

# **DCi**sion ERP *Operations*

*Operations management - MRP / ERP*



## **Includes :**

- **Demand Management**
- **Production and Inventory Management**
- **Distribution Management**
- **Product Structure Modeling**
- **Replenishment Management**
- **Contract Management**

## Corporate Profile

Our name reveals our old computer backgrounds! Indeed, the **DCi** initial's is a reincarnation of our original name, **Debits / Credits Informatique**. Founded in 1982 to provide an accounting software, from where its name originate from.

A great deal has happened since then. Today, the company offers **DCision ERP**, a modern invoicing and financial software management system, as well as a distribution and production management software designed to meet the following criteria :

- Flexibility (to fit your business model).
- Ease of use.
- Reliability.
- Economy of operation.

Our customers are mainly composed of small and medium size enterprises, but, among them, we also have leaders in the Canadian economy.

Even though our business size be modest, we work with partners specialized in the needs analysis and implementation to offer our customers a full range of services related to computerization. All of our professional staff and partners have a university degree in computer science, engineering or management.

**DCi software** finance all its development from internal funds. In addition, to facilitate the acquisition of our products, we often finance our customers from these funds.

Finally, I want to return to our software. We are very proud at **DCi software** of the quality and exceptional depth of our software that compete in terms of functionality, with much more expensive products.

I hope that these few words have convinced you to continue your approach with us and we look forward to meeting with you and serving your needs in the near future.

Guy Fournier B.Sc.A.  
President

As a manufacturer of medium size, you have to comply with the demands of today's global marketplace. **DCi Software** can provide you with several tools used for many years by the major manufacturers.

## Overview

**DCision ERP** is a complete software of demand and production management designed specifically to meet your requirements in terms of planning management and production activity control.

It includes all the necessary elements to control your operations :

- Multi-Factories / Multi Warehouses / Multi Storage Areas
- Multi-Level Bill of Materials (BOM)
- Routing and Production Capabilities
- Make-to-stock and/or Make-to-order
- Multiple Units of Measure for Purchases and Sales
- Serial / Lot Tracking Management (With or Without Expiry Dates)
- Cost Management by Finished / Semi-Finished Goods and Raw Materials by Factory / Warehouse
- Purchased Parts and Costs Table with Overstock WIP Management
- Equivalent Products, Sales Price / Discount Tables by Currency
- Quotes, Bookings, Sales Order and Invoicing
- Planning of Shipments by Route and Priority
- Production Master Plan by Specific Product or Generic Planning Product
- MRP with Aggregate by Levels
- Evaluation of Limited Resources and Unlimited Capacity
- Production Plan Management
- Production Orders Control and Variance Identification
- Purchases, Expediting and Planning Receptions of Raw Materials
- Follow Up, Allocation and Control of Miscellaneous Buying and Selling Costs

The small and medium business manager must perform its work with often very limited staff resources and the software must accommodate. For this purpose, significant efforts have been invested to make the software easy to use, ensuring among other things that the effect of any data entered by a user is immediately reflected in the other functions of the software and that all reports are up to date at all times.

We have developed an implementation methodology that allows you to use the "Order entry/ Shipping / Billing" quickly, then, at your own pace, introducing the concept of BOM's to finally pass to the production management control. Throughout the implementation phase, our consultants will ensure to guide you and answer all your questions.

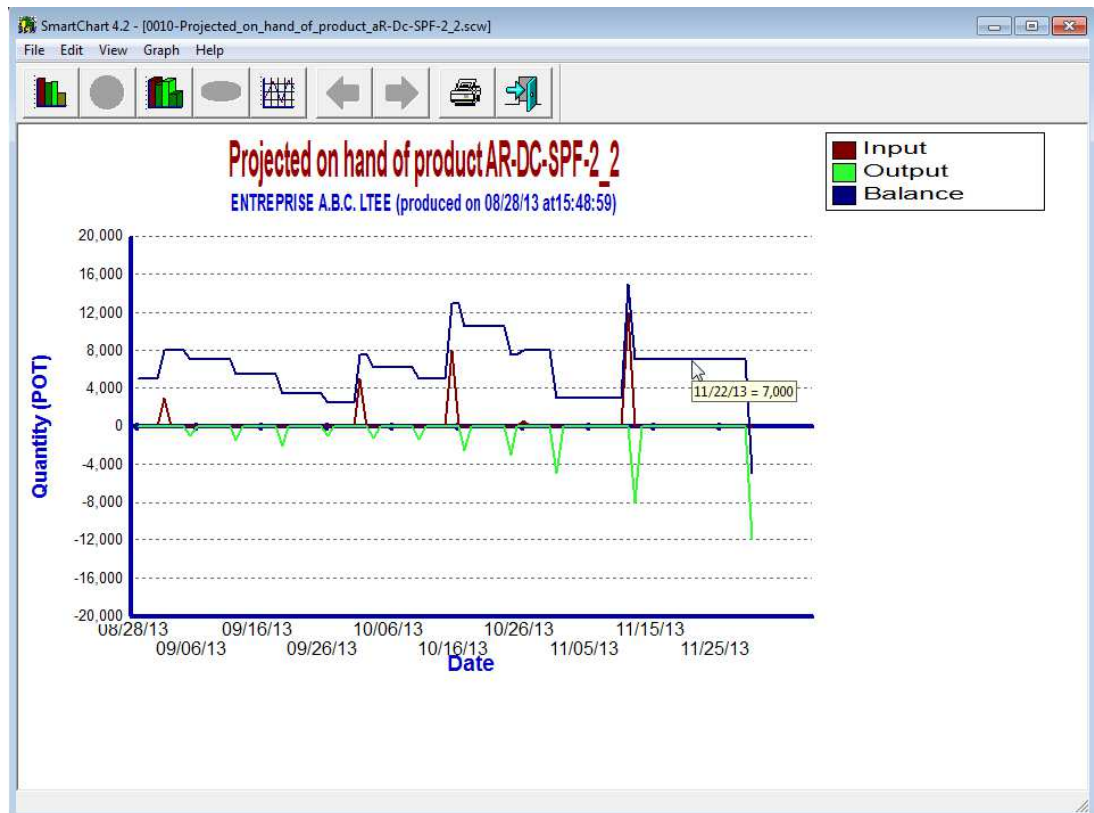
# Interface

## Operates in Client-Server mode over a relational database (Progress):

- Ensures a fast operation even with a large volume of data.
- Ensures data integrity even in the event of computer failure or network failure.

## Available in two versions :

- Single-user graphical mode running on Windows 10 PRO +.
- Multi-user graphical mode with client running on Windows 1 PRO +.
- To integrate with your current equipment: Runs on Windows Server 2022/2025.



## Integrated with Word, Excel and Access :

- Allows a quick initial installation of the master files using Excel.
- Allows the preparation of reports and customized analysis.

## Viewing reports before printing :

- Speeds up the Prepare-View-Print process.
- Easy to use differed reports preparation module.
- Allows you to postpone reports to off-peak periods.

## Description :

The software includes all the features needed to manage sales in a complex world. The system offers several price lists and very flexible discounts tables. International sales are facilitated by the use of customer currency and a tax table that you define.

## Features:

- Manages tenders, bookings and sales orders.
- The booking is the tool by which client engagements are registered by product and the negotiated selling prices. A commitment without the delivery date is perceived by the system as a tender and, for this reason, does not affect the demand of the concerned products. Engagement (bookings) with expected delivery date affects the demand for those products.
- Several delivery dates per booking line are allowed. The entered quantity will be reduced in sequential order by issuing sales order applied on bookings.
- Lot / Serial numbers can be allocated when entering sales orders or when shipping.
- Manages delivery directly from supplier to customer.
- Terms of payment made at the time the order is taken. Easy to break an invoice into several installments, each with its own terms of payment (due date, discount date, payment rates and interest rates).
- Each warehouse / factory can handle its costs and sales prices.
- Supports the concept of customer product. A stock product can be linked to several customer products.
- Each customer may have multiple billing and shipping addresses.
- The future stock forecast is available at the sales order entry and is automatically updated by this order.
- The credit verification is also available when entering sales orders.
- Manages the concept of sales offices (point of sales) and provides sales reports and gross profit associated with each sales offices.
- Easily manage returns of merchandise on warranty (RMA).
- Contact management.



**Description :**

The planning tool allows the production manager to establish a plan of production for several periods to come. This production master plan is used to evaluate resource requirements and raw materials.

At all times, the reports compare the real demand (bookings and sales orders) to the plan already established to provide the gaps. The plan is automatically adjusted when the bookings and sales orders are entered in the system.

**Features :**

Supports the concept of degrees of certainty where the needs arising from sales plans can be analyzed marginally to answer the question : "What would be the effect on our needs to accept such order on a certain date?".

- Allows you to set planning periods of variable durations.
- Manages the concept of planning classes in which several similar products are combined to simplify the process of planning in complex environments.
- The explosion (simulated MRP) of the entered demand and the remainder of the Master Plan allows at any time to engage the replenishment process.
- Step by step production management with Quality Control approval.
- Request For Quotation (RFQ) management.
- Allows you to manage outsourcing production.



## **Production**

### ***Resource Planning Limited Capacity***

#### **Description :**

The MRP engine is the central tool that analyzes the failure of future stocks caused by external demand or already generated work orders and offers, according to the BOM of each product to automatically create new work orders and / or purchase orders to fill the breakage.

The calculation of the suggested dates to put into production or to purchase is done according to a production schedule based on the batch parameters and deadlines of each product and / or supplier.

The system generates a graphical analysis comparing the planned requirements of each resource with its availability per time slot (day / week / month). Any over-utilization must be analyzed and resolved by the planner prior to approval of the plan.

#### **Features (of the schedule preparation):**

- Interactive execution. The production planner can group and / or move the suggested dates by the system. All dependencies will be automatically recalculated.
- The MRP can be run in simulation mode only. Thus, by creating virtual work orders, it helps to analyze several assumptions and demands, thus, informing suppliers of our potential requirements of raw materials.

#### **Features (of works orders):**

- Allows backflushing.
- Manages production partial outputs.
- Allows substitutions at the production.
- Requirements may be issued in batch or when required.
- Completion reports are available for long-term work orders.
- The raw material can be returned to inventory.
- Possibility of product substitution when assembling.
- Manages sub-assembly.
- A work order can be linked to a sales order.
- Allows disassembly.



## **Execution**

**Description :**

It is through this function that are created or modified the product information. The system supports controlled products, catalog products only, controlled assemblies, ghosts and virtual assemblies (kits). It specifies here, for each currency, the selling price by class and by quantity ordered. Are also managed here the weight and volume, pick up locations (bin), the min / max / opt quantities and applicable tax classes.

**Features :**

- Supports the concept of equivalent product: Product having its own pricing structure and discount but attached to an inventory product quantity management.
- Sales Products: Managing product families (for price list and inserts several family products at the same time).
- Each warehouse can handle their min / max / opt quantities, their pick-up location and tax classes.
- Supports multiple units of measure that can be divisible or not.
- Supports control by serial number and / or lot number (divisible like food and drug, or not divisible like a TV).
- Additional sales and/or purchases descriptions are printed on external documents either French or English, depending on the language of the customer or supplier.



## **Product Structure Modeling *BOM***

### **Description :**

The BOM function handles the composition of materials and parts and propagating changes through other functions. It allows you to compose the real assemblies that must be produced to exist, ghost assemblies that will be used in the BOM to eliminate duplication, and virtual assemblies (kits) that will be assembled only when shipping.

### **Features :**

- Unlimited number of items and / or resources.
- Manages real assemblies, ghosts and virtual assemblies (kits).
- Number of assembly levels determined by the client.
- Manages assembly loss (waste).
- Manages acceptable production batches per quantities or per time intervals.
- Quickly create by copying assembly and by using virtual assemblies.
- “Where Used” function to understand the implications changes.
- Manage changes in kits and apply those changes on orders in hand.
- Ability to manage assemblies with external software and import/export changes.
- Management of technical changes to the BOM (*Version / release / time stamp / user*).

# Product Structure Modeling

## Assembly Update (exemple)

Opmdemo - DCision Operations management

File Transactions Reports Analysis Lists Utilities My menu Tasks

Stock Orders

Products update - selection

Product update: 'Produit\_fini\_1'

Identification Assembly Costs Where-used Prices Restock Weights and vol. Location Others LCR Avail. Files

Product:  U/m:  Type:  Cat:

Descr:  S-Cat:

Site:

Section:

Instr.:

Resp:

MRP Gr.:

Special product:

MRP - Time and quantities calculation

Setup time:  Hrs Batch quantity:

Production/unit:  Hrs Minimum batches:

Clean-up:  Hrs Average batches:

Minimum time:  Days Maximum batches:

Lead time:  Days Frequency:

BOM version:

| Pri | Sec | seq             | seq | Component            | Description | U/m | Required quantity | At each unit(s) | Loss (%) | M PO | Assembly instr |
|-----|-----|-----------------|-----|----------------------|-------------|-----|-------------------|-----------------|----------|------|----------------|
| 1   | 00  | Piece_1         |     | Raw material #1      |             | Eac | 1.0               | 1.0             | 0.00     |      |                |
| 2   | 00  | Prod_semi_fini1 |     | Semifinished good #1 |             | Eac | 1.0               | 1.0             | 0.00     | *    |                |
| 3   | 00  | Machine_A       |     | Temps machine A      |             | Hrs | 1.0               | 1.0             | 0.00     |      |                |
| 3   | 00  | Main_d_oeuvre   |     | Main d'oeuvre        |             | Hrs | 1.0               | 1.0             | 0.00     |      |                |

guyf -09/15/16 10:29

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## Inventory Control

### Description :

The inventory control function includes the necessary tools to maintain a perpetual inventory. It manages the master product information and controls all the entries and withdrawals from the inventory, that is, from receiving to shipping. It also maintains a complete audit trail and will also plan the needs for restocking by purchase or production.

### Features :

- Manage the Minimum / Maximum / Optimum quantities.
- Automatic computation based on historical sales.
- Complete reporting and exception reports.
- Manages multiple warehouses and multiple sections per warehouse. Each section can be defined as :
  - Receiving and Shipping,
  - Quarantine,
  - Defective,
  - etc.
- Manages consigned inventory either at the customer or supplier sites.

### Description :

The Cost Management function is used to evaluate the inventory on hand and calculates the cost of assemblies. Assemblies can be evaluated at a given or calculated standard cost from its components Standard cost. Although the standard cost is the preferred method for the production management, client may also, by simulation, use the FIFO cost method or the Average cost of products solds.

### Features :

- Managing the cost of goods, labor and other direct production costs.
- Evaluation of the Standard cost and Real cost (FIFO, Average cost and Last cost).
- Allows you to attach the inscription of the cost of sales for each invoice posted to the accounting system, thus enabling the accounting profitability analysis by administrative sections.
- Valuation at any time of the received stock value but not yet invoiced by suppliers.

## Cost Management

## Description :

The purchasing function provides the necessary tools to the buyer in order to perform its task efficiently. From exception reports highlighting the inventory breakage by date, he can place order with, at its disposal, a wide range of information on past purchases and alternative suppliers.

## Features :

- Table of suppliers by product with the supplier product number, equivalent quantities, minimum order quantity and resupply time.
- Optional management for restocking per supplier. The manager first chooses a supplier. The system offers all the items with inventory breakage available from this supplier. The manager, after negotiation, may or may not include the items in the purchase order.
- Many PO's may be opened simultaneously.
- Different receipt date by purchase order line.
- Management mechanism to follow an order at a supplier.
- Management mechanism to follow a reception with a carrier.
- Scheduled receipts per date to help the receiving manager.
- Authorization requests management for the purchase orders from the buyers to the responsible.



## Job Costing

### Description :

The Accounting and Financial software manage the activities related to each contract. However, one of these activities in a manufacturing environment is the use of products (and resources) related to purchased and manufactured products.

The Operations Management software is designed to transfer to the Job Costing Management function of the Accounting and Financial software the product and resources related costs.

And you will control :

- The quantity and localization of your inventory related to your project with the Operations Management software.
- The costs (products and other activities) and project accomplishment through an activity linked to the material into the Job Costing Management function of the Accounting and Financial software.

### Features :

- Allows you to control the inventory at your subcontractors site.
- You can use the work order function to manage inventory transformations and variances caused by the production.
- Lets you attach the purchase invoices / work orders / inventory transfers and sales invoices to projects.

### General information :

- Real-time integration of functions.
- Purchases / sales / rentals / Production / Inventory.
- Planned stock availability management by date.
- Purchases and sales management in multiple currencies.
- Possibility of several units of measurement per product.
- Able to show on screen any important information :  
Stock level, future shipments, receipts, etc.
- Flexible and complete interface to the general ledger.
- Complete and easy to use Audit Trail.
- Elegant integration to the job costing management.
- Management of documents kept in the database for customers, products, suppliers and transactions.

### Purchasing Management

- **Purchase Orders :**
  - Inventory levels by season.
  - Generation of the PO sorted by product or supplier.
  - Unlimited number of suppliers by product.
  - On screen review of recent purchases.
  - Quantity discount table by supplier.
  - Equivalent table of product code per supplier.
  - Delivery deadlines per supplier and per product.
- **Receipts :**
  - Back order management.
  - Availability levels (Quarantine, in transit, etc.).
  - Printing labels.
  - Unlimited number of months of historical purchases.
- **Complete Purchase Management Reports**

### Inventory Management

- **Products Catalog :**
  - Coding by category and subcategory.
  - English and French product description.
  - Product code management per supplier.
  - Create virtual assemblies (kits).
  - BOM Integration of assemblies losses.
  - Job costing integration.
- **Quantity control :**
  - Serial number management option.
  - FIFO inventory valuation / Last Purchase / Average Cost.
  - Number of seasons for stock levels: 4.
  - Unlimited Number of warehouses.
- **Complete Inventory Management Reports**

## **Additional Informations...**

### **Sales management**

- **Lead management for quotations:**
  - Allows you to convert prospects into clients.
  - Allows you to convert quotations into sales orders.
  - Revision management.
  
- **Tenders and bookings :**
  - Updatable price and discounts.
  - Anticipated delivery dates.
  - Several delivery dates per booking.
  - Control of due dates.
  
- **Customer orders :**
  - Credit limits validation and control.
  - Easy to use discount table per client and per product.
  - Determining the stock availability at the order entry.
  - Back order management.
  - Changing the product description, unit of measure, price and suggested discount at the order entry.
  - Unlimited number of point of sale per warehouse.
  - Revision management.
  
- **Shipping :**
  - Picking slip with warehouse localization.
  - Packing slip with stock availability.
  - Logistics centers management.
  
- **Invoicing :**
  - Print in the customer's language(English / French).
  - Create invoice lines not connected to a product.
  - Billing non-inventory products.
  - Changing the product description, unit of measure, price and suggested discount at the order entry.
  - Creating batch invoices.
  - Point of sale invoicing.
  - Quick invoicing (without going through order and shipping).
  - Automatic posting to accounting.
  - Unlimited number of months of historical of sales
  - Management of Tax Products and Service (GST).
  
- **EDI**
- **Complete Management Sales Reports**
- **Complete Management Profitability Reports**