

## **Master Data & Documents**

- Customer master with fields for GST, credit terms, and default price list.<sup>[1]</sup>
- Item master for finished parts, semi-finished parts, raw materials, and bought-out items, including material grade, density, and standard weight.<sup>[2][1]</sup>
- Attachments (drawings, inspection reports, external documents) on Customer, Item, Purchase Order, BOM, Work Order, Project, and Sales Invoice via standard attachment feature.<sup>[3][1]</sup>
- Warehouses for: raw material, WIP, finished goods, subcontractor, scrap.<sup>[4][1]</sup>

## **Purchase Order & Drawing Management**

- Purchase Order entry with: customer PO number, PO date, delivery date, and line items.<sup>[1]</sup>
- Custom fields (no code) on PO for:
  - Drawing number(s).
  - Revision number.
  - Job / project reference.
- Attach drawing PDF or CAD file directly to PO.<sup>[3][1]</sup>
- PO print template including drawing number and revision (configured in print settings, no scripting needed).<sup>[1]</sup>

## **BOM, Operations & Costing Basis**

- BOM for each finished part including:
  - Raw material items and quantities.
  - Bought-out items.
  - Operations (VMC machining, drilling, tapping, inspection, packing, etc.).
- Operation master with:
  - Workstation (VMC, manual, inspection).
  - Costing method (per hour or per quantity).
  - Standard rate (₹/hour or ₹/piece).<sup>[2][1]</sup>

- Attach process sheets, inspection standards, and sample reports on BOM and operations via attachments.<sup>[1]</sup>
- Separate items for in-house processes vs subcontracted processes where needed.<sup>[4][1]</sup>

## **Raw Material Management**

- Raw material items with:
  - Material grade (e.g., EN8, EN19) as attribute or custom field.
  - Density and section (round bar, plate, etc.) as attributes.
  - Standard buying UOM (kg) and stock UOM.<sup>[2][1]</sup>
- BOM quantity representing theoretical weight per part (kg) so cost auto-calculates from rate list.<sup>[1]</sup>
- Purchase Receipt and Material Issue / Transfer between warehouses (RM → WIP → Finished → Dispatch).<sup>[1]</sup>
- Standard stock reports: stock ledger, stock balance, stock aging for raw material tracking.<sup>[2]</sup>

## **Process Tracking – In-house**

- Work Order generated from Sales Order or Project for each job or batch.<sup>[1]</sup>
- Routing / operations sequence on Work Order (VMC roughing → finishing → inspection → packing).<sup>[1]</sup>
- Time capture using:
  - Timesheets (operator logs hours per operation), or
  - Start/finish time entry on Work Order operations.
- System-calculated in-house process cost using operation rate × actual time or quantity.<sup>[2][1]</sup>
- Status tracking: Draft → In Progress → Completed → Closed for each operation and work order.<sup>[2]</sup>

## **Process Tracking – Outsourced (Subcontracting)**

- Subcontracted operation modeled as:
  - Subcontracted item, or
  - Subcontracting step in BOM / routing.<sup>[4][1]</sup>
- Subcontractor warehouse for materials sent out.<sup>[4]</sup>

- Transfer of components (stock transfer) from own warehouse to subcontractor warehouse with Delivery Challan.<sup>[4][1]</sup>
- Purchase Order to subcontractor for processing charges (per part or per kg).<sup>[4][1]</sup>
- Purchase Receipt to record processed items back from subcontractor and book service cost to job.<sup>[4][1]</sup>

## **Quotation & Cost Sheet**

- Quotation linked to:
  - Customer.
  - Item and quantity.
  - BOM for automatic cost pull.<sup>[1]</sup>
- Automatic cost calculation based on:
  - Raw material (from BOM and rate list).
  - In-house operation cost (from routing and operation rate).
  - Outsourced process cost (from subcontracting cost).<sup>[2][1]</sup>
- Custom fields on quotation for:
  - Overhead percentage.
  - Target profit margin percentage.
- Automatic selling price computed as: estimated cost  $\times (1 + \text{overhead \%}) \times (1 + \text{margin \%})$  via built-in price and margin fields (no custom code).<sup>[5][1]</sup>
- Print format for cost sheet showing raw material, in-house process, outsourced process, overhead, margin, and final rate.<sup>[1]</sup>

## **Dispatch, Invoicing & Profit View**

- Delivery Note for dispatch with:
  - Job / Project reference.
  - Drawing number and revision (pulled from PO or item custom fields).
  - Packing list details (weight, package count).<sup>[1]</sup>
- Sales Invoice from Delivery Note with:

- Customer PO number.
- Project / job reference.
- Standard Gross Profit report on Sales Invoice to see selling price vs cost of goods.<sup>[2][1]</sup>
- Custom reports/filters (via report builder, no code) to show:
  - Invoice-wise profit and loss (selling vs actual cost).
  - Customer-wise margin.

## **Project-wise Costing & P&L**

- Project document for each major order or group of jobs.<sup>[1]</sup>
- Link all related documents to Project:
  - Sales Order, Work Orders, Purchase Orders, Purchase Invoices, Timesheets, Stock Entries, Delivery Notes, Sales Invoices.<sup>[6][1]</sup>
- Timesheet entry against Project for:
  - Design time (CAD/CAM).
  - Programming time for VMC.
- Expense booking (transport, packaging, travel, tooling) with Project tag so it hits project cost.<sup>[6][1]</sup>
- Project profitability report and filterable Profit & Loss report by Project (no code; use built-in project filter).<sup>[7][6]</sup>

## **Bought-out Items**

- Separate item type for bought-out components (bearings, fasteners, standard parts).<sup>[1]</sup>
- Purchase cycle for bought-out items: Supplier Quotation → Purchase Order → Purchase Receipt → Purchase Invoice.<sup>[1]</sup>
- Inclusion of bought-out item cost in BOM so it flows to quotation and job costing.<sup>[2][1]</sup>

## **User Roles & Basic Controls**

- Roles: Management, Design/Programming, Purchase, Stores, Production, Accounts, Quality.<sup>[1]</sup>
- Role-based permissions configured via standard role/permission manager:
  - Purchase can create PO but not approve.

- Stores can do receipts and stock moves.
- Production can update Work Orders and operations.
- Accounts can post invoices and payments.
- Simple approval workflows for Purchase Orders, Quotations, and Sales Invoices using built-in workflow configuration (no scripting).