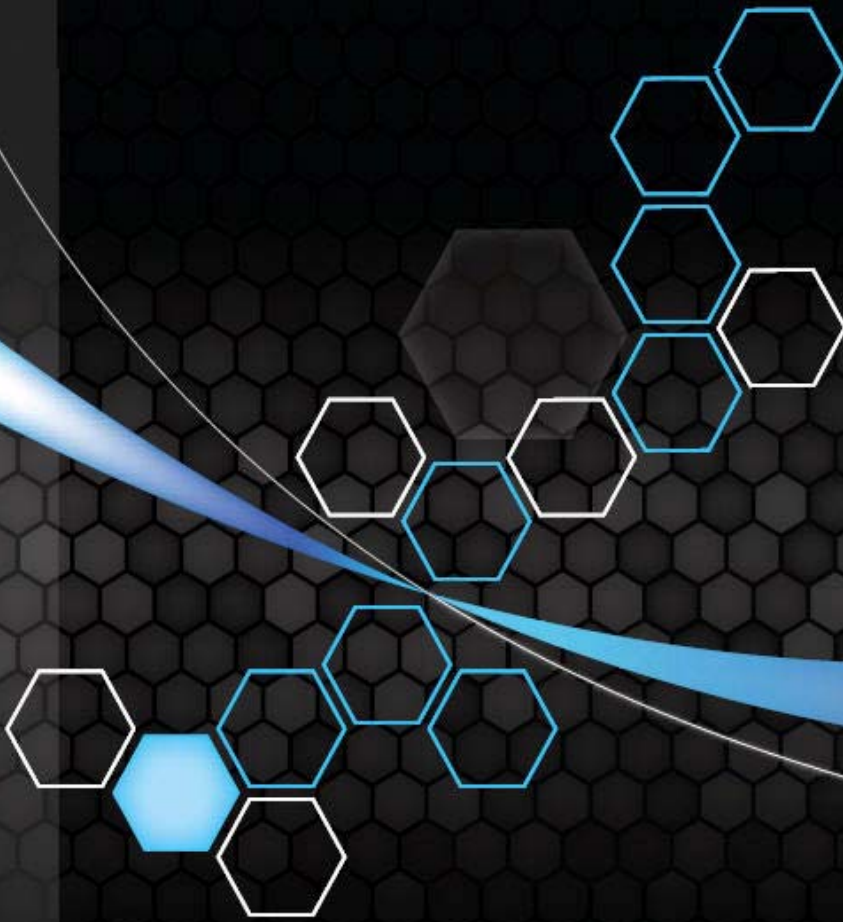


Ramco Enterprise Series

Product Book

Procurement





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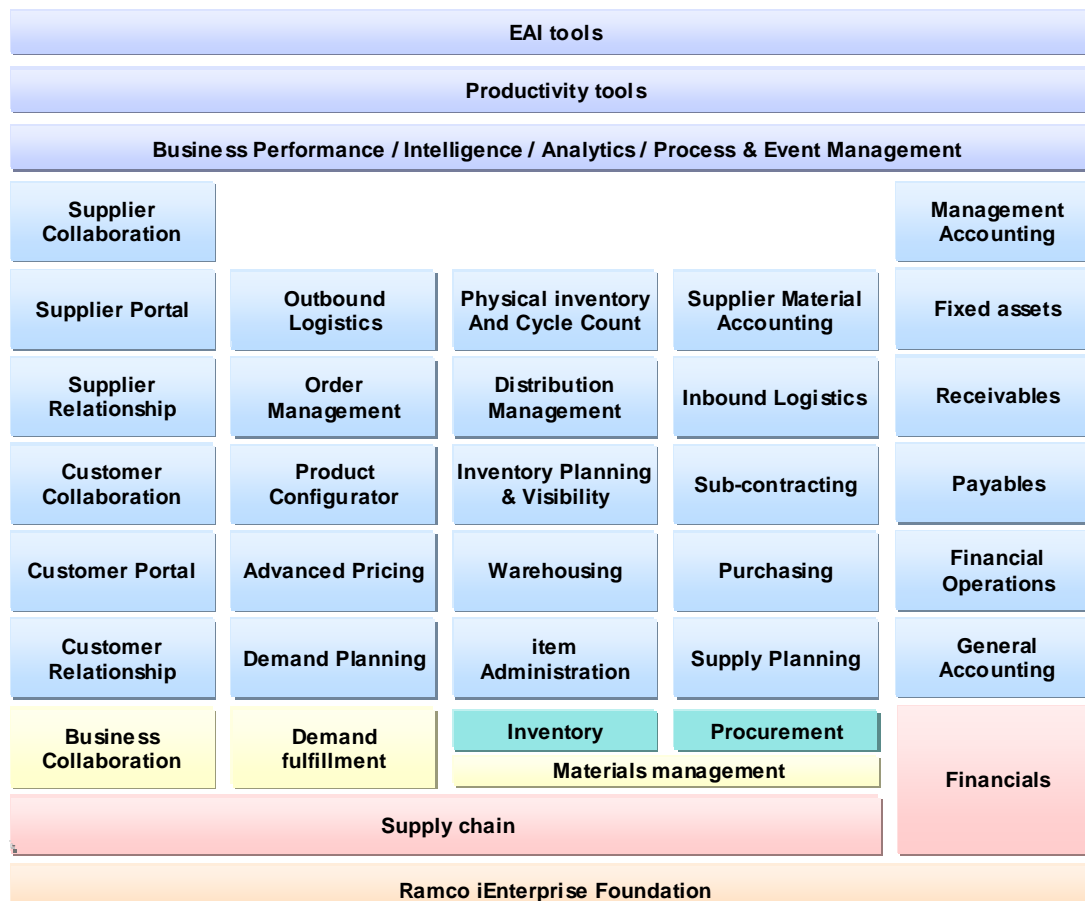
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1. Procurement

Procurement of goods and services plays a key role in defining the competitiveness of a company's supply chain. This is especially true, because the extent of outsourcing, i.e. procurement expenses as a percentage of sales, is increasing every year. A dollar saved in procurement adds to the bottom-line directly. Ramco Procurement helps organizations to manage their procurement processes effortlessly. This solution, in conjunction with the other Ramco applications like the Ramco Business Collaboration, Ramco Inventory and Ramco Financials, covers the complete spectrum of procurement processes from procurement request to payment.

Ramco Procurement application comprises the following functional modules:

- Procurement Organization
- Supply Planning
- Purchasing
- Sub-Contracting
- Inbound Logistics
- Supplier Material Accounting



2. Procurement Organization

The core activity of the purchase function in any organization is fulfilling the procurement demand of various functions like production, maintenance, administration, warehouses etc. To help achieve this, Ramco solution allows information definition of a comprehensive purchase organization.

The following are the key aspects of Purchase Organization, supported by Ramco Procurement.

2.1. Procure-to-Pay Cycle configuration

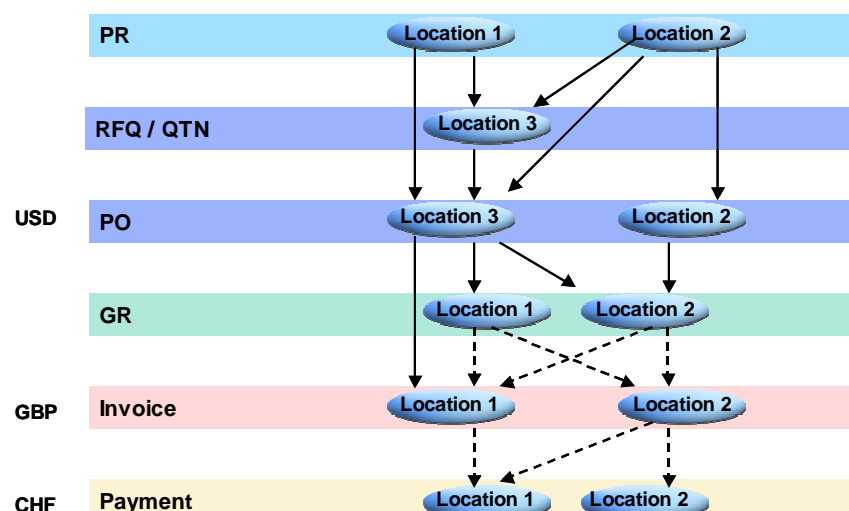
Ramco Procurement has been designed to support a centralized procure-to-pay process, local procure-to-pay process and a mix-n-match wherein certain activities of the process are carried out centrally and certain others locally.

The various activities in the procure-to-pay cycle (including purchase and sub-contract processes) are Requisitioning, RFQ, Quotation, Quotation Processing, Orders, ASN, Pre-Goods Receipt Acknowledgement, Receipt Acknowledgment, Goods Return to Supplier, Invoicing and Supplier Payment.

This extensive process coverage ensures that the application can take care of business processes in companies operating with different procurement organization structures.

2.2. Multi-Currency Capability

The procure-to-pay cycle fully supports multi-currency, whereby the Order, Invoice and Payment legs of the cycle can be in 3 different currencies.



2.3 Multiple UOM Capability

Multiple UOM tracking comes handy where the weight of the item varies from piece to piece or when there is variation in weight due to biological changes or due to storage. Items are stocked in parallel in two quantities (i.e.) Stock UOM and alternate UOM. All stock valuation and payments takes place based on the stock UOM for all transaction. In Procure to Pay related Process, the Goods received are posted in 2 units of measurement.

2.4. Generic Features in Purchasing and Sub-Contracting

Listed below are few of the generic features of the application:

- a. Provision to have a user defined classification of different transactions / documents, using a user defined 'folder'
- b. Multiple documents numbering scheme for each transaction and transaction type.
- c. Support for non-codified items in all the Processes; i.e. Request, RFQ, Quotation, Order, Receipt. E.g. A PO can have both codified as well as non-codified items.
- d. Transactions in UOM other than the Purchase UOM
- e. Capability to inherit notes from masters or reference documents, to the documents in the subsequent stage
- f. Defaulting of account codes and cost centers in a document based on Account Rule Engine and Cost Center Rule Engine definitions.
- g. User can create documents without entering mandatory fields. The system saves the document in draft status. Additional information can be added later. For eg. Supplier information is mandatory only at the time of PO authorization.
- h. 2,3 and 4 way matching of orders for liability creation.

These and similar generic features have been built and designed to increase user efficiency besides supporting diverse business needs.

2.5. Buyer

Considering the vital role that a buyer plays in the procurement process of an organization, Purchase Organization has a well-designed 'Buyer' functionality to cater to the organization's needs.

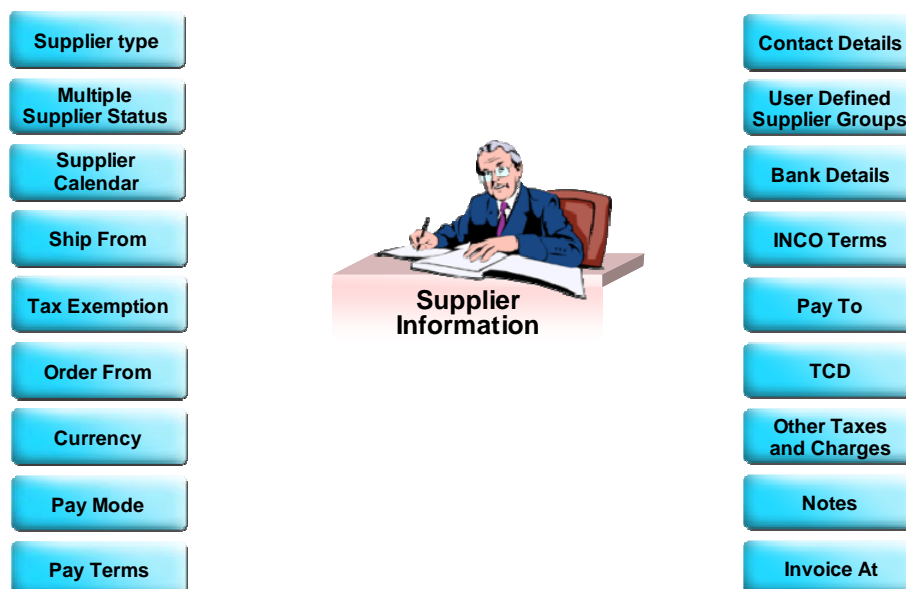
Mapping of buyers and their Login Ids is provided to enable control as well as to ease data entry. Buyers can be mapped to items and item groups. Rules for exclusion and inclusion of items and item groups enable quick association of items to buyers thereby eliminating the drudgery involved. Effective dates for buyers enable control, in case of employees' resignation, transfer, role change, etc. There is also provision to specify if the buyer can procure ad-hoc (non-codified) items.

2.6. Supplier

Supplier is the key entity in procurement organization and his performance is crucial to supply chain effectiveness.

Suppliers can be classified as external or suppliers within the group company structure. This information is used for financial consolidation. The supplier level can be set as location specific, business unit specific or for a group of companies. The supplier code is unique across group of companies, ensuring better MIS and control.

Ramco solution provides for comprehensive definition and information capture of Suppliers, to enable informed and effective decisions. The information captured is pictorially represented below.



Purchased	Sub-contracted
Consignment terms	Sub-contract BOM
Currency specific prices for each UOM	Supplier item ref.
Effective dates	Item quality attributes
Price breaks	Lead time
Inspection type	Matching type
Default UOM	Last purchase price
Minimum order	Item specific other taxes and charges
Maximum order	Source
	Item specific notes
Order multiples	Item specific TCD

2.7. Purchase Budgets

Ramco solution enables flexible definition of Purchase Budgets based on to the organization's needs. Budgets for a business unit, with effective dates, can be specified for the following set of combinations - a) Items, b) Item Groups, c) Period, c) Utilization Locations and d) Suppliers

Budgets can be specified for ad-hoc (non-codified) items, at ad-hoc item class level (logical grouping of ad-hoc items). Purchase Budgets can be specified and tracked from the requisition-to-order stage.

2.8. Sub-Contract Bill of Material (BOM)

Sub-contract Bill of Material can be defined for both conversion and service sub-contracting.

Items can be categorized in BOM as Primary Outputs, Secondary Outputs, Returnable Inputs, Issuable Inputs or Non-Issuable Inputs. Typically, Secondary outputs are by-products and returnable inputs are tools. Different BOMs can be defined for different UOMs of the primary output material.

At the sub-contract BOM Level, effective dates, lead time-item code (only for service sub-contracting), etc can be specified. At the item level UOM, lead-time and tolerance % can be specified.

The items used in the sub-contract process can be specified by the buyer though they are procured and used by the sub-contractor. While some input item quantities remain constant, some increase in a stepwise fashion, when the primary output quantity increases. Rules are

defined to handle such complex requirements. There is also provision to activate / inactivate BOM.

2.9. Taxes, Charges and Discount

Ramco Procurement provides for Taxes, Charges and Discounts (TCD) rule engine, to handle a myriad of business situations

The basis for TCDs can be percentage, flat rate or unit rate. The user can be specified for each of the TCDs whether they are to be treated as expenses or included in the stock value.

For each of the TCD, variants that take different values can be defined.

All the taxes, charges and discount scenarios are handled by building TCD sequencing. The sequences are built using granular values, thus allowing for maximum flexibility. For building TCD sequences the various options available are basic value, total value or TCDs besides the one for which the sequence is defined.

TCDs can be classified into different folders and effective dates can be given to ensure business relevance.

2.10. Type Setup

All documents / transactions in Procurement can be classified into user defined folders. These folders can be used for multiple purposes such as MIS reports, Intuitive search, Workflow routing, Document classification and Ad-hoc (non-codified) item classification.

Type-setup provides a powerful tool for the user to configure rules to handle various business situations. E.g. the document number- help/search contains the document folder as a filter criterion to assist the user to locate a document intuitively.

2.11. Pay Term

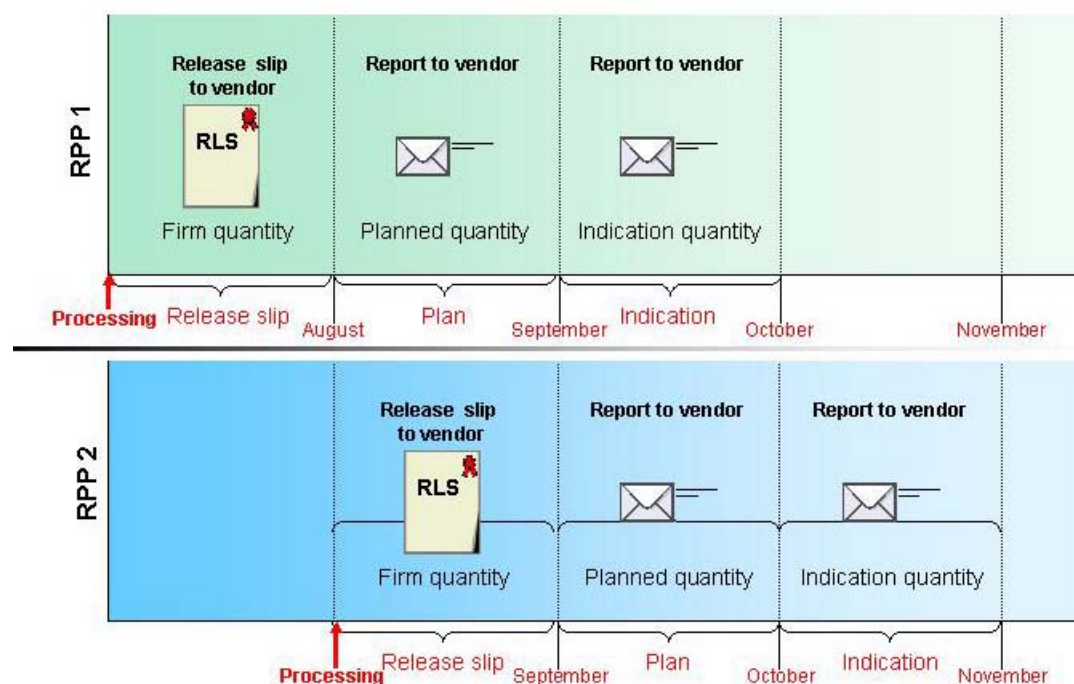
Ramco Procurement provides for definition of a pay term that has various parameters like Due Days, Due %, Discount Days, Discount %, Penalty %, Per and Time Unit. The user can specify the anchor date basis to be used for each pay term. The various options available are supplier invoice date, receipt date and user defined date. There is a provision to specify if proportional discounts for part payment within the discount days are applicable.

3. Supply Planning

In a typical manufacturing set-up, some of the material requirements are often known well in advance, say for a quarter year or so. The demand would be pre-determined and the requirements would be fairly accurate due to the availability of a production plan and associated bill of materials. As the material requirements are known in advance, it would be better for a company to plan for its procurement also in advance. Such prior procurement planning would not only help the company in having a fairly consistent supply of materials, but also benefit the Supplier in terms of planning his resources accordingly.

The benefits of such close relationships with suppliers are:

- Shorter delivery lead times
- Reliable delivery promises
- Less schedule disruption
- Lower stock levels
- Fewer quality problems
- Stable, competitive prices
- Orders given higher priority
- Integrated scheduling of production and deliveries

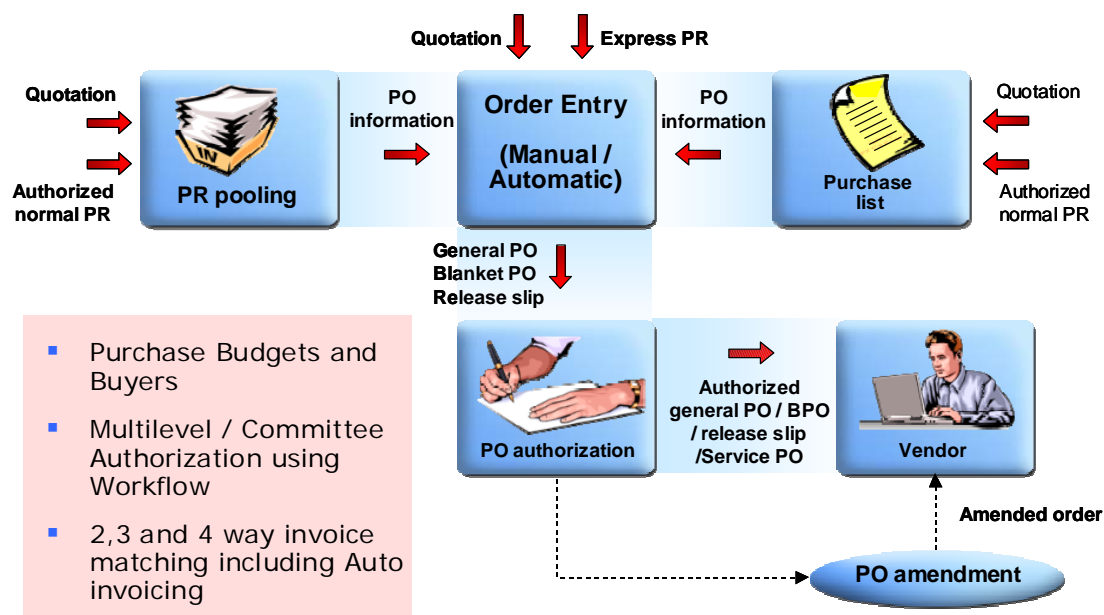


3.1. Rolling Purchase Plan

Rolling Purchase Plan is seamlessly integrated with the production applications. It supports procurement planning of materials whose requirements are known in advance. At the time of Rolling Purchase Plan processing for a particular item/variant and planner, a set of MRP generated Purchase Requests (PR) are considered for the processing. The PRs indicate the exact requirement of items with associated schedule date or need date. The need date of the material would be different for each PR. Based on the period (i.e. Period 1, 2 or 3) in which the need date of each PR falls, either a Release slip or a report is generated to communicate the material requirement to the Supplier.

If the need date (material requirement date) of a PR falls within Period 1, an RLS is generated for that material requirement. If the need date falls in Period 2 or 3, a report, indicating the tentative material requirement to the Supplier, is generated. Both the release slip and the report would be sent to the Supplier to aid in their planning.

4. Purchasing



4.1. Purchase Request

Ramco Procurement has different types of Purchase Requests (PRs). Normal PRs allow inclusion of all item types except capital items. Capital PRs allow spares and services apart from capital items. For capital PRs the Proposal ID from Ramco Fixed Assets can be specified. It also allows the user to suggest a supplier different from the standard supplier.

The PR can be either manually created by any user or it can be system generated from various Ramco applications like Inventory, Production and Maintenance.

4.2. Purchase Request to Order Conversion

Purchase Requests can be pooled and converted to Purchase Orders / Release Slips by giving reference to a Quotation or Blanket Purchase Order. The information from these documents is defaulted onto the Purchase Order that is created. If none of these are specified, the system takes the information from the supplier master. Alternatively, after the orders are created based on any of the above documents or supplier master information, the open Purchase Requests can be covered.

4.3. Purchase Request for Quotation (RFQ), Quotation and Quotation Processing.

RFQs can be generated referring to purchase requests or by specifying items directly. The solution provides for supplier-wise mapping of items as well as competitive bidding (all items mapped to all suppliers and selection is at the document level). Competitive bidding enables better comparison across suppliers when quotations are received.

RFQ and Quotation can have both codified as well as non-codified items. In the RFQ, buyer, inspection by and effective dates can be specified.

It is possible to send RFQ s to selected suppliers in a phased manner. There is a single RFQ number for all suppliers. The RFQ number and supplier code combination acts as the key in the system.

Creation and approval of Quotations can be done based on RFQs or quotations can be entered directly. Quotation processing can be done for quotations received from different Suppliers and orders can be generated. Quotation processing can be done either as quotation-based (1 order for each quotation) or as Supplier-based (1 order for a Supplier's multiple quotations).

4.4. Purchase Order (PO)

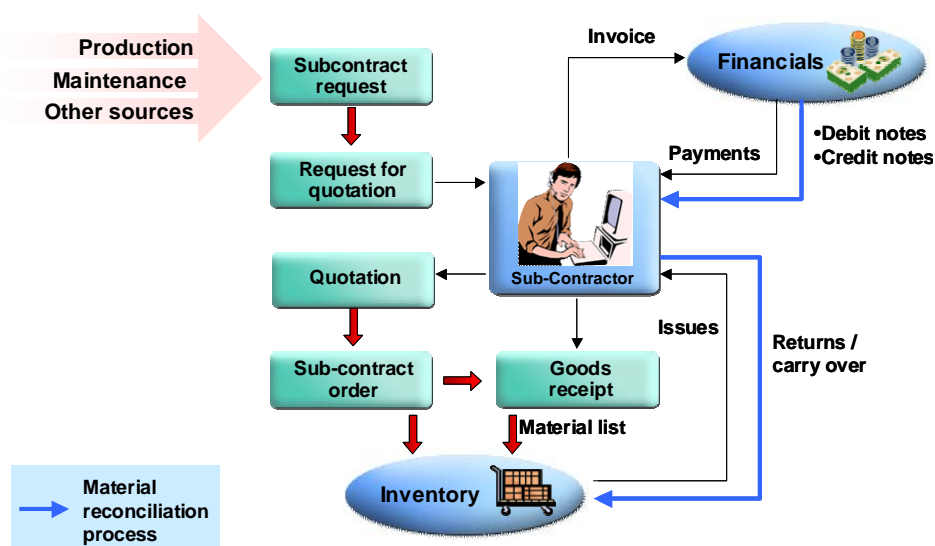
Ramco procurement supports various types of Purchase Orders (POs) like Normal, Dropship, Consignment, Capital and Imports Purchase order.

Purchase budgets are supported at line level and the users can add line and document level taxes and charges in a PO. Apart from this the application has provision to record list of taxes and charges based on weight / volume and bases other than quantity and value. An additional LOI (Letter of Intent) status is allowed prior to PO authorization. Zero value Item procurement is supported to take care of samples, promotion, deals etc. The solution allows record of miscellaneous charges in the PO with provision to modify or add at the time of Goods Receipt (GR). The system automatically generates invoices at GR time for POs marked as Auto-invoicing. Centralized Purchasing as well as local purchasing is supported. Use of LC (Letter of Credit) documents as pay mode is also supported for Normal and Capital orders

4.5. Blanket Purchase Order / Release Slips

The various Blanket Purchase Orders/Contracts supported are rate, value and quantity. Besides Normal Blanket Orders, the application supports Capital, Drop-ship and Consignment Blanket Orders. Based on Purchase Requests or otherwise, release slips can be generated against these Blanket Purchase Orders. All the Purchase Order functionalities are supported in Blanket POs and Release Slips.

5. Sub-contracting



5.1. Sub-Contract Request

Ramco solution supports the following types of Sub-Contract Requests - Conversion, Service and Activity Sub-contracting.

The Sub-Contract Request can be either manually created or system generated from Ramco applications like Inventory, Production and Maintenance.

Activity sub-contracting helps in outsourcing of a production activity to a sub-contractor.

When the sub-contractor request is raised, the user can specify inclusion and exclusion list to control issue of items to subcontractor in the absence of a BOM.

5.2. Sub-Contract Request to Order Conversion

Sub-Contract Requests can be pooled and converted to Sub-contract Orders / Release Slips by referring a Quotation or a Blanket Sub-Contract Order. The information in these documents is defaulted onto the Sub-Contract Order that is created. If none of these are specified, the system takes the information from the supplier master. Alternatively, after the orders are created based on any of the above documents or supplier master information, the open Sub-Contract Requests can be covered.

5.3. Sub-Contract RFQ, Quotation and Quotation Processing

Sub-Contract RFQ can be generated referring to Sub-Contract Requests or by specifying items directly. The application provides for supplier wise mapping of items as well as competitive bidding (all items mapped to all suppliers and selection is at the document level). Competitive bidding enables better comparison across suppliers when quotations are received.

RFQ and Quotation can have both codified as well as non-codified items. In the RFQ Buyer, Inspection By and Effective Dates etc. can be specified. Quotations can be received for both.

It is possible to send RFQ s to selected suppliers in a phased manner. There is a single RFQ number for all suppliers and RFQ No. and Supplier code combination acts as the key in the system.

Creation and Approval of Quotations can be done based on the RFQ's above or the quotation can be entered directly. Quotation processing can be done for quotations received from different Suppliers and orders can be generated. Quotation processing can be done either Quotation Based (one order for each quotation) or Supplier based (one order for a Supplier's multiple quotations).

5.4. Sub-Contract Order (SCO)

The Ramco application supports Non-codified service sub-contracting, conversion sub-contracting and activity sub-contracting for production. Purchase budgets are supported at line level and include line and document level taxes and charges.

The application has provision to record list of taxes and charges based on weight / volume and bases other than quantity and value. An additional LOI status is allowed prior to SCO authorization. Miscellaneous charges can be recorded in the SCO with provision to modify or add at the time of GR. The system automatically generates invoices at GR time for those SCO's marked as Auto-invoicing.

Centralized Purchase as well as local sub-contracting is supported.

5.5. Blanket Sub-Contract Order / Release Slip

Long term sub-contracting using Blanket Sub-Contract orders and releasing slips against the same are possible for Conversion contracting, Service contracting and Activity contracting for production. All the other functionality related to Sub-Contract Order as in Purchase Order is supported in these orders too.

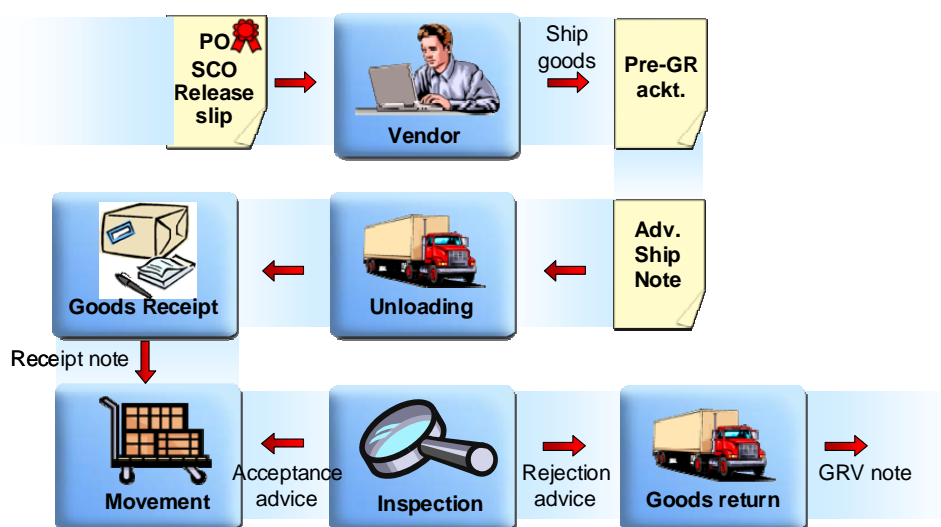
6. Inbound Logistics

The application supports the inbound logistics process right from Shipment from the supplier's location up to movement of the stock the respective zone and bin. All the intermediate steps like ASN, Pre-GR Acknowledgement, Unloading, Goods Receipts, Goods Reversal, Goods Returns, and Auto invoicing are part of the inbound logistics process. These steps except for Goods Receipts (Receipt Acknowledgement) are optional and can be used based on business need.

6.1. Advance Shipment Note

Advance Shipment Note not only keeps track of the material once it is shipped but also gives visibility to stock in the inbound supply chain thus proving crucial for planning. In our application apart from doing the above we also capture crucial information like:

- Shipment type
- Route information,
- Logistics Provider
- Consignee, Pallet / Rack / Container number along with item code, quantity, Unit of measure information
- Supplier Invoice
- Insurance Liability
- Inco-term
- Transshipment information
- Shipment Status
- Expected delivery date.



6.2. Pre-GR Acknowledgement

Pre-GR acknowledgement facilitates acceptance of order based invoice before the goods are received. The application provides for single acknowledgement against multiple orders / shipments. Pre-GR acknowledgements can be reversed.

6.3. Receipt Acknowledgement

The Goods Receipt process involves capture of detailed information related items received like Supplier lot numbers, Supplier serial numbers, manufacturing date, quantity etc. Material Inspection, Rejection and capture of quality attribute values is part of this process. Shipment such as AWB (airway bill) / BOL (bill of lading) / LR (lorry receipt) information, ASN (Advance Shipment Note) and packaging details can be recorded at this stage. Goods can be received in alternate UOM defined for the item. Goods can be moved to quarantine bays and receiving bays before actual movement to warehouses / consumption point for quality check. The application provides for setting the number of mandatory steps in the receipt. Multiple receipts against one pre-GR Acknowledgement are possible.

Apart from receipts against different orders like Purchase Orders, Purchase Release Slips, Sub-Contract Orders, Sub-Contract Release Slips, the application allows for a) receipt against Sale Order for inward contracting b) receipt against Goods Return and c) receipt against cargo clearance for imports purchase order

For receipts raised against purchase orders which are mapped to LC documents, the mapped LC no and the corresponding unique Ref ID are defaulted. User can change the Ref ID and LC no if required, using another LC Number which is also covering the PO.

6.4. Goods Return to Supplier

Goods are frequently returned to Suppliers for various reasons. The application provides for goods return against a PO, Receipt Acknowledgement or without a reference document. Goods return to Supplier can be during receipt or post warehouse movement. This action results in an automatic Debit note to Supplier.

7. Supplier Material Accounting

An organization deals with suppliers and their materials based on the nature of contract it has with them. Procuring items from supplier on consignment basis and sending items to suppliers for subcontracting are two major business scenarios. In both these scenarios accounting for material belonging to the other party is crucial. The Ramco application elegantly takes care of these business practices and the same are described below.

7.1. Consignment Register

Consignment Register is a consolidation document on material consumption of Consignment PO's and Release Slips. Buyer organization consolidates the consignment items / quantities / values that have been consumed in a period and sends this to the supplier. The supplier uses this as basis to send his invoice. At the time of supplier invoicing, Consignment register is used to match with the supplier invoice.

7.2. Material Reconciliation

Material Reconciliation is done for conversion sub-contracting. Material Reconciliation activity is used for reconciling the stocks lying with the sub-contractor with that indicated in the organization's system. The record is maintained based on BOM, sub-contract order and receipts. The reconciliation process takes into account input, receipt, their tolerances, BOM, material lying with sub-contractor etc. The Ramco application also provides visibility on tools that are lying with the sub-contractor.

Material Reconciliation is done order wise or at period end. If there is any discrepancy in the statements of the supplier and the system stocks, various actions can be performed for reconciliation. Based on excess / shortage of material issued, courses of action could be a) carry over to the next Subcontract Order or b) initiate a Debit / Credit Note and / or c) issue / return of material

7.3. Supplier Rating

Supplier rating is processed in the organizations by giving different weights for different parameters such as price, adherence to delivery schedules and quality of material supplied etc.

The Ramco Purchase application supports user defined rating parameters and predefined rating parameters, with their own weights in overall rating.

The predefined parameters are

- Delivery
- Quality
- Price
- On Time Performance

A separate scale can be defined for each user-defined parameter. At the time of Overall rating, the user will have to specify only Excellent, Good, Average or Poor and the system will assign points accordingly. User defined text and instructions can be associated with individual parameter value ranges as well as overall parameter value ranges. The output of Supplier rating includes overall and parameter wise ratings and soft factor rating.

Standard text and instructions and a history of the transactions explain the Supplier's rating. The Ramco application provides for definition of time period for the rating calculation. Users can therefore run a rating for a particular month, quarter or a specified time period. A feature to allow the user to re-run a rating for a previous period for which supplier rating was already run is also available. To increase system performance, an option to clear the redundant data is also present.

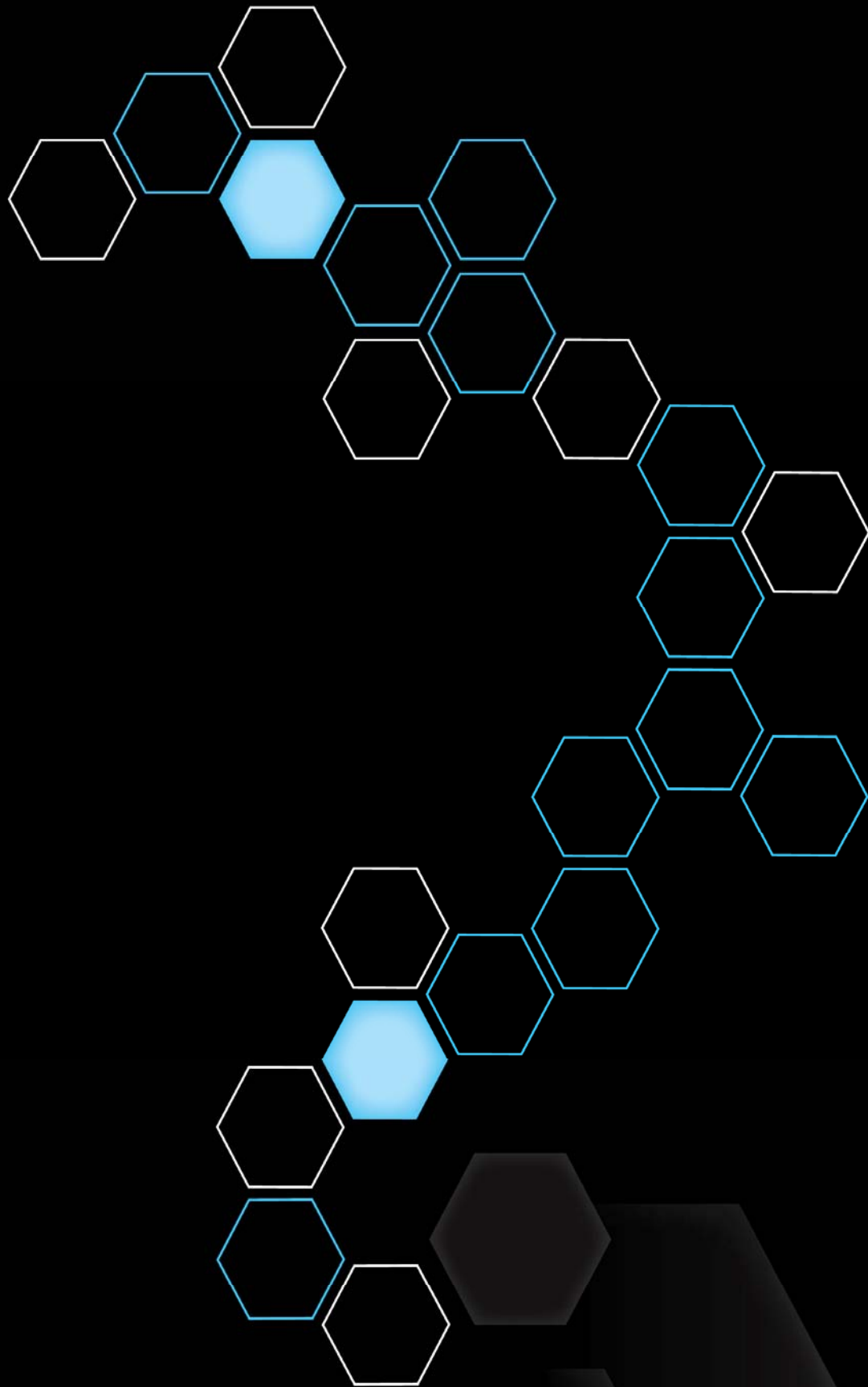
8. Letter of Credit

Letter of Credit (LC) mode of payment is used to overcome the financial risk involved in national and international trade transactions. The LC is issued by a financial organization at the request of the buyer. Necessary instructions are provided by the buyer while preparing the LC.

The Letter of Credit is an arrangement with the bank (Issuing bank), which acts at the request and the instruction provided by the customer (Applicant) to make payment to the supplier (Beneficiary). The LC is classified as Sight and Usance LC. LC details are maintained for both Receivables and Payables cycle.

Multiple Ref.ID can be mapped to a single order and multiple orders can be mapped to a single Ref.ID. LC coverage amount for an Order – LC combination is specified while mapping the LC to the orders at document level. However invoice / payments can be released only for one LC at a time. INCO terms supported for LC are FOB, CIF and CFS. LC documents can be amended, if required.

All transactions details such as Order details, good received details, invoiced details and payment details pertaining to the entered LC can be viewed through Payables LC Dashboard.



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