OSTENDO

One system • **Complete** operations

Manufacturing

Features & Capabilities Paper

Ostendo Manufacturing supports businesses from simple assembly operations through to complex multi-level production environments. Whether you 'Make-To-Stock' standard products or 'Make-To-Order' custom manufactured items, this guide explores how Ostendo provides complete control over bills of materials, production scheduling, shop floor operations, and cost management.

Bill of Materials

Manufactured items can be pre-defined in standard Bills of Materials (BOMs) or custom configured on-the-fly for one-off manufacturing. Multiple configuration approaches include Feature & Options selection, manual configuration, or scripted step-by-step processes that guide users through complex product specifications.

Bills of Materials support unlimited levels of sub-assemblies, accommodating complex product structures. A BOM can contain combinations of Materials, Non-Inventory Costs, and Labour with both Fixed and Variable Overheads—capturing all cost elements that contribute to finished product costs.

Version Control maintains BOM revisions with each manufacturing order recording which version was used. This traceability is essential for quality management and regulatory compliance.

The 'Where Used' Inquiry quickly identifies any component across all BOMs, while Mass Replacement enables efficient swap-out of components. BOM contents can be copied to speed setup of new master records. Custom configured items can optionally have BOMs auto-created, making one-off specifications reusable.

Routing & Production Steps

Routing steps logically construct manufacturing sequences within a BOM. Setup and Run times can be defined separately, allowing scheduling to treat setup as a constant while run time varies based on production quantity.

Phantom BOMs represent sub-assemblies that are never stocked separately. When used in a parent BOM, the Assembly Order automatically explodes the phantom and includes its components directly—simplifying production while maintaining accurate material requirements.

> **Hazards** can be defined at routing step level to alert staff before initiating specific manufacturing operations. This ensures safety information reaches operators exactly when needed.

Multiple Manufacturing Outputs support Co-Products and By-Products beyond the base output—essential for process industries where production yields multiple items from a single run.

Scheduling & Planning

Simple scheduling uses a graphical Assignment Board with drag-and-drop functionality, showing up-to-the-minute actual time spent on each assignment. For more complex environments, full Constraint Based Scheduling considers lead times, resource capacity, and loadings.

Materials Requirements Planning (MRP) determines component requirements at all BOM levels to satisfy current and future demand. The system can automatically create Purchase and Manufacturing orders when replenishment is required.

> **Cost Rollups** calculate finished goods costs by rolling up component costs through the BOM structure. Standard Costing, Average Costing, or Actual Costing methods can be used depending on your financial requirements.

Shop Floor Operations

Shop floor data collection supports time capture initiated by Mobility, barcode, keyboard, or touch screen. Manufacturing Order routing status can be controlled through any of these methods, providing real-time visibility into production progress.

Timesheet Interpretation applies Break Time and Overtime rules automatically, improving cost accuracy without requiring operators to classify their time manually. Real-time Work-In-Progress (WIP) tracking maintains current values as production progresses.

> **Back Flushing** (auto-issuing of components) handles products where standardised issue quantities are used, eliminating manual issue transactions for repetitive production.

User Defined Tracking Codes at order or routing step level provide flexible categorisation. Stock reservations allow materials to be earmarked for specific manufacturing orders.

Mobile & Quality Assurance

Standard Mobility functions on Android and iOS include issuing materials, timesheet entry for individuals or teams, receipting finished product, scanning capability, and real-time inquiries. This brings production control directly to the shop floor.

Configurable Mobility functions support compliance, QA, and data capture including checklists, photos, audio notes, signatures, typed notes, order status updates, batch status and QA results, and batch properties.

> **QA and Test Results** can be linked to Manufacturing Orders or Batch Numbers via Mobility. Container Tracking with Virtual Containers enables full traceability of tracked components for each manufactured item.

Traceability & Documentation

Full traceability handles multiple tracking forms—Serial Number, Batch, Expiry, Grade, Revision, Size, and Colour—for both inputs and outputs. This comprehensive tracking supports quality investigations, recalls, and regulatory requirements.

Any electronic document or image can be linked to a BOM, Manufacturing Order, or component within it. Unlimited date/time stamped and categorised History Notes maintain a complete production record.

> **Multiple Input Methods** for populating order lines—Drag & Drop, Batch Select, predefined lists, or single line entry—suit different production planning scenarios. Manufacturing Order lines can include Inventory Items, Labour Codes, Non-Inventory Charges, or Custom Configured products.

Ready to optimise your manufacturing operations?

Contact your local Ostendo Consultant to discuss how these capabilities can be configured for your specific business requirements.

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