

If you are a build to stock, build to order, or engineering to order manufacturer, we designed your system to be a complete solution for your company. We have more than 30 years experience used to develop our software. Our goal is to bring the most complete solution possible while still being easy to use!

# **PRO**DUCTIVITY SOFTWARE FOR **MAN**UFACTURING

### **HIGHLIGHTS**

- Complete, closed loop ERP system based on industry standards
- Fully integrated, real time transaction-based system
- ISO 9000 support
- Simple integration to third party software (such as MS Office, etc.)
- Real time shop floor data collection capabilities
- Hardware efficient (minimal requirements)
- Extremely efficient storage allows very large files available for online processing
- Very scalable (from two to hundreds of users)
- Supports enterprise-wide requirements
- International installation, service/support
- Evolutionary platform growth
- Executive dashboard
- Integrate emails throughout system to improve communication internal, customers, and vendors
- Online PPCC to improve communication with customers and vendors
- More than 20 business processes supported, completed integrated in real time.

# Implementation Sequence & Dependency Chart Accents Polyaking Counting System Administrator What's New

### **GENERAL FEATURES**

- Robust security with multiple levels of access control
- Easy to operate (designed to have users operating effectively, quickly)
- Extensive windowing capability and a powerful, flexible access query language – optionally downloading to excel
- Documentation integrated to online KnowledgeBase with a single keystroke
- Post relational database
- Sophisticated cross referencing and indexing allows for quick, accurate access to records
- Supports multiple currencies
- Availability of night processing (daily or weekly scheduling)
- Complete auditability/traceability with transaction logging (by old data, new data, date & time, user ID)
- Electronic StickyNotes available throughout system
- Event Driven Email internal or external addresses
- Fax, email, print documents to your supply chain
- Easily customized menus for users
- Drill down to details with single key strokes find your answers quickly !
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### **Sales Order Processing**

- Assigns customer numbers automatically or manually
- Access customer information by name or number
- Supports customer file maintenance
- Maintains catalog price and product family code
- Supports different sales functions:
  - Make to stock
  - Make to order
  - Engineer to order
  - Cash sales
  - Configured parts
- Assigns sales order number automatically or manually
- Provides for discounts, commissions, volume rebates, promotions, and/or extra charges
- Allow for multiple items and instructions per sales order
- Allows for multiple deliveries, quantities, and instructions per line item
- Supports multiple invoice-to addresses as well as multiple ship-to addresses
- Calculates unit price based on price matrix table
- Price matrix tables set up by customer, customer code, part number and product family code
- Accounts for applicable taxes.
   Supports multiple sales taxes
- Ability to check product availability
   on-line at order entry
- Matrix based product configurator automates entry of make-to-order products with options
- Print, fax, or email sales order acknowledgements and packslips
- Allows special allocation for shipments
- Sophisticated credit check system at order entry
- and/or shipment time email interface to accounting
  Provides instant access to order and shop status
- Provides instant access to order and shop status
   Dravides for invalsing and accounts receivable tra-
- Provides for invoicing and accounts receivable tracking prior to shipment of product
- Reports on revenue schedules from pre-invoicing (progress billing)
- Deducts amounts pre-invoiced from invoice gross on first shipment of product
- Advance shipping notices emailed to customers
- Query order status/history by variety of methods
- Standard text by customer and/or part can be saved and printed automatically on documents
- Bills of lading
- Proforma invoices supported
- Supports export shipments
- RGA (return-goods-authorization) process
- Web interface for customers to view order status
- Promise delivery date versus customer requested delivery date tracking
- Customer-specific package and master pack labels
- Orders on hold

### <u>Sales Analysis</u>

- Show sales and bookings by code, sales person, territory, customer, product family, part number
- Sales and bookings analysis of \$ and quantities by month, year to date, this year, last year, cost, % margin and % change
- Ranks Customer by year-to-date shipments
- Ranks Representatives by year-to-date sales
- Prints multiple backlog report and shows aged dollars booked
- Show on-line history of shipped orders
- Provides for year-end cutoff processing
- On-time shipments

Customer Service

- Sales Order Processing
- Sales Analysis
- Invoicing

## Invoicing

- Calculates invoices after shipments are confirmed
- Prints, faxes, or emails invoices
- Assigns invoice numbers automatically or manually
- Allows manual invoicing
- Allows modifications to invoice date
- Provides invoicing audit runs
- Available "drill-down" for on-line invoice inquiry showing complete invoice details, including original amounts and payment summary
- Calculates commissions, automatically updates Accounts Payable (no additional entries)
- Accepts credit memos
- Retains invoice history
- Purges invoices to history file on disk or to tape

### **PURCHASING**

- Maintains vendor information
- Assigns vendor numbers automatically or manually
- Assigns purchase order numbers automatically or manually
- Supports multiple items per purchase order
- Supports multiple deliveries per item
- Tracks outplant operations on work orders
- Allows for purchases to inventory, work orders or general ledger accounts
- Print, fax, or email purchase orders and purchase order changes
- Allows for drop shipments
- Prints aging of dollars committed on purchase orders
- Prints purchase part status by part or vendor
- Has on-line inquiry of purchase order status
- Shows all open lines for a purchase order and allows receipts against any item
- Supports purchasing in any unit of measure with conversion factor
- Allows for short close of line items on purchase orders
- Reports past-due orders by part number or vendor
- Vendor performance report card system
- Email vendors with open order information
- Supports purchase order receipts with inspection option
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- Warns for early purchase deliveries and overshipments
- Supports unplanned receipts
- Applies purchase receipts to outstanding deliveries
- Tracks vendor performance
- Displays vendor quality parameters (\$ volume, ontime, rejects, lates, etc.)
- Provides for formal inspection of purchased parts
- Reopens purchase orders when parts are rejected
  Automatically maintains average and last costs for
- Automatically maintains average and last costs for parts
- Allows for material burden for purchase order receipts
- Creates receiver records for purchase order receipts to be processed by accounts payable
- Can automatically put payable on hold if variances are over specified dollar or percentage threshold
- Purges closed/completed purchase orders to history file on disk or to tape (provides an audit report of records purged)
- Returns Processing complete with packslips
- Scan vendor documents and tie to transactions
  - Blanket purchase orders with unlimited releases
    - Request for quote from multiple vendors
      - Vendor quotes readily visible on order entry
        - Merge text available for standard boiler plate text
          - Subcontracting supported

# SHOP FLOOR CONTROL

Manufacturing

Control

Purchasing

**Shop Floor Control** 

- Real time data collection
- Produces shop packet including pick list and route sheet
- Supports forward or backward scheduling of work order operations for work center loading
- Shows on-line dispatch list and work order status reporting
- Scrap reporting by operation with reason codes
- Rejected material processing (MRB)

- Allows splitting of work orders
- Updates work order with move tickets or labor reporting
- Supports off-loading work to alternative work centers
- Prints a report of value added to a work order by work center, comparing standard to actual for a specified date or a range of dates
- Work schedules with critical ratios, labor load left

### **BILL OF MATERIAL**

- Maintains inventory master file
- Maintains product structure file
  - lead time offset (used for Just-in-time inventory control)
  - □ low level code
  - □ component scrap planning
  - □ type code allows planning control
  - quantity per assembly to 4 decimal places
  - □ reference designators
  - item number/balloon number
  - comments by component or bill
- One step new part creation (by copying part data, BOM and routing from an existing part)
- Provides purchased and manufactured short list from multi-level bill
- Allows bills to be generated via configuration tables
- Checks continuity as bills are generated
- Provides for copy bill capability
- Has "where used" reporting
- Has multi-level "where used" reporting
- Substitute part numbers
- Change control
- Import bills of material

# WORK ORDER CONTROL

- Allows control over how work orders are opened
- Assigns work order number automatically or manually
- Supports rework orders and work orders for noninventory items
- Shows pick list parts referenced to work order operation
- Shows on-line material issue status by work order
- Prints shortage reports
- Allows changes to:
  - start and finish dates of order
  - quantity
  - routing steps
  - scheduled start and completion dates of operations
- Audits and optionally updates the item master with average run sizes
  - Calculates work order start and end dates
    - with detail Ability to audit an

planned

open work order

completion date with actual and

and compare

recalculate a planned completion date

Prints past due

work order status Purges work

orders to history

file on disk or to

tape (provides an audit report of

# Resource Planning

- Bill Of Material
- Work Order Control
- Capacity Planning
- **Inventory Management**
- Physical Inventory
  - records purged)
  - Shrink supported
  - Holds on work orders quarantine/ stop work

### **CAPACITY PLANNING/ROUTING**

- Maintains standard operations with time study notations
- Maintains work centers
- Supports labor rates by work center
- Supports fixed and variable burden rates by work center
- Maintains multiple routing steps for each part
- Supports copying of routing steps to another part
- Allows for tooling, additional description, and drawing reference by routing step
- Supports move and queue by routing step
- Provides work center where-used information
- Provides for FINITE loading of critical work centers and/or infinite loading of all non-critical work centers

- Calculates manufacturing lead time based on routing steps
- Shows capacity requirements graph by work center
- Identifies planned orders and released work orders with separated totals for each
- Prints work center load detail in a spreadsheet format
- Allows rough cut loading by work center
- Allows scheduling by individual machine within work center
- Uses shop calendar in capacity planning process (with on screen calendar interface)
- Calculates lead times based on realistic average run times

### **INVENTORY MANAGEMENT**

- Display average inventory turns by ABC class code (detail or summary)
- Issues by exception to work orders (explode-deduct)
- Supports unplanned issues
- Projected inventories for planning
- Available on-line transaction detail
- Shows transaction history for audit, reconciliation
- Flexible reporting structure:
  - for a date range (posted or not)
  - □ for each type of transaction (showing data relevant to that type)
  - values of inventories by general ledger inventory account number
- Prints extended month end inventory value
- Display receiver records by vendor, PO, part, invoice, packslip and receiver
- Accepts adjustment to inventory with reason codes
- Supports RF inventory transactions
- Slow moving inventory
- Excess inventory reports
- Issue labels to accompany parts to the shop floor
- Age controlled inventory supported

#### Supports multiple locations with general ledger accounts by location

- Confirms shipments of finished goods
- Summarizes part allocations to manufacturing and sales to provide net available
- Supports work order receipts with backflush option
- Automatically maintains average and last costs for parts
- Print purchase variances by date and receipt, part, ledger or vendor
- General ledger transactions created for each data and type. Drill down detail available from GL back to individual inventory transactions
- Transfer parts between physical locations
  - Expense parts supported
    - Tooling supported

# Resource Planning

- Bill Of Material
- Work Order Control
- Capacity Planning
- Inventory Management
- Physical Inventory

### **CYCLE COUNTING**

- ABC calculation and analysis for cycle counting
- Prints cycle count worksheets by count class, very flexible to support warehouse locations
- History reports in cycle counting tracking accuracy
- Reconcile count worksheets
- Automatic updates to inventory

### **PHYSICAL INVENTORY**

- Supports full inventory of stockroom and work in process
- Uses tag assignment number and responsibility
- Enters information with on-line editing
- Reports on:
  - missing tags
  - Lags with invalid part numbers
  - parts with balances that were not counted
  - tags that cannot be valued
- Compares counts with discrepancies and reports variances (Stores and WIP)
- Rolls counts into new on-hand balances
- Extends value of inventories
- Lot/location support
- "Freezes" quantities and costs before count (allows normal processing while count data is entered)
- Supports RF inventory

### **GENERAL LEDGER**

- Supports unlimited number of fiscal periods
- All transaction dates are validated against general ledger calendar
- Maintains chart of accounts
- Supports financial statement maintenance including copy feature
- Supports individual or consolidated financial statements
- Allows Recurring/reversing journal entries
- Accepts manual journal entries
- Shows individual general ledger transactions, selected by name or reference
- Summarizes general ledger transactions (by date or period posted to), one line of totals per item
- Allows for audit trails by date, by type and by account
- Allows a separate posting of general ledger transactions by journal type
- Prints detailed trial balances
- Calculates and prints financial statements
- Prints user defined groups of standard financial statements (eg: a monthly set, quarterly set, yearly set)
- Prints bucketed cash flow analysis (weeks) based on actual customer receivable payment history (averaged)
- Calculates variances between actual and budgeted amount for financial reporting
- Supports year-end processing
- Supports multiple open fiscal periods (allows new month processing before month end close)
- Purges closed transactions to history file on disk or to tape (provides an audit report of records purged)
- Import manual journal entries

### **ACCOUNTS PAYABLE**

- Prints an aging of accounts payable
- Provides for manual entry of invoices
- Matches invoice to purchase order receipts
- On screen query with GL disbursement available
- Allows drill down for additional detail on selected transactions
- Allows recurring AP transactions
- Posts purchase order variances
- Supports partial payments
- Supports check reconciliation
- Pays multiple invoices with one check
- Calculates discounts allowedSupports special payment status codes for holds and
- priority payments
  Provides for option of payment by due date or by individual invoice
  - Prints accounts payable checks
  - Printer management allowing jammed
  - checks to be easily voided and reprinted
    - Reports payables on hold
      - Has void check capability
        - Provides for hand written checks

# Management

Financial

- General Ledger
- Accounts Payable
- Accounts Receivable

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- Budgeting
- Fixed Assets
- Costing /

- commissions
   Supports inquiry of
  - unpaid or paid invoices

Pavs sales

- Supports
  miscellaneous vendors (for US
- customers, supports 1099 vendors)
- Purges closed transactions to history file on disk or to tape (provides an audit report of records purged)

# ACCOUNTS RECEIVABLE

- Has on-line transaction view of customers
- Calculates average AR days
- Prints an aging of accounts receivable
- Accepts cash for multiple invoices or on account
- Interfaces with sales order processing for credit limit checks
- On screen query with GL disbursement available
- Allows drill down for additional detail on selected transactions

- Prepares customer statements
- Has on-line inquiry of check distribution
- Supports multiple cash accounts
- Calculates service charges
- Purges closed transactions to history file on disk or to tape (provides an audit report of records purged)
- Email notifications of cash received
- Email delinquent customers with invoice details

### **PRODUCTION COSTING**

- Supports three simultaneous costing methods:
  - Standard
  - Average
  - Last
  - Supports six cost components for each cost method:
    - Material
    - Labor
    - Outplant
    - Fixed Burden
       Variable Burde
    - Variable Burden
       Material Burden
    - Material Burden
- Tracks cost by work order including material labor, burden,and outplant
- Show part costs by routing sequence (audit showing how costs were calculated)
- Incremental cost increases displayed by routing sequence
- Allows recording of labor at actual or standard cost
- Calculates and posts to general ledger the work order variances for material, labor, burden, and outplant
- Daily and monthly production reports showing units, dollars and actual efficiencies
- Stores month-end quantity and value of inventory for delayed reporting
- Variances to GL by plant or part
- Historical averages by part or by operation

- Rolls up labor, burden and outplant costs from routings for calculation of parts costs
- Allows manual maintenance of routing costs
- Calculates material costs using the bill of material and adds routing costs to update part cost fields
- Accepts changes to part accounting value and records general ledger transactions for inventory value change
- Reports work-in-process value
- Summary of Work in Process receipts for a work order broken out by cost component (material, labor,
  - overheads, etc.) for the total production quantity and costs per unit
  - Supports closing a work order short

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- List summary of closed work orders showing all variances and the GL accounts they were posted to
  - Financial closing data for all cost components,

# Management

Financial

- General Ledger
- Accounts Payable
- Accounts Receivable
- Budgeting
- Fixed Assets Costing

standard, closing and variance Updates average and last costs for

showing actual,

- optional audit reports to
- show in detail how costs were calculated
- Shows value of product at standard at each operation step (used to determine cost of scrap, rework, etc.) Costing Worksheets

### **BUDGETING**

- Prints a budgeting worksheet
- Accepts fixed, annual, or variable budgets
- Interfaces with financial statements for comparisons of
- actual or budgeted
- Import Budgets
- Budgeting by customer/product or by salesman

# FIXED ASSETS

- Maintains asset records
- Calculates depreciation (with a user definable table)
  - Straight line
    - □ 150% declining balance
  - □ 200% declining balance
  - ACRS method Records sale of assets
- Records sale of assets
- Post depreciation directly to ledger
- Special depreciation overrides possible
- Drilldown from assets and/or accounts

#### **MANUFACTURING RESOURCE** PLANNING

#### MASTER SCHEDULING

- Integrates shop calendar in planning process
- Maintains sales forecasts (sales orders consume the sales forecast)
- Compares sales forecasts to actual
- Supports master schedule which supersedes sales forecasts
- Allows for manual planning of firm planned orders
- Allows for planned component substitutions to aid in Inventory utilization
- Supports planning bill methodology
- Provides "available-to-promise" and rough cut load graphs

#### QUOTING

\* EDI Interface

Document Imaging

Data Warehousing

Bar Coding (BAR)

Lot Control (LOT)

Order (ECO)

Control (SPC)

Statistical Process

Engineering Change

Whiteboard Scheduler

- Assigns quote number automatically or manually
- Supports multiple items per quote
- Supports multiple deliveries per item
- Handles individual markup on material, labor, outplant, material burden, fixed burden, and variable burden

JOB SHOP

- Supports quotes on non-inventory items with components and routing
- Reports on quotes by follow-up date, customer, and part number
- Prints tickler report for follow up of quotes
- Provides sales projections based on capture ratios
- Shows on-line quote inquiry with print option
- Extensions **Jptions**/
  - Manufacturing Resource Planning (MRPII) Requisition Module
- MATERIAL REQUIREMENTS PLANNING
- Maintains requirement activity file for MRP
- Allows for net change or regenerative processing by low level code
- Uses flexible planning horizon
- Supports four-order rules
- Supports phantom (make on assembly) logic
- Utilizes shop calendar
- Supports shrinkage by part
- Supports scrap by product structure
- Supports bin item planning
- Supports planned purchase orders
- Prints requirement analysis report
- Prints purchasing tickler with action messages
- Prints manufacturing tickler with action messages
- Incorporates tickler tolerances for accelerate and slide messages
- Supports part pegging
- Utilizes obsolete part coding and reporting
- Validates requirements
- Converts planned orders to work orders with support • for component planned availability
- Master production schedules

- Quotation information converted to sales orders including part numbers, bills of material, and process plans
- Purges quotes to history file
- Tracks production status on all component parts for a specific order

# **ESTIMATING**

- Provides for entry of estimating parts for manipulation in preparing quotes
- Rolls up routing costs for labor, outplant, fixed burden, and variable burden
- Builds up costs from the bill of material for a specific part or entire quote
- Supports effectivity date change control for bill of material

Job Shop (SHOP) Purchase Order

# PURCHASE ORDER

#### **REQUISITION**

- Handles inventory and non-inventory parts
- Purchased item file for frequently used non-inventory items (maintains descriptions and GL account data)
- Supports blanket purchase orders
- Can set up non-inventory items on the fly (linked to vendor information and GL account data)
- Allows miscellaneous payables
- Captures reason for PO request
- Ability to add special instructions at all levels (per item, PO, all POs and internal only comments)
- Can operate without price when necessary
- Allows any user to enter a PO requisition
- On-line authorization based on definable user
  - spending limits (configurable to various approval levels)
- Also allows for definable management authorization limits
- On-line approval process with user-id's, passwords, and user defined approval levels
- Requisition automatically creates a PO when approved
- Ability to fax PO directly from desktop
- Recognizes and warns of variances in price and quantity (by % or \$) at time of receipt
- Non-inventory items automatically linked to GL

**Options/Extensions** 

 Manufacturing Resource Planning (MRPII)
 Job Shop (SHOP)
 Purchase Order Requisition Module \* EDI Interface

- Document Imaging
- Whiteboard Scheduler
- Data Warehousing
- Bar Coding (BAR)
- Lot Control (LOT)
- Engineering Change
  - Order (ECO)
- Statistical Process Control (SPC)

### EDI INTERFACE

- Integration with SPS PC based EDI software
- Works in conjunction with enhanced sales order processing
- Currently support both purchase orders (sales orders), acknowledgments and invoicing
- Table driven translation allows for easy adaptability to trading partner formats
- Reports exceptions for price and part numbers

### **BAR CODING**

- Prints purchase orders with bar code information
- Receives purchase items using a scanner
- Prints pick lists for a work order with bar code information
- Issues parts to a work order from a picklist using a scanner
- Prints work orders, labor cards, and employee labels with bar code information
- Collects labor time on the shop floor from the work order or labor card
- Prints packslips with bar code information
- Confirms shipment of parts on a sales order from a packslip using a scanner
- Supports several printers and readers
- Integrates to LOT TRACKING extension
- Inventory bar code labels
- RF bar code interface

### ENGINEERING CHANGE ORDER

- Tracks engineering change request:
  - Urgency
  - Savings expected
  - Costs expected
  - Responsibility
  - Approval
- Tracks engineering change order:
  - Costs
  - Charge to responsibility
  - Disposition of parts
- Maintains effectivity date change for components in a bill of material:
  - Start date of change
  - Stop date of change
- Provides for reference designators
- Provides for item number/balloon number
- Provides for comments on each product structure record

# ptions/Extensions

\* EDI Interface

- Document Imaging
- Whiteboard Scheduler
- Data Warehousing
- Bar Coding (BAR)
- Lot Control (LOT)
- Engineering Change Order (ECO) Statistical Process Control (SPC)

- Provides for lead time offset for Just-in-Time pick lists
- Supports effectivity date change control for bill of material
- Integrates process changes automatically to selected open work orders
- Integrated email . notifications

Supports dual lot files to protect against lost data

LOT

TRACKING

- Supports lot serial number control by part
- Prompts for lot numbers and lot quantities for all inventory transactions of parts under lot control:
  - Purchase order receipts
  - Unplanned receipts (no Purchase Order)
  - Issues/Returns to work orders
  - Issues/Returns to general ledger numbers
  - Work order receipts
  - Shipments
  - Adjustments
- Produces lot labels for identification of parts and for hard copy records:
  - Purchase receipts

  - Packslips for shipments
- part/lot
- receipts of a work order

- Serial number system with duplicate control
- Lot pools supported

Requisition Module

Manufacturing Resource

Planning (MRPII)

Job Shop (SHOP)

Purchase Order

# STATISTICAL PROCESS

#### CONTROL

- Maintains standard characteristics/process values:
  - Description
  - Unit of Measure
  - Target high spec limit
  - Target nominal
  - Target low spec limit
  - Control limits
  - CP
  - CPK
  - etc.
- Provides ability to link characteristics to routing steps
- Prints work order with control charts for characteristic values of routing steps
- Records measurements of characteristics with on-line real-time X Bar and R graphs
- Prints work order with hard copy of characteristic values
- Exports measurement values to external files

- Pick lists for work orders
- Shows on-line history of all transactions of a specific
- Allows for inquiry to all lots issued to a work order or
- Integrates to Bar Code extension
- Querv lot history

### **Labor Collection**

- Time and attendance
- Direct and indirect time tracked and reported
- Single or multiple job tracking at one time
- Employee on-time reports
- Indirect labor reports by supervisor or department
- System feeds production control in real time
- Interfaces to payroll services (ADP)
- Swipe cards and bar code interfaces
- Updates ledger, work order cost, and payroll
- Manu job ticket supported
- Backflushing labor with analysis by cell/work center

PRO:MAN software has been helping manufacturers for over 25 years and is in use by manufacturing companies all over the world

# Our focus is manufacturing, our strength is implementation

# WE HELP MANUFACTURERS EXCEL