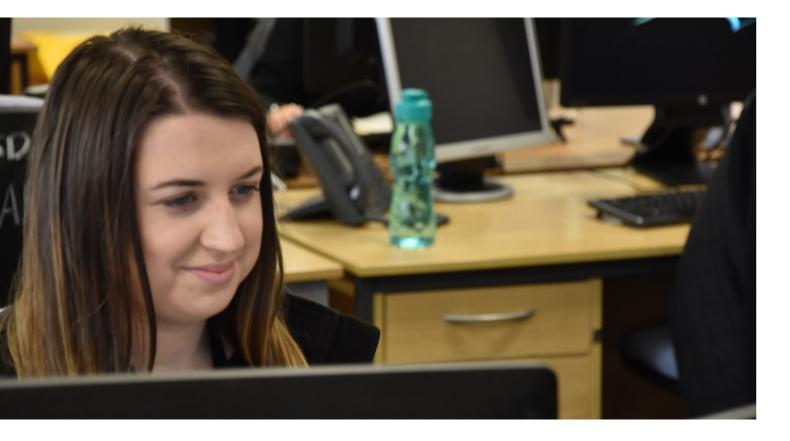
### INFORMATION SYSTEMS DEPARTMENT

The Information Systems Department (ISD) is a key area of the Nissan Sunderland business. You will be part of an exciting organisation that ensures continuity of systems. From fixing laptops to maintaining R&D systems, our department is at the forefront of breakthrough IS technologies and development techniques. We go beyond the factory, with specialisations in other areas too, such as regional Information/Operational Security, Helpdesk, Governance, IT Operations, Market & Sales, After Sales, Finance & Administration.

### WHAT WILL YOU BE DOING?

Your responsibilities will be dependent on the section of ISD in which you will be working. These may include:

- Reacting to and troubleshooting complex technical issues
- Business analysis turning requirements into real world technical solutions
- Project management of small to large and complex enhancements or new system implementation
- Managing on shore/off shore vendors to support systems changes or new implementations
- Software design and development (Agile, Waterfall)
- Technical infrastructure design and implementation (servers/networks)
- Ensuring ongoing security safeguards and controls are in place and effective
- IS Systems and IT Infrastructure roadmap, strategy and planning



#### NDIRECT

### **PURCHASING**

Nissan has UK-based Purchasing offices located at the R&D Technical Centre in Cranfield (Near Milton Keynes) and at our Sunderland plant. Across these 2 sites we purchase parts and materials required to build our cars, plus indirect purchases such as machinery and services. We also have key Project, Vendor Tooling, Supplier Quality and Planning and Control sections.

### WHAT WILL YOU BE DOING?

Working in the Purchasing department is as fast-paced and diverse as you would expect at a global automotive organisation. Your responsibilities will include:

- Working directly with our suppliers, along with internal stakeholders throughout the business
- Ensuring parts and services are sourced with the highest levels of quality
- Ensuring the best cost through the life of the part, product or service

#### INDIRECT

### **FINANCE**

The Finance Department plays a key role within the business. The goal of the Finance function is to measure and monitor the financial health of the various entities within Nissan Europe. The Finance department monitor critical metrics and trends, providing this data to senior leadership.

By working in the Finance Department, you will contribute to Nissan's decision-making process, working closely with our cross-functional partners in the manufacturing plant.

Due to the size and scope of Sunderland plant, the Finance Department is split into sections which have specific roles.

### WHAT WILL YOU BE DOING?

Your responsibilities will be dependent on the section of Finance in which you will be working. These may include:

- Core Accounting Preparation and management of statutory accounts for all UK entities, as well as the reporting of company performance to Nissan Europe and Nissan Global; UK treasury operations; Liaising and co-ordination with external auditors; Technical accounting
- Operational Support Working with operational management so they understand their performance and spend, support and challenge delivery of cost reduction, ensure achievement of budgets; management of plant assets; management accounting
- Vehicle Costing Ensure accurate costing of current models and products to ensure accurate profitability analysis; providing data and analysis to support cost submissions for new model allocations
- Tax and Customs Ensure compliance with UK Tax and Customs regulations, provide analysis and initiatives to improve business performance in these areas
- Corporate Governance Company secretarial and compliance support for all UK-based entities
- Regional Manufacturing Finance team Regional Management Reporting: consolidation and analysis of Functional Performance across Europe Purchasing, Logistics, R&D, Plant Costs and Capex

32 Getting Started Getting Started Getting Started - 33