

# JobBOSS ERP

MANUFACTURING SOFTWARE REVIEW BY SHELDON NEEDLE



## Executive Summary

### New ownership

The Dutch software company Exact Group B.V. (Exact) announced in July 2017 that an agreement has been reached to sell Exact's Specialized Solutions division, which includes Macola, JobBOSS and MAX. The division will be combined with ECi Software Solutions Inc. of Fort Worth, TX, under the leadership of ECi management.

JobBOSS Shop Management Solutions is a fully integrated job-based system. You enter information once and it flows automatically through the system from quotation to general ledger. This product is used by over 4,800 job shops in North America, the UK and internationally.

JobBOSS is specifically designed for custom, contract, and make-to-order high-tech manufacturers who need a flexible job-based system that manages constant change. JobBOSS fits the majority of the operating characteristics facing job shops. (*Modern Machine Shop, Precision Manufacturing, CNC West*):

- 50% reduction in work-in-process inventory.
- Substantially increases profits
- Improve job costing accuracy
- Improve customer service and internal communication

JobBOSS software is user-friendly, with on-demand and virtual training, classroom training, excellent built-in and on-line documentation; online and telephone support, newsletters, regional workshops, an annual user conference, upgrades, remote and on-site assistance, and 24/7 hour support and training at the Customer Portal Web Site – accessible through <http://www.jobboss.com> JobBOSS conducts annual surveys and also uses their web site to collect information on suggested improvements to the products and services. Being fully integrated, information only needs to be

entered once no matter how many modules are being used or the number of users. The software is designed to handle the constant changes that job shops must deal with to remain competitive and satisfy customers' needs.

JobBOSS is a PC-based system and can be used by a single user or multiple users. It is compliant with the current Windows operating systems.

### The complete system includes the following modules:

- Job Control s – the heart of JobBOSS
- General Ledger
- Accounts Payable
- Accounts Receivable
- Payroll– with exporting (Abra, ADP)
- Sales Order Processing
- ShopBOSS Scheduler
- OfficeBOSS
- Automated Workflow Management
- Customer Relationship Management
- Data Collection – in plant or remote (Palm)
- Micro Estimating Systems Integration
- Costimator Integration
- MQ1 Quality Management System
- EDI – custom
- AutoCAD Integration
- JobBOSS Integration to QuickBooks., Sage 50 Canadian Edition
- Software Developer Kit (SDK)
- Universal Accounting Integration



## Version 12

Released in 2017, The focus of version 12.0 was updating email shop alerts, fixing long time bugs, cleaning up the user interface (more consistency) and better job status tracking in ShopView. In earlier versions it made significant enhancements to shift level scheduling, resource management and constraints, finite and infinite capacity planning, and integration of material planning with shop floor scheduling.

JobBOSS deploys three distinct product offerings designed specifically for the job shop market.

JobBOSS Starter (designed for the entry-level buyer) offers the core of the functionality necessary to quote, manage jobs, receive material cost, track labor, ship and invoice with an integration to QuickBooks for all accounting functions. JobBOSS Professional includes all of the traditional functionality of a shop floor system including full material control and management of inventory, purchasing, planning, etc. and fully integrated shop floor scheduling including their intuitive and powerful whiteboard scheduling tool, ShopBOSS. JobBOSS Enterprise (designed for the larger enterprise looking to eliminate disparate systems) includes all of the features of JobBOSS Professional and extends the solution to include customer relationship management, automated workflow, and quality management as an option.

JobBOSS strengths are in change management specifically for handling single one-time orders (quoted or time and materials), blanket orders with multiple releases, and jobs with multiple assemblies. This allows the user to process estimates and quotes, copy and modify quotes and orders, purchase and receive materials, schedule orders, record labor times, obtain timely reports to track the orders, make shipments and review detailed costs.

JobBOSS is user friendly and was designed to be intuitive for job shops and custom/make to order manufacturers. With a minimum number of keystrokes, information can be entered and used throughout the entire system without re-keying. It uses icons, menus, pop-up screens and calculators, and has shortcut methods to move from one area to another very quickly (e.g. when customer calls for order status). The documentation is well indexed and includes flowcharts, implementation steps, sample forms, graphic pictures and text to easily start and learn JobBOSS. It also includes a complete training database area where live information can be entered and users can watch how it flows through JobBOSS.

JobBOSS allows quotations to be done quickly whether the price is known or more detailed information needs to be compiled to determine a price. Phone inquiries about job status are quickly accessed with just a few keystrokes. Users can see how many parts are still left to be built, how many are at each work center (router step), at a vendor for outside services and what has been received back from vendors doing outside services. Many standard reports are available and provide valuable current and historical information. Custom user-defined reports can be created using Excel and/or Crystal.

JobBOSS integrates scheduling with all facets of the shop, enabling automatic linking right to a routing line and scheduling of raw material purchasing and outside vendor services. Its auto linking capabilities also help keep subassembly jobs on track. When a job schedule changes, the due dates for all dependent activities change automatically. If any of the dependencies are not going to occur for the job's ship date to be met, a red flag appears on the Exception Report

**Help** Screen specific Help, developed with a drill-down structure to help you get straight to the specific Help topic you need, is available with the use of the Help Icon or F1 key. It includes pop-ups

that answer commonly asked questions, online tutorial pop-ups, sample scenarios and an overview page. The information is easily understood and contains examples of reports and calculation methods. Online guides, lessons and tutorials are available 24/7 via the web. These resources are of great assistance when making the transition from the previous system and procedures. Unlimited support for customers with a current maintenance agreement is available via the web, eMail or a toll-free 800 number.

## Security

The JobBOSS administrator sets security for each individual or group, and password control is available by individual screen. While modifications are available only through JobBOSS, a Software Developers Kit (SDK) is available for use by software developers that enable data to flow seamlessly to and from multiple applications without manual re-entry. Data can be exported to any of the major Windows-based spreadsheets, databases, Microsoft's Access, Crystal and Excel.

## System Administration

Master files are the keys to how information is processed, compiled and reported. They provide the database from which the other areas receive and process information and eliminate redundant data entry.

The preference files contain the control information used throughout Job Control. The company name, address, phone/fax, metric versus imperial, etc. are loaded here along with your logo that will print on plain paper. The Shop Calendar is easily established and assures only scheduled working days are used for scheduling production, unless changed. You can also set the default ship lead days (i.e., scheduling schedules production to be completed in accordance with the default number of lead days prior to the scheduled ship date).

Other options include: default pricing method and values, inventory costing (standard, average, last), and starting number settings for packing slips, purchase orders, quotes, job numbers, invoices, journal entries, etc.

### Other preference files that allow user-defined areas and less typing are:

- Standard Comments used on purchase orders, packing list, quotes, back orders, etc. and used to quickly add pertinent information without retyping \* Formatting information on shop paper, includes customer name, run times, add special headings or hide customer information.
- Establishing standard ship via listings (i.e., "UPS", "Our Truck", etc.). Again, to avoid typing. \* Developing your own titles for departments, additional costs, customer types, warehouses, locations, terms, etc.
- Adding additional standard raw stock items. JobBOSS comes loaded with many of the standard raw stock items used in job shops.
- Establishing various standards for time costing using either actual employee rates or standard rates and a burden method as a percent or amount by machine, labor and general/administration. This includes time entry in minutes or hundredths, in start/stop or elapsed times and overtime factor.

### Available reports in JobBOSS Administration section include:

- Customer List
- Employee List
- Finished Goods List - Provides a detailed list of all finished goods and counts

- Hardware/Supplies List - Provides a detailed list of all hardware and supplies and counts
- Raw Material List - Provides a detailed list of all raw materials and counts
- Sales Rep List
- Vendor List.
- Work Center List - Provides a list of all work centers with scheduled hours, number of resources, departments, etc.

## Quote Processing

This module allows estimates to be constructed with consistency and accuracy using default information set up in JobBOSS preferences section or to enter the information on the fly. It includes tabs for General information (name, address, etc.), Pricing, Additional Charges, Routing, Materials, Notes, Custom fields (12), and Components (if it is part of an assembly).

Throughout the entire system part histories, customer and vendor profiles including sales and aging balances, and vendor pricing and performance history are available with a click of the mouse. In addition, you can drill into detailed information to analyze any element that needs further review. RFQ (Request for Quotes) with multiple vendors, materials, job requirements, quote requirements and different quantities may be directly emailed from JobBOSS and the responses recorded from each vendor.

A history of parts you have quoted make it quick and easy to lookup customer names, addresses, ship-to, terms, etc., and copy them into the quote. If the estimate is for a new prospect, the information can be entered and later transferred to the customer master files.

It is easy to transfer an estimate to a job or re-quote an old job. Multiple part numbers can be included on one quote. Quoted information is cross-

referenced by quote number, customer, sales rep, part number, or description.

Modifications to the previous quotation or job are easily made while the customer is on the phone.

JobBOSS will handle estimates for a “one-time order,” a quote with multilevel assemblies or components. Lists of the components are shown but there is no online visibility (drill down) into assembly structures. Built-in “pop-up” Costing Calculator can be used to quickly calculate the number of parts produced per unit of material and calculate the cost of materials or cub-contract purchases.

Estimate routings can be computed using parts/hour, seconds/part, minutes/ part, and hours/part or fixed hours. Each routing line can have a unique set-up or run time attached. A “What-If: option to compare the order to your current job schedule. You can create an unlimited number of quote quantities for each quote.

You can also develop different routings for each quoted quantity. After the Routings, Labor, Material, Direct Buys/Subcontracting and Additional Charges are entered, JobBOSS will calculate a unit price, total price, total cost total hours and estimated margins.

Markups can be based on targeted profit margins or based on a percent increase over costs of labor, material and service costs. The method is selected in the Preference file options. Prices can be changed to a quoted price and cost sheets printed and verified before printing the quotation or faxing it to the prospect. Quoting also has several custom areas to enter follow-up dates and other information. The status of estimates can be changed and/or followed to track success rates and reasons for failure. JobBOSS keeps a log of quotes, which can be searched by several options. This is a good management tool to evaluate quoting efforts and results.

## The reports that can be viewed, printed or faxed in the Quote Processing module are:

- Quote – Provides single or multiple printing.
- Quote Audit – an audit trail for all of the detail entered for a selected quote.
- Quote Bill of Material – lists the material requirements and components.
- Quote Cost Detail - Provides detail quoted cost information. This includes revenue, labor, burden, material, and components.
- Quote Cost Summary - Summary of revenue, labor, burden, material, and service information.
- Quote Log - This display includes quote number, customer/prospect, and if it was lost or won.

## Order Processing

Transfer quotes into orders or creating orders that are not quoted, copying data to new quotes from existing jobs and maintaining existing orders. Orders can be processed as components, blanket orders or single jobs. Each order or job contains the following information: general, additional quantities, pricing, deliveries, routing, material, notes, custom, and components, build to stock and certifications required. Information entered here provides the basis for all other functions in Job Control.

*Job Entry Screen* The traveler or shop paper lists the processes and steps to be used to make the parts and components.

Detailed shop papers along with prints; pictures certification requirements eliminate guesswork and errors. Any standard Windows graphic file of a print drawing can be accessed and printed along with the shop paper. Shop papers can be formatted to print the information in different sequences and

special headings can be added. Each traveler can have unlimited special notes or instructions attached to the job, plus 12 custom fields are available.

JobBOSS offers great versatility in setting up jobs; from the customer who walks in the door with the part to be done now, to the formal RFP to quote, to PO, etc.

### Jobs can be priced in one of three ways:

- Regular jobs with pre-established process and profit percentages
- Time and material jobs with the price determined at the end of job
- Multiple Release jobs – where the order quantity is released to the shop in multiple manufacturing lots and materials are allocated to the job based upon the release schedule.

It also offers the ability to change information brought over from a quotation. If you are repeating a previous job, you have the option to repeat the routings based on actual history or the estimate. It also asks if the materials, job notes, routing notes, routing steps, comments, and additional charges are to be repeated.

## Job Master Definition

The Job Master includes all pertinent information on the customer and part. If the order is a parent, it allows you to lookup all components or multiple release jobs connected with this job. It allows pricing by each, per hundred or per thousand and shows the salesmen, terms, and tax if any. It allows you to set a scheduling priority code of 1-9 and dates requested and promised.

Scheduled deliveries are established for each job and are used for production scheduling. It is also used to generate the shipping delivery reports.

Finished goods can be looked up, selected from materials with online visibility into assembly structures.

Once an estimate is transferred to a job, auto-linking goes to work to alert the shop of any obstacles that might prevent the job from shipping on time. There are multiple ways to invoke linking: **System wide** - By simply placing a check mark in two check boxes when initializing JobBOSS - one for material and the other for components, all jobs in JobBOSS will be assured that material will be available for the job before it is scheduled on the first workcenter or machine in the routing and that each component job (child) is completed before the main assembly job (parent) is started. Overlapping of routing steps is easily controlled by percent complete or number of parts completed.

## Workcenter

By indicating in the workcenter master file that material must be received prior to scheduling a primary operation, e.g., blanking, turning or shearing - receipt of material will be scheduled prior to that primary manufacturing operation. Likewise, if your shop has an assembly workcenter, by clicking on the component check box, all subassemblies will be scheduled for completion before they are assembled into the parent part.

## Job Routing

When working with an individual job, links can be added, changed or deleted in Shop Floor Control to accommodate exceptions.

You can look up history on previous shipments and see on-time deliveries, packing slip numbers and, if interfaced with accounts receivable, the invoice number. The routing or process sheet uses information from the established master work centers and allows standard text information to be

transferred into various documents. Pictures of parts or setups can be added to routing steps.

Routing steps can be either for internal work centers or outside processors. Scheduling will use that information to calculate hours and dates and, if linking is assigned, include that in scheduling. Production rates can be tracked in one of four ways - parts/hour, seconds/part, minutes/part and hours/part and can be changed “on the fly” by operation. You decide which way JobBOSS is to track and cost the job. If efficiency ratings are expected to be less than 100%, the work center rate can be adjusted and scheduling will include this in its calculations. You can also indicate the percent attended by operation. Scheduling and costing will then be adjusted accordingly.

## The Material section

The Material section is used to establish the required quantities of raw stock, hardware, supplies, finished goods, or misc. materials. Calculators are available for determining how much material is needed, (i.e., feet to inches or lbs., each bar/sheet to lbs., etc.) from multiple locations. Stocked items can be quickly looked up and costs determined. If the item is bought just for one job, the same calculator will help determine the quantity and costs.

Material Planning functionality helps users monitor demand and manage supply by creating and modifying PO's and jobs.

As materials or subcontract work are received, data is entered in the receiving section. This allows the order to progress through the routing. JobBOSS automatically tracks quantities produced, on hand (WIP and finished), required quantities and updates the records. JobBOSS also tracks purchasing history.

Again, special unlimited notes can be attached to the job and 12 custom fields are available to record

consistent information. Additional miscellaneous charges can be added to the total amount on the job invoice, such as tooling, freight, etc. These may or may not be commissionable items and may be charged with each invoice or only once. These items can optionally be charged as a cost against the job.

JobBOSS allows housekeeping to close outstanding job requirements (i.e., shipments, materials) or to delete or purge jobs from JobBOSS.

### Reports that can be viewed, printed or faxed in the Order Processing section are:

- **Active Jobs** - Provides information about active jobs, including customer, current and next work center, and shipping information. It can be sorted by customer, promised dates, work centers, and part numbers.
- **Anticipated Job Revenue** - This displays anticipated job revenue for active, on hold, and closed jobs that have a remaining delivery quantity. It can be sorted by customer part or job, promised dates or job number.
- **Job Status** - Provides a status report on all jobs. It can include special notes, material requirements, work center recap and material recap.
- **Job Bill of Materials** – Lists all material and components for a job.
- **Job Ticket** – Job and part information and an abbreviated routing list.
- **Order Acknowledgement** – Used to confirm an order to the customer.
- **Order Audit** – An audit of a specific job.
- **Order Register** – Revenue details and totals for all jobs and/or sales orders booked in a given date range.
- **Traveler** – is the routing paper used by the shop for instructions.

## Shop Floor Control

This module is used to create and monitor the production schedule and generate a number of effective reports. JobBOSS determines the production hours and minutes needed and then suggests the sequence to do the jobs. It can be used to schedule a single job or assembly, globally schedule all active jobs, split a quantity from a job and send it ahead, schedule teams and to display graphs and numerical reports of the shop floor load for various periods of time or by workcenter.

JobBOSS schedules by the priority set, 0 being the highest priority and 9 the lowest, and due dates.

JobBOSS schedules operations infinitely, either backward from the due date or forward from the current date, and to the minute for the amount of time required.

In global scheduling new options allow scheduling of new orders only, all active orders, forward or backward scheduling. If a promise date has not been defined or the calculated start date proceeds the current date, the job will be forward scheduled from the current date.

The information reports in this module can be used by management, supervisors and employees to track the activities and monitor the progress of jobs in process, jobs running behind schedule, the number of jobs scheduled for each work center, what operation is next and the scheduled deliveries. The accuracy of the information entered determines the accuracy of these reports.

JobBOSS recommends using caution when assigning a job a zero-priority code as its schedule cannot be changed and may cause workcenter overloading.



JobBOSS can schedule an operating shop with about 100 jobs in a few minutes. There are graphs and reports available that are very useful in isolating problems or spotting bottlenecks. They can be used to adjust the jobs and schedule accordingly.

The auto-linking feature for materials and assemblies will reduce or eliminate potential problems. With JobBOSS, anything that could keep the job from being shipped on time will show up on the Schedule Exceptions report, making the shop aware of upcoming hurdles. These delays could, for example, be a result of materials not received or ordered on time, or if subassemblies are not done in time for the next step or shipment. JobBOSS integrates scheduling to all facets of the shop.

### **This module provides totally integrated shop scheduling in the following ways:**

- Provides purchasing with a schedule based on the shop production schedule.
- Integrates the purchasing life cycle into the overall shop production schedule.
- Reports potential material shortages - alerts purchasing while there is still time for changes.
- Schedules complex assemblies automatically, since each subassembly is linked to the proper step in its parent routing.
- Identifies subassemblies running late which, in turn, could cause the main assembly to ship late.
- Auto-linking is a real asset for all shops; especially those having production runs with subcontracted services, many different material requirements, and jobs with subassemblies.

### **Reports that can be printed, faxed or viewed in the Shop Floor Control section are:**

- **Foreman's Report** - Forecasts the current and future workload within work center operations. It can be used by the foreman to monitor work in each work center, the time remaining, the location and status of the job.
- **Late Jobs** - This is an exceptions report providing information about jobs running beyond the estimated dates or projected to be late.
- **Production Overview** - Provides a summary of all open jobs in process. It is a good tool for production meetings with information on customer, part, current and next work center, and shipping information, as well as hours posted to date, remaining hours and percent complete of the job.
- **Production Status** - Displays detailed information about jobs in process including; customer, part, current quantities, hours, days late and shipping information. Gantt charts can also be displayed.
- **Schedule Exceptions** - Provides a report for exception conditions detected (why scheduling cannot meet due dates) during production scheduling. This can be sorted by job or by exception description.
- **Service Schedule** - Shows information about vendor/service providers' shipment schedules. It can be sorted by vendor and/or scheduled dates and is a useful tool to monitor outside activities that may cause scheduling problems.

- **Shop Load** - Provides visibility for available shop capacity. It allows you to specify the time periods covered in the report and what percentage of capacity over or under utilized. It can be viewed as a graph or text printed report.
- **Work Center Dispatch** - Provides a list of prioritized jobs available to work on within specific work centers and departments each day.

## ShopBOSS® Scheduler

This module is included as part of JobBOSS Professional and JobBOSS Enterprise and enhances the single and global scheduling features.

ShopBOSS provides three levels of visibility to scheduling issues including overall shop level, work center, and job and includes a new ShopBOSS Dashboard to highlight issues caused by manually adjusting the scheduling to do what-if scheduling in one scheduling board.

*Scheduling screen with workcenter detail*  
Individual work centers are shown with jobs scheduled by time periods. It is easy to spot problems or bottlenecks as the jobs are color coded: red = over capacity, yellow = potential problems, green = ok.

Using drag and drop, jobs can be moved to new dates, alternate work centers or run overtime, and ShopBOSS will show the results. If you have a busy shop with a number of changes occurring regularly this module makes adjusting workloads much easier.

## Material Control

This function is used to purchase, receive, make adjustments; transfers, issue materials to jobs, and for outside services (subcontractors). It maintains historical information and transactions on all Job Requirements showing selected / available to order supplies, hardware, raw and finished inventory items.

It keeps a running balance on all items, tracks usage by month and year, and maintains a history on all adjustments and issues to jobs. The functionality of this module gives users visibility, flexibility, and easy change management.

*Material Planning screen showing stock status*  
Match the supply of material with its demand.

Material Planning projects what a material's on hand balance will be on any particular date in the future and provides the tools needed to increase this on hand balance to avoid shortages.

JobBOSS makes the purchasing, handling, and use of materials easy. Once a job is scheduled, the purchasing department is automatically alerted so that necessary materials can be ordered and delivered to complete the job on time. JobBOSS allows scheduling to drive purchasing by Auto Linking. Auto Linking automatically integrates the "need dates" for material or subcontractor to the production schedule of the associated job. In the case of an assembly job, Auto Linking also applies to the subassembly/component jobs involved. For example, if material arrives late, the job is rescheduled accordingly. An exception report flags materials that may be received too late to complete the job on time. With scheduling and purchasing so closely linked, the shop can work faster and smarter. This supports Just-In-Time purchasing.

JobBOSS has made entering the header information easy with quick lookup features (pop-up screens) on vendors and items in the master files. New vendors or items can also be added on the fly. The reports Material Reorder and Open Buy Requirements show purchasing requirements by vendor. This allows you to call up all the requirements for a particular inventory item or all items for a particular vendor or all items for a particular job. This feature shows the quantity and due dates. You select the items you want to include on the current purchase order, and JobBOSS automatically transfers that information into the purchase order. Special notes or standard text items can be added to each purchase order. All these features save time and reduce errors.

JobBOSS allows for an unlimited Bill of Material. It checks the needed material against its library of materials - data catalog of all materials, hardware, supplies, and finished goods the shop has in inventory. JobBOSS also handles unit-of-measure conversions as necessary (i.e., carry-in sheets/rods/pounds and convert those into whatever unit of measurement - feet, inches, each, etc. is needed to make a certain number of parts).

Receiving materials is easy. If the vendor or PO is known, JobBOSS calls up all the information and allows quick entry of the quantities received and cost.

Issuing materials is done by job number. JobBOSS shows what quantity is on hand, required, and what has been issued before. It also lets you automatically issue all required items or just do a partial release.

Adjustments change the balance of items on hand and JobBOSS provides an area to list the reason. Transfer of material is used to record transfers of finished parts from jobs to finished goods and to record returns of materials previously issued to jobs.

Shipments can be made directly from finished goods with the Sales Order Processing module.

### The following reports are available in the Material Control section:

- **Accrued Receipts** - Shows purchase order line items that were received as of the Thru Date but not Invoiced as of that date.
- **Annual Usage** - Provides a material annual usage report by stock or purchase units for raw material, hardware, supplies, and finished goods.
- **Data Collection Receiving** - Provides a receiving report with bar codes for data collection.
- **Inventory Changes** - provides a material transaction register for a specific class, item, or for all materials.
- **Material Planning** - a list of Picks from Stock, All Jobs Due to Stock, and All Open PO Due to Stock.
- **Material Reorder** - Provides a report by vendor of material reorder requirements based on reorder points established by you.
- **Open Buy Requirements** - Summarizes what needs to be ordered today, or any date range for one vendor or all vendors.
- **Open Pick Requirements** - Shows exactly what needs to be picked from stock to start each job and at which job you'll run out of a particular item.
- **Purchase Order (Detail, Receiving and Summary)** - Allows you to look at what materials or services are due by date range. Open orders or closed orders can be viewed with this report.
- Provides a report of all purchase orders and includes the status - open, closed or un-issued.

- **Receipt History** - Shows the receipt history information on a particular job.
- **Request For Quote (RFQ)** - A log of the vendor RFQs and the Vendor Responses to the RFQs.
- **RFQ Log** - Provides the ability to print or fax Vendor Requests for Quote.
- **Stock Status** - Allows effective management of inventory levels in a cost-effective manner by quickly reviewing on-hand and on-order items. It can be sorted by product class or type of material.
- **Stock Valuation** - This provides a report on the valuation of stocked items.
- **Transaction Register** - Provides a material transaction register report for a specific type, class, item, or all transactions.
- **Vendor History** - Provides the ability to analyze invoiced purchase orders for a given vendor. Drilldowns are available to provide detail information.
- **Where Used** – shows where all material types are used in jobs and sales orders.

## Labor Reporting

This function is used to enter all labor hours which then updates job status, shop load, productivity, costs and efficiencies. Labor and burden dollars are applied to the reported hours to support job costing. The reports can be used to track setup and run hours, percent complete, and the number of parts produced and scrapped. The hours recorded in timekeeping can be passed directly to one of the Payroll Modules automatically. In order to obtain accurate information, the counts and completed operations must be done properly.

JobBOSS allows notes or explanations to be attached to a time entry. You determine which method of time recording is used - elapsed or start/stop time and if lunch periods are automatically deducted. Overtime hours are

recorded separately in both setup and run hours. You can always go back to a previous time entry to change, delete, or add time. Additional routings can be added on the fly during time entry.

Also recorded is the quantity of good and scrapped parts, rework quantity, if overtime was used, and percent of operation completed. JobBOSS makes the recording of information as easy as possible with pop-up screens. You can look up employee names and numbers, jobs by number, part number, customers, description, customer PO, and work centers. After the information is entered, JobBOSS shows the activity for that individual during the time recorded. It also lets you look at an employee's total time audit for that day. JobBOSS allows automatic marking of operations completed and warnings about percent complete of quantity.

An add-on module with a high return on investment is Data Collection. Data Collection automates employee job time, payroll time, inventory issues, and purchase order receiving. Bar codes built into JobBOSS forms and reports, such as packing lists, bills of lading, purchase orders, improve and simplify getting accurate time and attendance, and job, materials and sales order transaction information while decreasing the turnaround time from the operation to capturing the information in JobBOSS.

A mobile ready wireless data-collection option is available.

## There are several standard reports available in Labor Reporting:

- **Bar-Code Lists** - A list of bar codes for transactions, work centers, locations, materials and scrap/ rework codes.
- **DC Audit Logs** - An audit report of all data collection transactions for a specific time period and/ or transaction type.
- **Employee Badges** - Prints employee name and bar code for each shop employee.
- **Group Analysis** - An efficiency report that shows estimates and actuals reported against the group.
- **Group List** - A bar-coded report that shows the Job Operations assigned to a group.
- **Material Labels** - A list of bar codes for materials.
- **Productivity Analysis** - A time audit report that shows direct versus indirect time per employee.
- **Time and Attendance Audit** - Provides a detail or summary listing of time and attendance transactions for a single or all employees. This report can be used as a time card for hourly employees when sorted by employee.
- **Time Variance** - A summary or detail comparison of job time to time and attendance transactions. A single employee, supervisor or department may be specified.
- **Work Assignments** - A Work List for each employee that shows Jobs and Groups.

## Shipping

This function is used to identify that a job has been shipped to the customer or sent out for processing to a service vendor. This function also tracks the materials or jobs received or jobs being returned.

The jobs returned section allows notes to be attached to the return. Returns are recorded against the packing list they were shipped on and more than one return is allowed. Actual revenue for a job is recognized when the job is shipped. Revenue records are updated when processing a returned transaction.

Auto-linking the job's schedule with all dependencies affecting ship date means that all material requirements purchased directly for jobs are pulled from inventory, subcontracted services, and subassemblies. If the job's schedule changes, the due dates for all dependencies change automatically but not the customer's due date.

Shipments can be made from finished goods, completed jobs, and work-in-process. The shipments can record as partial or completed and as over and under the ordered quantity. It also allows the option to automatically mark the job complete, which changes the job status and marks all operations as complete.

Integration to UPS World Ship provides address and pack list data to your UPS system and brings the UPS tracking and freight info into JobBOSS.

Packing slips can be produced before or after all parts are shipped. JobBOSS, again, makes it easy to complete shipments with pop-up screens and then transferring information directly into the packing slip.

A standard header and/or footer, which can be defined in System Administration, will print on every packing list. Shipping labels and Bills of Lading can be printed for jobs by transferring that information into MS Word.

### Reports available in Shipping include:

- **Bill of Lading** - Report for the shipping carrier.
- **Delivery Backlog** - Undelivered goods for a specified time frame.
- **Delivery History** - All shipments, returns, and transfers for a single job and also compares actual shipment dates to promised delivery dates.
- **Delivery Schedule** - Scheduled deliveries through a specified date range.
- **JIT Delivery Performance** - Shows how well promise dates have been met through a specified time period.
- **Labels** - Shipping labels created from pack lists that can be printed for all parts or a specific part on a pack list or for a sales order.
- **Pack List** - Form for shipping to customers or outside services. Also prints Pack Lists for returns.
- **Shipment Register** - Shows all shipments made during a specified time period.

## Cost Analysis

The Cost Analysis module is used to analyze shop and job cost and performance. Reports are useful guides to determine job profitability; projecting revenue, and finding cost overruns. More reports help determine the cost of goods sold and the value of work in process. In analyzing these reports, one can improve profit margins and efficiencies on future jobs through more accurate estimation of work hours and costs. Reports will show the differences between estimated and actual costs, where to improve profit margins and efficiencies,

plan for future sales or make capital improvements. These reports can be used very effectively to monitor JIT, TQM, lean manufacturing techniques, and continuous improvement efforts.

There are seven reports in this section. The help function has explanations of these reports and how the computations were made – very helpful.

- **Closed Job** - Review estimated and actual data for one or more completed jobs, including: Labor costs, Burden costs, Material costs, Service costs, Delivery schedule, Finished goods picks and transfers, Revenue summary
- **Cost Overruns** - Identify jobs that are over budget.
- **Financial Analysis** - variety of financial snapshots by date or date range, including:
  - " Work In Process (WIP) - summary of active, on hold, and complete jobs and determine the amount by which to adjust the general ledger for work in process. Includes labor, burden, material, and service information. Drill down detail for accruals as well as scrap and pick quantities.
  - " Transfers " Scrap " Cost of Goods Sold (COGS) " Indirect Jobs
- **Job Cost – Detail** - Detailed production summary for a job, including a breakdown of operations performed, materials used, outside services performed, and burden costs.
- **Job Cost Summary** – Information for a regular job, an assembly job, including all components in the assembly, a blanket order, including the individual releases, the job associated with a purchase order, all active and closed jobs.
- **Open Progress Payments** - View Progress Payments that have not been invoiced, or have not been approved to be invoiced.

- **Part History** - Compare different jobs that produced the same part in order to determine the quantities at which you can manufacture the part most profitably and spot profitability trends for the part.
- **Projected Revenue** - View projected revenue for selected periods in order to help prepare cash flow projections and identify jobs for which customers owe you.

- Cannot issue more material than what is on hand

## Pros and Cons

### Pros

- Flexible fully integrated job-based system for job shops and custom manufacturers that is Microsoft Certified.
- Intuitive and easy to use with excellent implementation steps, Help, wizards, documentation, training and customer support.
- User friendly because of menus, pop-up screens, and calculators and fully compatible with other Windows based applications.
- Multiple levels of security and user defined to screen level with passwords.
- Excellent reports to support making on-time shipments, controlling costs, and improving customer service.
- Custom reports can be created with spreadsheets, Crystal, Excel and Access by accessing the databases.
- Material planning capabilities for mixed-mode manufacturers
- Lot tracing of material.
- Serial number control of purchased or produced parts.
- Material can affect schedule for long-lead material and purchase order due dates adjust the schedule of jobs where material is linked.

### Cons

- Program modifications only through JobBOSS.
- Limited engineering change history maintained.
- Cannot handle multiple lots on one order
- Cannot track WIP for individual lots
- Minimal audit trail for financials or manufacturing transactions , no date stamps, no usage stamps on factory floor
- Multiple screens, many mouse clicks required to enter information
- Not good at tracking reworks and rejects
- If a part specification is entered incorrectly (e.g. wrong length) have to adjust each traveler individually
- Very slow to pull travelers with large number of parts
- Lacks back flushing during manufacturing process
- must log in and log out at each workstation to enter production data
- Inventory is not integrated with General Ledger
- Unsuitable for repetitive production to stock environments

## About Sheldon Needle



A former CFO, consultant and software designer, Sheldon Needle has authored or co-authored more than 20 books on software selection and has contributed articles to major publications, including the Journal of Accountancy and Nation's Business. CTSGuides.com has the distinction of being the very first company to do hands-on, independent evaluations of software for the middle market.

Sheldon speaks with business owners and managers every day about software selection and makes personalized recommendations based on their needs and budget. He is widely known and respected throughout the business software community for his independence, integrity and expertise.

As part of registering for our free software selection kit, you receive a 15-minute consult with Sheldon. Sheldon understands financial and business issues and speaks your language.

He knows the leading software companies—how they compare, their strengths and weaknesses, where they fit into the market and which ones would be suitable for your business.