Oracle Outsourced Manufacturing for Discrete Industries

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ENTERPRISE PERFORMANCE MANAGEMENT SYSTEM

Oracle Outsourced Manufacturing for Discrete Industries is a product that enables original equipment manufacturers (OEMs) to manage and track the overall health of their outsourced manufacturing business with one or many manufacturing partners (MPs). The product provides manufacturers the ability to model various industry standard outsourced manufacturing business flows within the E-Business Suite instance. It also provides support to setup and execute outsourcing of standard and configured assemblies to external manufacturers and/or to internal affiliated companies with complete visibility into the health of their outsourced operations related to inventory balances, financial positions and production details such as delays, material shortages and quality issues with respect to their contract manufacturers. This enables buyers or executives responsible for outsourcing operations with real-time actionable information to take proactive actions to mitigate potential risks to customer commitments

KEYBUSNIESS BENEFITS

Gain full visibility into the overall health of outsourced manufacturing

- Quickly view and analyze financial transactions related to subcontract orders.
- Track quality issues related to supplied components and finished products.
- Monitor sales and procurement activities to meet on-time customer delivery.

Collaborate effectively with approved suppliers and contract manufacturers

- Analyze and negotiate service level agreements and pricing to optimize costs.
- Mitigate risks related to inventory bottlenecks across manufacturing partners.

Support for modeling industry standard outsourced manufacturing business flows

Outsourced Manufacturing solution supports the following flavors of modeling Outsourced Manufacturing scenarios within the OEM's EBS instance.

Chargeable (Shikyu) Outsourcing: In this model, the OEM retains the ownership of the components but makes a virtual sale of the components to the MP. The reason it is a virtual sale is because the MP does not pay for the components. The MP charges the OEM for the value of the components as well as the service provided. Since the OEM owns the components, AP/AR netting is mandatory for the OEM to pay the MP just for the service provided. This practice is prevalent in countries like Japan, Korea, and Taiwan.

Buy/Sell Outsourcing: In this model, the OEM sells the components to the MP after an optional price markup and buys the finished product from the MP. The MP charges the OEM the total value of the components as well as the service provided. There is an explicit selling and buying transaction between OEM and MP.

Full (Non-chargeable) Outsourcing: In this model, the OEM retains the ownership of the components and ships them to the MP. The MP charges the OEM only for the service provided.

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KEY FEATURES

**Model industry standard outsourced manufacturing business processes**

- Chargeable (Shikyu) Outsourcing.
- Buy/Sell Outsourcing.
- Full (non-chargeable) Outsourcing.

Comprehensive Outsourcing modeling

- Configure and Outsource Assemblies.
- Internal Toll (Outsourcing to Affiliated companies).
- Lot and Serial Genealogy.
- Drop/Direct ship Component and Assemblies.

Complete out of the box integration with various EBS applications to automate orchestration of material and financial transactions between OEM and Manufacturing Partners

- Subcontracting orders for outsourced assemblies.
- Replenishment sales orders and purchase orders for components.
- ASCP integration for managing demand and supply for assemblies and components.
- Financials integration for AP/AR netting between purchase order and sales order invoices.
- Quality integration for defect tracking.
- Discrete manufacturing integration to simulate the work order for the outsourced assembly.
- Purchasing integration for sourcing rules and purchase order creation for assemblies and components.
- Order Management integration for component sales orders.
- Inventory integration for tracking material quantity and value on-hand and intransit.
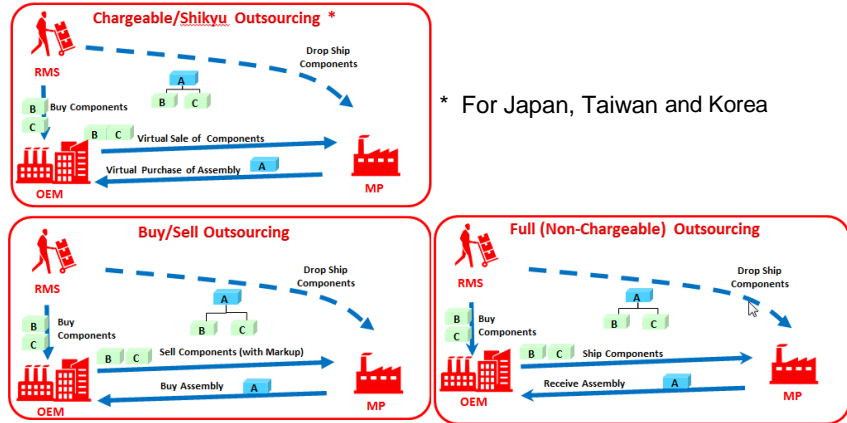
* For Japan, Taiwan and Korea

Figure 1. Different flavours of Outsourced Manufacturing.

Setup and Execution of outsourced manufacturing business processes within E-Business Suite instance

The OEM and MP are modeled as Inventory Organizations. Oracle ASCP is the planning engine that manages demand and supply of components and assemblies between the OEM and MP based on the forecast or customer demand for the assembly in the OEM organization. The MP organization is a simulation organization only to track and plan inventory for the components at the MP site and has no costing and financial significance. OEMs can flexibly model an assembly's BOM to include components like software and supplier (manufacturing partner) supplied components which do not need physical shipment from the OEM's side, but need to be tracked in the BOM for costing and planning purposes.

A subcontracting order is a standard purchase order that is created by the OEM organization for an outsourced assembly against the MP. The components needed by the MP to produce the assembly are shipped from the OEM organization using sales orders (referred to as Replenishment orders). A discrete manufacturing work order is created in the MP organization to simulate the manufacturing process at the MP's end. The movement of material and corresponding financial transactions between the OEM and MP organizations is managed by several automated processes. This eliminates the need for any manual intervention to manage the outsourced manufacturing process. Reconciliation processes periodically reconcile the inventory at manufacturing partner site.

Support for Internal Toll, Configured to Order and Lot & Serial Genealogy in Outsourced Manufacturing

EBS Outsourced Manufacturing solution also supports outsourcing of various assemblies like standard, ATO/CTO along with lot and serial control and maintains lot and serial genealogy

Internal Toll Manufacturing: OEMs can outsource their assemblies to Internal Organizations (affiliated companies) and those affiliated companies can still act as OEMs for other assemblies, utilizing its unused capacity in a productive manner.

Complete, real-time visibility into the overall health of the outsourced manufacturing business using Endeca presentation layer

• Subcontracting order status
• Inventory balances.
• Financial positions.
• Quality issues.

Complete visibility into outsourced manufacturing business with Information Discovery dashboard

A business user can access complete and real-time visibility into the overall health of the outsourced manufacturing business using the rich user interface powered by Endeca. Various aspects of the business such as subcontracting order status, inventory balances, financial position, and quality issues can be visualized intuitively using these interfaces.

Figure 2. Outsourced Manufacturing Data discovery domain.
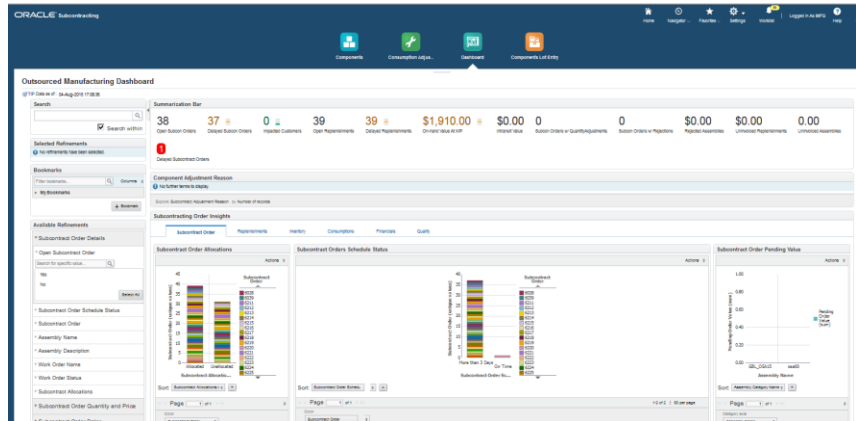
Figure 3. Outsourced Manufacturing Information Discovery dashboard.

360 Degree View of Outsourced Manufacturing Business

Key Performance Indicators and metrics provide quick answers to simple business questions like:

• How many subcontracting orders are delayed and which customers are impacted?
• What's the value of our material at manufacturing partner locations?
• What's the value of defective finished goods received from manufacturing partners?
• What's the value of un-invoiced subcontracting orders and replenishments?
• What is the value of outsourced products that had quality problems?

Detailed analysis on any metric can be done using a comprehensive set of charts and

tabular data on the user interface. Using the guided navigation, Google like search capabilities, and tag clouds, the user can quickly get to the subcontracting orders that need immediate attention. Outsourced manufacturing data across manufacturing partners is presented together to allow for quick comparison to differences.

Oracle E-Business Suite -- The Complete Solution

Oracle E-Business Suite enables companies to efficiently manage customer processes, manufacture products, ship orders, collect payments, and more—all from applications that are built on unified information architecture. This information architecture provides a single definition of your customers, suppliers, employees, products—all aspects of your business. Whether you implement one module or the entire Suite, Oracle E-Business Suite enables you to share unified information across the enterprise so you can make smarter decisions with better information.