

# MANUFACTURING

The Next Generation of Business Management Software



 TRAVERSE®





Managing profitability, cost control, inventory control, purchasing and supply chain, production planning, production scheduling, and all other business aspects remain challenging tasks for manufacturing companies. The need for fast, timely and accurate information in the competitive global landscape increases the level of pressure and stress associated with running a successful manufacturing organization.

The TRAVERSE Manufacturing solutions provide the functionality and value you need to address these challenges and improve your operational efficiency. You can boost your manufacturing processes across the board and keep your finger on the pulse of production with the complete set of TRAVERSE Manufacturing applications. These are designed to increase flexibility in manufacturing environments, such as Project Manufacturing, Engineer to Order, Job Shop, Made to Order, Assemble to Order and Made to Stock.

The TRAVERSE Manufacturing solution is ideally suited for smaller manufacturers who may be using an inefficient legacy software package--fearing expensive integrated systems and complicated implementations--to larger manufacturing companies requiring strong features, advanced functionality and flexibility to empower further organizational growth. Integrated with TRAVERSE accounting, distribution, CRM, eBusiness, business intelligence, and handheld applications, TRAVERSE Manufacturing will streamline your organization and result in a more productive, more effective, and better informed competitive organization.

Whether you subscribe to the simplicity of a Kanban philosophy, operate under process constraints, or have a need to manage a complex supply chain to meet just-in-time production needs, TRAVERSE Manufacturing can be configured to support and enhance your business practices.

A photograph of a warehouse worker operating a forklift. The worker is wearing a white cap, a white t-shirt, and red overalls. The forklift is black and red. The background shows tall industrial shelving units filled with cardboard boxes, some of which are secured with green straps. The floor is a smooth, light-colored concrete.

*TRAVERSE Manufacturing from Open Systems, Inc. is the perfect solution for smaller growing to larger progressive manufacturers*

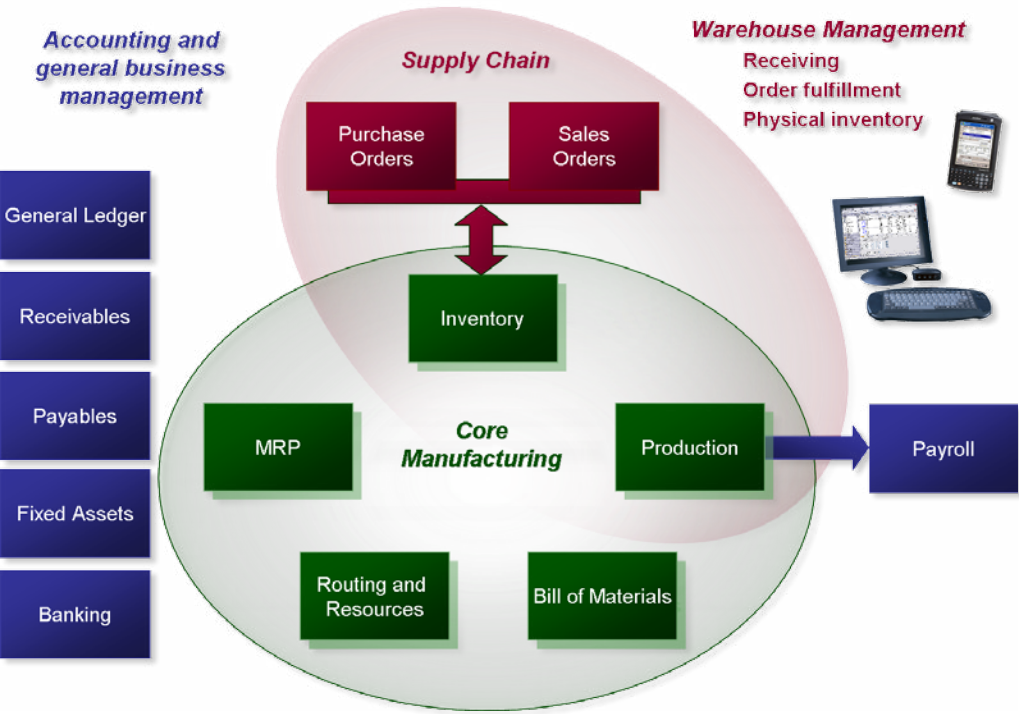


A complete ERP solution

Manufacturing companies have many critical business processes: managing stock to just the right levels, monitoring and controlling material, labor, and other costs, and ensuring that production stays on schedule. TRAVERSE Manufacturing integrated applications fit existing needs and provide the flexibility for future changing and growing needs.

Inventory management and a comprehensive bill of materials form the core of the manufacturing system. Sales forecasts and customer orders drive demand. Add the Routing and Resources and Production applications and you can manage and cost your complete production process, including operation times and routings, work center and machine costs, and labor and tooling requirements.

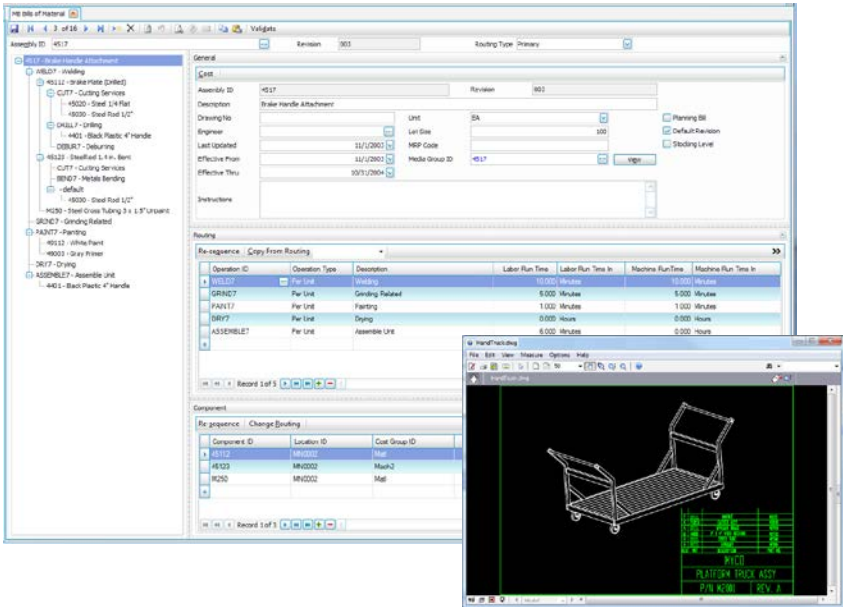
MRP, EOQ, or Min/Max reorder processing generate purchase requisitions. Products are received into the warehouse and delivered to the production floor with hand-held device software available with the TRAVERSE Warehouse Management application. All the while, the rest of the information is taking care of itself. Time entered for production is passed to payroll, vouchers for purchases are pushed to payables, billings for shipments are added to receivables, equipment depreciation can be handled automatically and costing is managed in inventory .



Integrated with the tools you use

TRAVERSE Manufacturing is designed to easily integrate with the tools you use. Throughout the software you can attach documents, spreadsheets, diagrams, and movie files. These automatically integrate to the appropriate application. Integrated features empower the user to:

- View CAD diagrams using the native drawing program.
- Verify specifications and tolerances stored in a word processing document.
- Use a spreadsheet to analyze cost variances.
- Create movie files to document the detailed setup of a
- work center for an operation.
- Import your parts lists into the software from your CAD, spreadsheet or other engineering software.



TRAVERSE Bill of Materials includes parts list imports and direct viewing of CAD drawings

TRAVERSE Manufacturing is designed to be flexible. Using a simple set of business rules, you can configure the software to fit your business; you don't need to change your business processes to fit the software.

TRAVERSE inventory supports multiple locations, unlimited units of measure with conversion factors, and complete purchasing history. Items are easy to find using internal Item IDs, vendors' part numbers, UPC codes, and user-defined aliases. Costing can be reported using actual (LIFO or FIFO), average, or standard methods. No matter which method you use, standard and actual costs of production are always captured and the reporting of standard versus actual costs is available for any production run.

An adaptable solution for your agile business

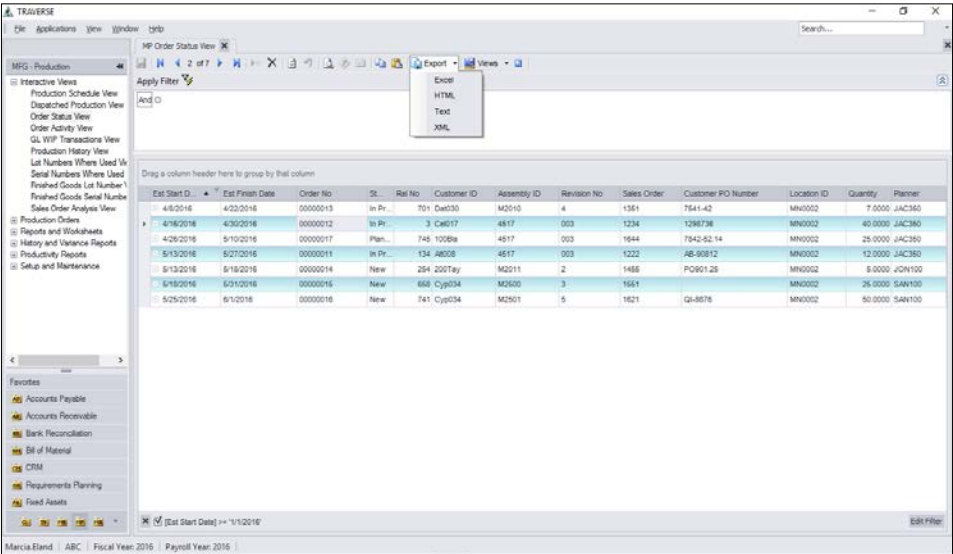
Extensive utilization of user-configurable fields adds to the flexibility of the software. You can add information to the inventory and manufacturing process that is specific to your industry or company.

TRAVERSE Manufacturing requirements can be driven by sales forecasts, actual customer orders, or a combination of both. During the order entry process, tools that are a click away will help you identify the availability of an item, what quantity can be built using existing stock, and provide an available-to-promise date based on lead times and other order commitments. Manufacturing requirements can be handled direct to order, or grouped into a master schedule for processing in cost efficient lot sizes.

Engineering or job shop environments will benefit from the project costing application, which can be used to manage and track the up-front costs of design and planning necessary for short run or one-off items.

Information when and where you need it

A full suite of reporting is part of TRAVERSE Manufacturing, including status, cost tracking, cost analysis, and planning, but the real power is found in the interactive inquiry functionality. Most inquiry functions within the software provide summarized-- often graphical--views of information. When you find something of interest, simply click on the value to drill down to the detail information that supports the item. This gives you the ability to more quickly find, assess, and make informed decisions.



Automation

The information provided by the system is only as good as the data that is entered into it. The TRAVERSE Manufacturing suite is optimized for integrated data retrieval, whether it be from time clocks, hand held data collection devices or other sources.

All routing and source documents have an option to include bar codes for key information, and the system has user-configurable labels and RFID tag functions. These documents can be used with data input devices to ensure data entry accuracy.

TRAVERSE Mobile Warehouse includes software that can be loaded onto data collection devices that use the Microsoft Win CE or Windows Mobile operating system, providing real-time, wireless updates from the dock, warehouse, or production floor to your TRAVERSE database. Functionality includes receiving, issuing product to and from the production floor, order fulfillment, physical inventory, and more.



## Make to Stock

In a Make to Stock production environment, the product is manufactured to completion before receipt of a customer order. Typically the items and quantities to be made are based on a forecast of demand with the advantage of this strategy being very short lead times for shipping product and very well defined production methods and times. Strong material requirements planning (MRP) and tight inventory control are mainstays of this strategy.

The TRAVERSE Manufacturing suite has many features designed for the Make to Stock environment, including:

- Demand driven by sales forecast
- Master Production Schedule to manage production goals
- MRP Reporting in Bucketless or user-definable buckets
- Excellent MRP inquiry with graphing and drill down capabilities to view demand
- Inventory visibility across multiple warehouses
- Automatic generation of Planned Production and Purchase Requisitions
- Cycle counting, inventory tags and import from handheld devices
- Inventory Safety Stock and Min/Max reorder management
- User-defined cost groups
- Where used reporting
- Global replacement of components
- Post production backflushing

## Make to Order

In a Make to Order production environment, the product is manufactured after the receipt of a customer order. The items and quantities to be made are based on customer orders. Lead times for production are typically longer than in a Make to Stock environment. Flexible production order processing and prioritization is a must in this environment. In many cases components are purchased specifically to produce products for customers.

The TRAVERSE Manufacturing suite has many features designed for the Make to Order environment, including:

- Online printing, faxing, emailing of sales documents
- Production work orders automatically generated from sales orders
- Ability to partially close production orders
- Drag and Drop dispatch scheduling for those rush jobs
- Purchase Price Variance tracking
- Combined visibility of demand for production and service parts
- User-defined cost groups
- Extensive pricing capabilities
- Very flexible setup options for factory overhead absorption
- Wireless issues of inventory items to production orders
- Wireless shipping and receiving
- Real time inventory updates
- Finite Scheduling reporting with calendars by resource
- Ability to generate PO directly from Production Order

## Assemble to Order

In an Assemble to Order production environment, the product’s major components are manufactured to a subassembly level and placed in stock. Upon receipt of a customer order, the specific configuration the customer ordered is run through a final assembly phase and shipped. The subassemblies are based on a forecast of demand, the advantage of this strategy being short lead times for shipping a product--but with a good degree of flexibility. Strong material requirements planning (MRP), tight inventory control and flexible production order processing are essential in this strategy.

The TRAVERSE Manufacturing suite has many features designed for the Assemble to Order environment, including:

- Ability to build sub assemblies to forecast
- Inventory visibility across multiple warehouses
- Online printing, faxing, emailing of sales documents
- Production work orders automatically generated from sales orders
- Ability to add sub assemblies to production work orders on the fly
- Very flexible production work order maintenance
- Ability to partially close production work orders
- Real time inventory updates
- Wireless issues of inventory items to production work orders
- Bill of Materials Kitting for single level bills
- Available to Promise and Component Availability
- Component Pegging
- Ability to build additional sub assemblies and return to stock
- Cycle counting, inventory tags and import from handheld devices

## Job Shop

In a Job Shop production environment, the company can simply perform a service for customers such as machining services and/ or produce a product. In the case of services only shops, there is typically a short turnaround time for customer orders, with a high emphasis placed on job status reporting and accurate labor and materials costing to the job. In addition to these requirements, a shop that produces a product will require tight inventory control and the ability to buy parts and materials to the job. Flexible job scheduling is also a requirement.

The TRAVERSE Manufacturing suite has many features designed for the Job Shop environment, including:

- Online printing, faxing, emailing of sales documents
- Production work orders automatically generated from sales orders
- Ability to partially close production orders
- Drag and Drop dispatch scheduling for those rush jobs
- User-defined cost groups
- Cost estimating through Planned Bills or Planned Production Orders
- Reporting of bills at last cost
- Extensive routing definitions capability
- Outside services automatically tracked and paperwork prepared
- Ease of recording activity to production orders
- Extensive online inquire of job status
- Extensive variance reporting of actual against estimate
- Import of bills of material
- Where used reporting for components and operations
- Complete shop travelers with optional bar coding
- Shop Calendars
- Tooling Definition and attachment to operations
- Ability to generate PO directly from Production Order



## Engineer to Order

In an Engineer to Order production environment, the company provides both engineering services and job shop services and products. There are typically long lead times for this environment because the final product is custom designed and built. A strong emphasis is placed on job status reporting and accurate labor and materials costing to the job, including subcontract management. Tight inventory control and the ability to buy parts and materials to the job are required. In many cases the company provides aftermarket parts and service on the equipment they produce.

The TRAVERSE Manufacturing suite has many features designed for the Engineer to Order environment, including:

- Extensive notes and comments
- User-defined cost groups
- Cost estimating through Planned Bills or Planned Production Orders
- Reporting of bills at last cost
- Extensive routing definitions capability
- Outside services automatically tracked and paperwork prepared
- Ease of recording activity to production orders
- Extensive online inquiry of job status
- Extensive variance reporting of actual against estimate
- Import of bills of material
- Copy bills
- Complete shop travelers with optional bar coding
- Shop Calendars
- Tooling Definition and attachment to operations
- attachment to operations
- Ability to generate PO directly from Production Order

## Project Manufacturing

In a Project Manufacturing environment, the company provides engineering services, job shop services and on-site services to install the product that is produced. A strong emphasis is placed on job status reporting and accurate labor and materials costing to the job, including subcontract management. Tight inventory control and the ability to buy parts and materials to the job are required and in many cases the company provides aftermarket parts and service on the equipment they produce. This environment typically has the longest lead times.

The TRAVERSE Manufacturing suite has many features designed for the Project Manufacturing environment, including:

- Buy to the job capabilities
- Billing by Project and Phase levels
- On account deposits tracking
- Extensive variance reporting of actual against estimate
- User defined Phase and Task tracking levels
- Revenue and Profitability reporting by project
- Requisitioning of parts from inventory
- Labor capture and reporting
- Overhead allocation and reporting
- Multiple billing formats supported

The screenshot displays the 'MR Work Centers' window. It includes fields for 'Work Center ID' (WELDING7), 'Description' (Welding Area), 'Schedule ID' (11), 'GL Offset Account' (000001000), 'Work Center Supervisor' (Smith), 'Cost Group ID' (Overh), and 'Media Group ID' (Foil). There are also input fields for 'Fixed Amount' (5.0000), 'Overhead Amount per Piece' (0.0000), 'Machine Overhead Pct' (2.00), and 'Labor Overhead Pct' (0.50). A 'Billing Information' section shows a 'Rate' of 43.50 and radio buttons for 'Pct Over Cost' and 'Per Hour'. A 'Notes' section contains a text area with a note about welding. At the bottom, there is a table titled 'Available Machinery' with columns 'Machine Gro...' and 'Description', listing items like GRINDER07, WELDINGM7, BRK07, and SAW07.

## Applications

### ACCOUNTING

- General Ledger
- Accounts Payable
- Accounts Receivable
- Payroll
- Banking
- Bank Reconciliation
- Fixed Assets

### DISTRIBUTION

- Inventory
- Bill of Materials/Kitting
- Purchase Order
- Sales Order
- Warehouse Management
- Requirements Planning

### MANUFACTURING

- Bill of Materials
- Production
- Requirements Planning
- Routing and Resources

### REPORTING

- Interactive Views
- Info-Alert
- Enhanced Payroll Tax Reporting
- Digital Dashboard

### FEATURED VERTICALS

- Project Costing
- Point of Sale
- Not for Profit
- CRM
- Service Director
- Electronic Data Interchange
- Multicurrency

### PORTAL APPLICATIONS

- Customer Inquiry Portal
- Customer Order Entry Portal
- CRM Portal
- Dashboard Portal
- Sales Rep Portal
- Project Costing Portal
- Service Director Portal
- Payroll Portal
- Executive Portal
- Financial Portal
- PO Approval Portal





## Corporate Headquarters

4301 Dean Lakes Blvd., Shakopee, MN 55379

800-328-2276 • 952-496-2495(fax)

[www.osas.com](http://www.osas.com) • [info@osas.com](mailto:info@osas.com)

## Regional Offices

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