

KANDAREE™

**Industry leading solution for Textile & Apparel sectors,
which helps Entrepreneurs & Workers stay in touch with
the forces that drive the business.**



KANDAREE™

1. Order Management & Material Requirement Planning :

Merchandising

The primary users of this module are the Merchandisers. It starts with getting the inquiries from the buyer. Pre-Costing for buyer quotation is managed through this module, which is subsequently linked with the confirmed order from the buyer. The module helps in making the consumptions of Fabric, Trims and other related materials. The detail order break down is also being captured in this module. Based on consumption definition and order breakdown details, the system generates the Bill of Materials for the Order (BOM). On the basis of this BOM, subsequently, the Purchase Orders (PO) to the suppliers are raised from the system. The Proforma Invoice (PI) from the supplier is attached with the corresponding PO.

The screenshot displays the 'PO Details' window in the Kandaree ERP system. It includes a header with fields for Buyer (MOTHER CARE), Year (2013), PO Qty (1776), Department (21), Style No (2910), PO Make (0201), and a checkbox for 'All Style'. Below this is a table with columns for Item No., Style, Buyer PO No., PO Dates, Department, Qty Qty, Order No., Order Date, Order Qty, and Amount. The table contains several rows of data, including a 'Totals' row. At the bottom, there is a summary table with columns for Item No., Style, Buyer PO No., PO Dates, Department, Qty Qty, Order No., Order Date, Order Qty, and Amount.

Besides Confirmed Orders, the system allows the Merchant to handle Projected Orders as well by Season and Style. Linked with Production Planning, the Merchant can make informed decision on how much Capacity s/he can commit to the Buyer.

System further allows the Merchandising Heads, Top Mgmt. and Department heads to conduct Order Progress Meetings through Kandaree, recording the anticipated critical problem areas and their solutions. Individual persons can then be assigned for the problem areas. After the Meetings, System facilitates following up on the problem areas in an organized manner. Over period, the System gets enriched with a Knowledge-Bank specific to the Organization.

- ◆ Pre-Costing Details by Costing Head: Know instantly how your quote is broken down by different Costing Heads - Fabric, Trims, CM, etc. This way, you will always know how you are affected by market price fluctuations of raw materials.
- ◆ Revenue Generation over the years by Style Category
- ◆ Profit Margin Pattern over time by Style Category
- ◆ Material Requirement by Order (Style)
- ◆ Status of Material by Order - Requirement, Booked and In House: No last minute surprises. Know ahead of time where you stand in terms on Material Availability for Production Start.
- ◆ Revenue and Profit Pattern by Buyer: Know which Buyers are more profitable for you so that you can focus on future Marketing Activity accordingly.
- ◆ Available Production Capacity for future Seasons: Be proactive and offer Capacity to your Profitable Buyers ahead of Time. There will no longer be the risk of over committing; at the same time, any potential under capacity will be known ahead of time.
- ◆ Improve your operational efficiency by working in a more structured manner through the Kandaree ERP System. Instant information sharing among concerned people greatly increases productivity and leads to increased efficiency in Order handling and management.
- ◆ Merchants no longer need to chase interdepartmental personnel for accurate information for Order follow up. All related information is now readily available in the System and is simply a click away.
- ◆ Leave the routine tasks and checks on the System so that you can focus on more Creative Avenues on the Marketing side.

- ◆ Draw from the Knowledge-Bank that the System builds up based on the Periodic Order Progress meetings. For any new Order, you can now check what critical problems were faced for similar Orders earlier and how they were resolved.

Sample Management

The sample making process is managed and controlled through this module. The different kinds of samples are handled through a structured Sample Requisition process. All sample materials are received and tracked in the system by the Sample Requisitions raised by the merchants. The monitoring of the sample making is handled through Time & Action - giving up to date status of all the sample requisitions. At any given point, the system gives useful information about the Sample Requisitions - whether material has been received, whether sample making has started, whether sample making is running behind schedule, whether the samples have been submitted on time, etc. Upon completion of Samples, System allows printing unique Sample Tag ID for each Sample piece. This way, System tracks each individual sample that has been produced. Furthermore, Sample making history can be obtained instantly through the Tag ID.

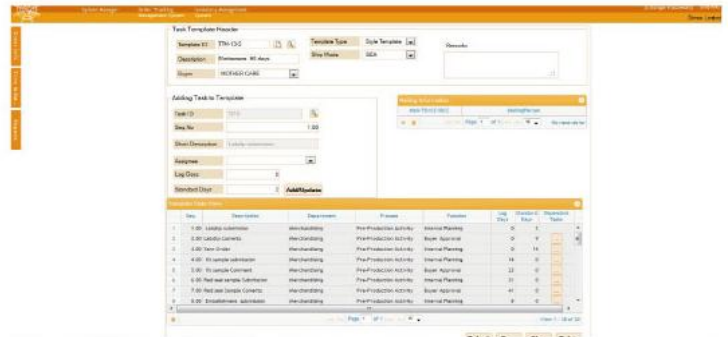
- ◆ Merchants can know instantly the status of Sample production through the System.
- ◆ The Sample Material availability is transparent to all concerned personnel. Sample Makers no longer need to chase Merchants to find out the ETA of materials.
- ◆ Individual Tag IDs allow Merchants to track and find the entire history of any Sample produced in the Organization. This allows the Merchant to quickly address any Buyer inquiries about submitted Samples.
- ◆ Sample Room can make realistic Sample Production Load based on Material ETA and Sample Deadline. This enables them to give more realistic commitment to the Merchants.
- ◆ All Buyer Feedback and Reworks are recorded in the System. You can now find out instantly your Organization's Sample Making efficiency and take appropriate measures.
- ◆ Compiled Sample Feedback for different Sample Types highlights the potential critical areas with possible solutions to the Production Managers when they go for bulk production.
- ◆ Get Cost and Productivity (SAM) feedback from Sample Room regarding the Style. This helps Merchants to negotiate more effectively with the Buyer.

2. Commercial / Documentary Credit Management

- ◆ Maintains and tracks export L/C related information
- ◆ Maintains and tracks BB L/C related information
- ◆ Handles DP, TT nature of transactions
- ◆ Tracks & monitors the import status, which is integrated with merchandizing & inventory systems
- ◆ Generates possible documents from the system to facilitate preparation of shipping document
- ◆ Tracks shipping document from preparation to submission to bank
- ◆ Internally passes the transactions to the accounting system where necessary

3. Procurement Management

Through this module the Indent/Requisition of Stock, Capital & Service Items are handled. The Indents from respective department are raised for Stock Items, Stores raise the Purchase requisitions. The module raises the purchase order for the approved purchase requisition. For Capital Item, the purchase requisition comes from the respective departments. The module raises the purchase order for Capital Items separately.



For composite knitting setup, the in-house fabric work orders are generated from this module. On the basis of the fabric work order, the Dyeing Finishing unit and the Knitting unit make their respective work plans. The yarn purchase order is also handled from this module.

In addition to the above, this module also handles the Service Requisition against which it raises the Service Work Order. The relevant activities of the module are linked with Inventory, Accounts, Order Management and Documentary Credit Management.

4. Store Management

There is some uniqueness in handling the Trims and Fabrics in garments industry compared to other materials. To serve the unique features of different items of Garment Industry, depending on the nature we have segregated it in to different categories - Fabric, Trim, Items sensitive to expiry date (Dyes, Chemical, etc) and Miscellaneous. All received items are passed through QC interface. Inventory is updated with the QC passed quantity. Account is closely integrated with this module.

Lot wise receive and issue of Yarn and fabrics are maintained.

System allows the store to issue items predefined against production planning. In this way, the use of materials is controlled at its optimum level.

The user has more control on the left over items for decision making purpose.

5. Sewing Production Planning and Accounting with Time & Action **Sewing Production Planning and Accounting**

Through this module, production scheduling is done primarily for the Sewing operation. Subsequently, through back calculation, Cutting schedule can also be generated. System facilitates the planning either based on sophisticated tool of Industrial Engineering exercise or from the Operational Target given. Depending on the Line preference, product category and other relevant information, everyday the system does the scheduling based on actual performance and provides very useful decision making information.

Based on the configuration, the bulk production data is captured through this module. Accordingly, the production reconciliation between processes is also maintained from here.

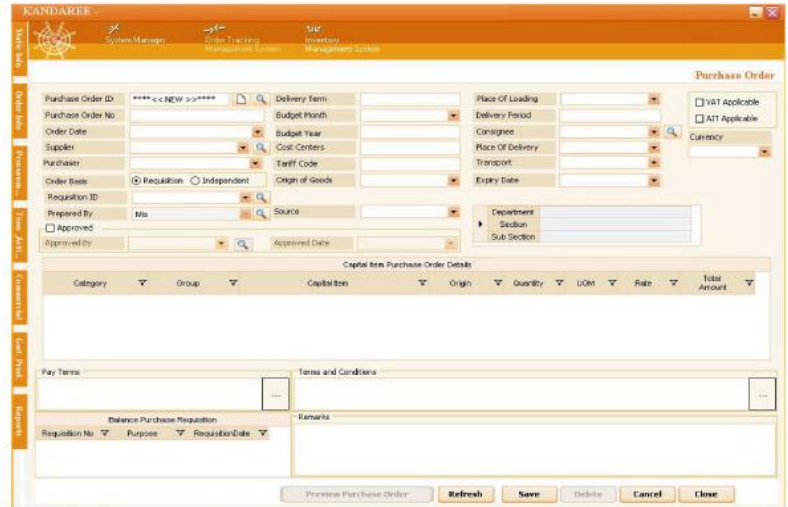
Time & Action

Complete task level monitoring and Critical Path Analysis are handled through this module. Different templates with predefined tasks and relationships may be kept in the system. The system provides enough flexibility to the user to create Templates for different Product Types and Order Lead Times - Woven, Woven with Wash, Knit, Sweater, etc. Upon attaching the templates at Style or Order level, the system populates the start & end dates against individual task. Against the relevant predefined task for the Order, the concerned person assigned to the task needs to put the commitment date.

The system provides Critical Path for an Order and also "task to do" list for each individual employee and keeps track of the completion status. Any deviation on the Critical Path can be immediately picked up. The system also sends out email reminders for upcoming critical tasks and alerts for missed tasks. Through this module, the system provides some important information which is very much helpful for employees' performance appraisal.

- ◆ Different Predefined Task Templates can be maintained by Buyer, Style Category, Lead Time, etc. When Orders are confirmed, appropriate Template can be attached to easily create the required Tasks.

- ◆ Assigning Order Tasks to Employees ensures no task is left unattended.
- ◆ An Employee can see and act upon all his/her Assigned tasks from one single place.
- ◆ Regular follow up reminders from the System ensures that no task is left unattended which goes a long way to completing an Order on time.
- ◆ System facilitates the Top Management to intervene on Critical Tasks before they go beyond manageable state.
- ◆ Top Management can easily check the status of all Tasks for an Order, thus enabling them to address Buyer inquiries about existing Orders.
- ◆ On time Completion of Assigned tasks by Individual Employee can be reflected in the Employee's Performance Appraisal.



6. Composite Knit Setup:

6.1. Knitting & Dyeing Production Management

This module is used to track the complete fabric production flow of Knit industry. The module is tightly integrated with the Garmenting module so as to handle the composite knit scenario. The system keeps track of the fabric production by individual rolls/bags. The different stages of the fabric - starting from Yarn to Dyed Yarn to Griega Fabric to Finished Fabric - are maintained and monitored in the system.

The requirement of the fabric comes from the Order Management module where the merchants raise the fabric requirement, based on the marker plan. In the system, the fabric department then determines the Greige fabric requirement and the Yarn requirement. The Yarn procurement is also handled from here.

Roll ID	Supplier	Roll Qty	QC Check	Total	Rate	UOM	Entry Date	Machine ID	Remarks
12401902	2882	108.000	108.000	108.000	1.000	yds	5/5/2012 12:0	SHANG	H3 1
12401901	2881	78.000	78.000	78.000	1.000	yds	5/5/2012 12:0	SHANG	X 2
12401902	2885	132.000	132.000	132.000	1.000	yds	5/5/2012 12:0	SHANG	H1 1
12401903	2887	107.000	107.000	107.000	1.000	yds	5/5/2012 12:0	SHANG	H2 2
12401904	2890	111.000	111.000	111.000	1.000	yds	5/5/2012 12:0	SHANG	D1 1
12401904	2889	107.000	107.000	107.000	1.000	yds	5/5/2012 12:0	SHANG	D4 1
12401905	3000	85.000	85.000	85.000	1.000	yds	5/5/2012 12:0	SHANG	D4 4
12401907	3001	108.000	108.000	108.000	1.000	yds	5/5/2012 12:0	SHANG	D1 1
12401908	3002	108.000	108.000	108.000	1.000	yds	5/5/2012 12:0	SHANG	H2 2
12401909	3003	118.000	118.000	118.000	1.000	yds	5/5/2012 12:0	SHANG	D2 2
12401910	3004	84.000	84.000	84.000	1.000	yds	5/5/2012 12:0	SHANG	H4 4
12401911	3005	111.000	111.000	111.000	1.000	yds	5/5/2012 12:0	SHANG	H3 3
12401912	8006	111.000	111.000	111.000	1.000	yds	5/5/2012 12:0	SHANG	D3 3
12401913	3007	118.000	118.000	118.000	1.000	yds	5/5/2012 12:0	SHANG	D1 1

Once the yarn is procured, the complete fabric production is tracked in the system. The system maintains the production status/update of all the rolls/bags for all the sub-processes in the fabric production (starting from Knitting to Dyeing to Finishing). The system also maintains the roll information by Dye Batch number. Subsequently, the fabric is delivered to Garmenting for cutting by the Dye batch number. This ensures that there is minimal shade variation.

The system gives the users complete control over fabric production and integrates it with the Garmenting unit. This enables material reconciliation of the entire order starting from yarn procurement, knitting of greige fabric, dyeing of

finished fabric, issue to cutting, actual cutting, sewing production and shipment of garments. The module is also tightly integrated with the Sewing Production Planner which makes it possible to keep the fabric production in sync with the Sewing production plan.

For sophisticated users, Recipe management, batch creation, dyeing material requirements by batches can also be managed and handled through this module.

6.2. Knitting & Dyeing Subcontract Management

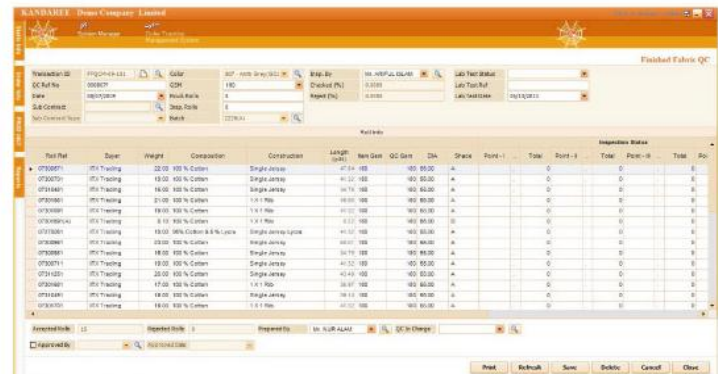
The nature of business of this industry, particularly for knitting operation no factory can become self-dependent. At different points it has to depend on outsourcing the job. Similarly, to optimize the installed capacity it has to work with inbound subcontract jobs. Managing and keeping track of both inbound and outbound subcontract is a very critical area in keeping the supply chain of the fabric smooth.



This module manages and controls all In and Out bound sub contract both for Knitting and Dyeing operations. Work order for specific process (es) is issued from the system. Movement of input materials and getting the output items back in house are being tracked by the system. In the process better internal control can be established. The module is closely integrated with other relevant modules, like production, store, and accounting.

6.3. Knitting Production Planning

The module facilitates in making the knitting production plan. The grey fabric requirement comes on the basis of finished fabrics demand including the process loss. The module makes auto scheduling of knitting production plan by each knitting machine.



The production requirements for knitting department will come from the Dyeing Department's production planning based on the Fabric Work order of the Sewing Department. The required delivery date is also given by the Dyeing Unit. The Knitting production is scheduled based on machine standard output against the style. System does the scheduling taking into consideration all the constraint factors and provides projected information to the planner. Through the Knitting Planning board, the planner able to see the different alternative scenarios to utilize the capacity in an optimized manner.

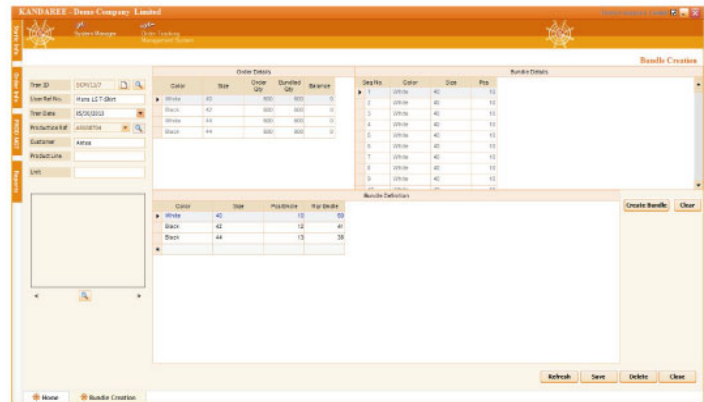
Daily knitting production is auto adjusted while making the dynamic knitting plan by the system. It is tightly integrated with Sewing production planner and the Dye house production planner, which enable the knitter to precisely understand the daily knitting production requirements. On the supply side from this module the periodical yarn requirements are generated which flows to the procurement module for raising yarn purchase order in time, ensuring uninterrupted production to meet the ultimate deadline of garment shipment. It also facilitates in ensuring optimum utilization of installed knitting capacity by giving indication of in and outbound knitting subcontract requirements.

6.4. Dye house Production Planning

The production requirements for the Dyeing department mainly originate from the Garment division in a composite knit factory. Based on the Sewing Production Plan, the daily finished fabric delivery requirement with starting and ending delivery dates are given by the Garment unit.

On the basis of fabric work order initial batch planning is done through the system as per vessel capacity. And subsequently through this module, production scheduling is done primarily for the dyeing process by machines. Depending on given inputs (number of machine allocation, machine preference, etc.), the system does the Dyeing Production Planning by each dyeing machine. The loading to the up and down stream Dye House processes is also made by the system automatically as per dyeing process production scheduling.

The actual production data is captured by given dyeing machine through this module. Accordingly, the production reconciliation between processes is maintained. Every day the system does the scheduling for the balance quantity and provides very useful decision making information.



7. Fabric & Cut Control

7.1. Knitting Setup:

The purpose of this module is to facilitate the Fabric Control in the production process. The main challenge of composite Knit setup is to maintain the efficient use of fabric. In Knit Garments the fabric is manufactured in terms of weight and the ultimate use of it (cutting) is dependent on length. The module, in a systematic manner, manages the process, resulting in efficient use of fabrics. Based on the reconciliation information, the user can take appropriate decision in reducing the possible fabric wastage.

System gives projection of cutting quantity, combining Marker information and the Roll details. It brings material usage visibility much earlier to get better control in having unnecessary left over quantity of fabrics in grey or finished form.

7.2. Woven Setup:

For Woven setup the Fabric Control starting from Roll receipt. System allows receiving Fabric by roll which enables tracking each Roll. After grading the fabric by roll in terms of Shrinkage and Color Shading, QC is done. Only the QC passed quantities are available for use. Roll wise Receipt & Issue of fabric is registered here and internally linked to Inventory Module.

This module helps with the planning and execution of markers. The system keeps detailed Marker information which is subsequently used for Lay Plan.

The most critical success factor of whole garment manufacturing operation is having an effective Cut Control. This module will allow the production staff to prepare their cut plan and also help schedule the cut program. While making the Cut Plan, the system picks the relevant Marker(s). System assigns the relevant rolls against each Lay plan and project number of plies to cut, End Bits length, etc. And at the same time, it produces the Roll(s) to issue requisition for store. The information is electronically passed to Store Module and the store people are restricted to only issuing the roll according to Lay Plan. Features are given to handle the Cut Plan with end bit fabrics.

8. Shop Floor Production Control

The pre requisite to this application is an Industrial Engineering Department. This application helps prepare an IE bulletin and can make suggestions for load balancing the lines. The application helps cutting department prepare and execute a cut plan. The base data element is the bundle ticket system which helps not only with production status data but also with productivity information of each employee. This information helps the client to decide on a productivity based incentive plan that is free from any bias. The yearly increment policy can also be linked with the productivity information. This application also works as a repository for the skill matrix of the work force. The module helps the client to identify bottle necks on a real time basis and also helps to correct them through line balancing. Machine Requirement Plan is also generated which helps to decrease style changing time on every line.

9. Financial Accounting

The accounting application has four sub modules. They are a) General Ledger b) Accounts Payable and c) Accounts Receivables and d) Term Loan Management. As the application is integrated with other modules, the Balance Sheet and Profit and Loss account reflect real time situation of the company at all times. Year closing becomes a matter of fact activity without any delay. The application gives aging report on account payable and receivables. It also helps to keep track of multi currency Bank Positions and various other entities. DCP and WCP are also handled by the application.

In an integrated environment with all other relevant modules, system generates comparative costing picture between three levels. The levels are Pre-Costing, BOM upon getting the order breakdown and Post facto after making shipment. System will keep track of the direct expenses and will apportion the fixed expenses at predefined criteria on monthly basis.

10. Fixed Asset Management

- ◆ Maintains procurement cost with other details for tracking
- ◆ Identifies and handles composite fixed assets, assembles individual fixed assets as component
- ◆ Calculates depreciation as per user selected method on individual assets
- ◆ Tracks sales, transfer of location or responsibility
- ◆ Tracks by date servicing and repairing records against individual assets



11. Reports Suite

There are some built in reports. Any additional report requirement can be handled based on client specific needs. At user level, with some level of SQL query understanding, the user with given access can also generate information in his/her own way.

Technical Data

Language:

C#.NET, ASP.NET

RDBMS:

MS SQL Server

Supported Operating System:

Windows OS Flatform

Web Technology:

ASP.NET, HTML, XML

Utilitys Used:

UML, COM+ Business Object, Infragistic Logic, SMTP

Network Environment:

LAN and WAN

Development Office:

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