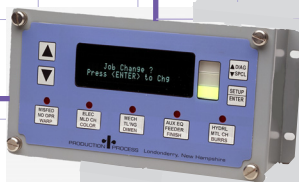


Improve your machine-based manufacturing productivity with **ProductionACE**--an economical, proven system for:

- Real-time machine monitoring with OEE calculations
- Production data collection and reporting
- Downtime and reject cause analysis
- Labor productivity tracking
- Usage-based Preventive Maintenance scheduling
- Visual production scheduling and real-time Job tracking
- Connecting production floor to ERP and CMM systems



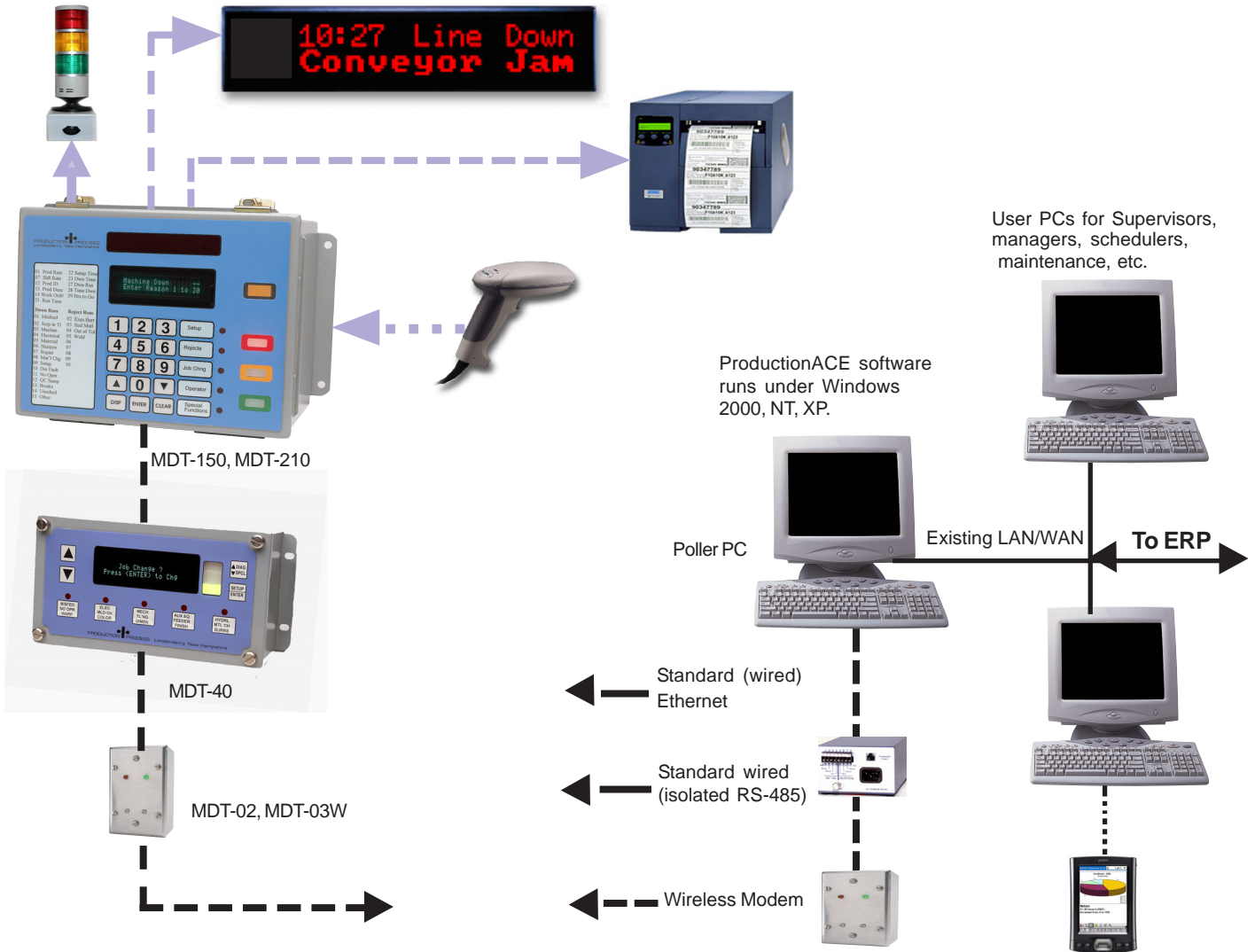
Production Manager and Job Manager from

Production  Process



ProductionACE: cost-effective, practical, proven, expandable.

Install a Machine Data Transducer (MDT) on each production machine to collect and display production and productivity information. Installation is easy because the MDT connects to existing “discrete” (on/off) and “analog” (temperature, pressure, etc.,) electrical signals in the machine to collect and transmit data to Windows **ProductionACE** software. Five models of MDT enable you to match each machine’s data collection, data display and Operator Interface requirements with the appropriate MDT for the most economical system possible.



Plant-wide coverage with your choice of communications.

A Poller PC communicates with the MDT on the shop floor via either standard wired communications (with MDT located up to 4000 cable-feet distant from PC), or standard (wired) Ethernet, or long distance Wireless Modem (100,000 square foot coverage with just one Base Station). Each MDT operates and collects data independently of PC, and retains data during power outages.

Enterprise-wide data access provides tools to improve enterprise productivity.

The Poller PC communicates over your existing LAN/WAN to User PCs for access by Management, Scheduling and Maintenance personnel, as well as for automated data exchange with your ERP systems. E-mails are automatically sent to PCs, PDAs when user-specified conditions aren't being met and/or system changes occur. Web-enabled display screens provide standard interface for real-time, enterprise-wide, world-wide information visibility.

The system is expandable, and you can select from many options to tailor a system for your application.

Options include barcode label printing at each machine, barcode scanner data entry and Job change, light trees, large alphanumeric “Marquee” displays, and custom MDT and system software features.

Identify problems fast, before production or quality suffers, with real-time displays.

This **Efficiencies Screen** displays critical performance indicators for each machine. Four “speedometer” gauges display the entire plant, individual groups, or departmental performance data.

Machine data line is color coded:

- Running within standards
- Setup mode
- Down
- Cycle time or machine rate out of limits

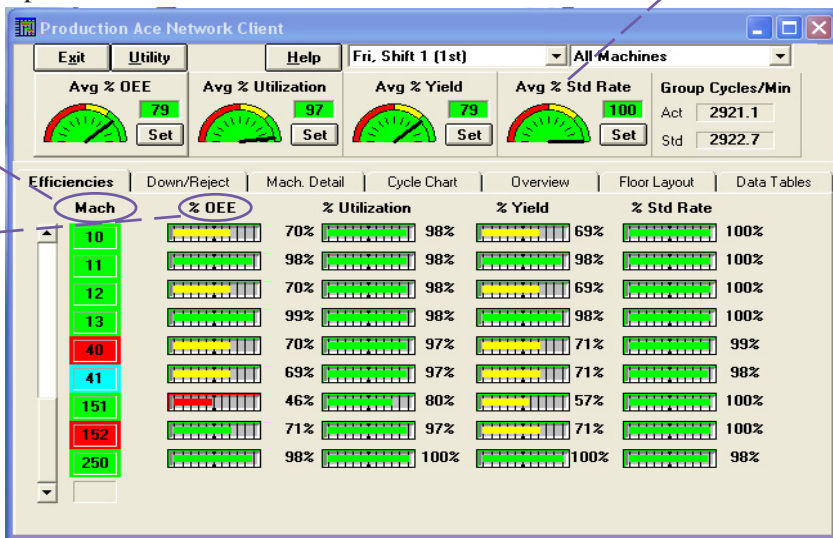
Definitions of machine column headings:

% OEE: a measure of overall efficiency, it factors in parts made, scrap, downtime, actual production rate and compares it to a standard.

% Utilization: shows the actual amount of run time as a percentage of the time the machine was available to run.

% Yield: the amount of good parts produced as a percentage of total parts produced.

% Standard Rate: is the actual rate of production as a percentage of standard rate.

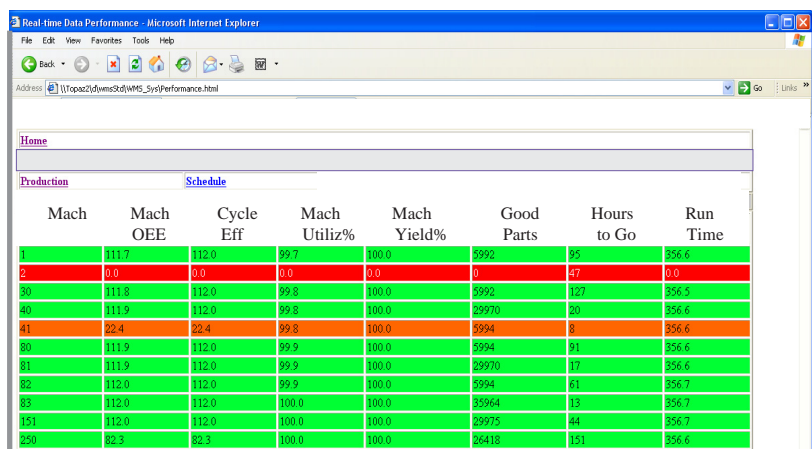


Custom, real-time, Web-enabled display screens: Data Tables.

You can define real-time screens containing only those parameters appropriate for your operation, group or department. They’re available over your standard LAN/WAN or via the Web.

From a list of all the Data Functions the system collects, click to select those items you want displayed -- in real-time.

For fast problem detection, each machine line is color coded with machine status, just like the **Efficiencies Screen** (above).

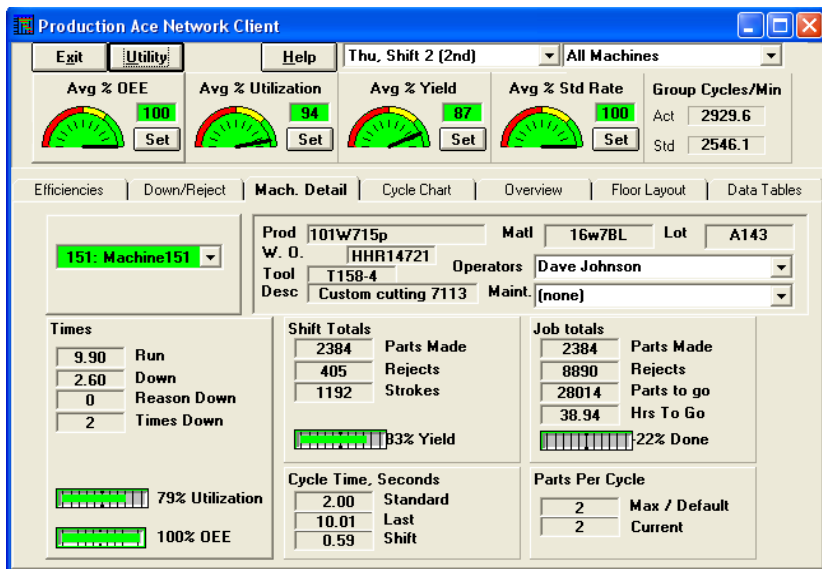


Real-time Machine Detail Screen lets you “zero in” on problems.

If you see a problem with a machine on the **Efficiencies** or **Data Table** Screen, select this **Machine Detail** screen.

This screen shows complete information about a specific machine (#151) and the Product (101W715p) that is running, the “operating” Operator (Dave Johnson) and the setup/maintenance Operator (none now), the Tooling, material and the material Lot number, etc.

All information displayed on the screen is in real-time, so supervisors, managers and maintenance staff have up to the minute information necessary for informed decision making.



Eliminate the non-productive labor and errors of manual data collection.

The system provides automatic and on-demand, standard and custom reports of Shift and Daily Production, Downtime, Reject, Material Used, and Productivity -- selected by date range, shift, machine, product and sorted by machine, product, mold/die/tool, or Work Order. Each group of machines or departments may be reported separately. This screen allows you to define criteria for reports.

A user-selectable "Scale Factor" enables MDT to automatically track multiple parts made each machine cycle. Scale Factor can be the number of mold cavities open, the circumference of a drive cylinder/roll, or the length of product that cut off by an automatic saw.

Present and format data your way: custom reports and exporting data.

Crystal Reports, software used to generate the standard reports included in the system, can be used to create virtually any report. Lean/Continuous Improvement or Six Sigma team members, Managers, or Supervisors can design a report within Crystal, import the design into the system's report generator, and simply "point and click" to select information to include in the report. Information can then be easily exported to most database tools, spreadsheets and word processing applications.

Determine real Job Standards to help improve your Job costing process.

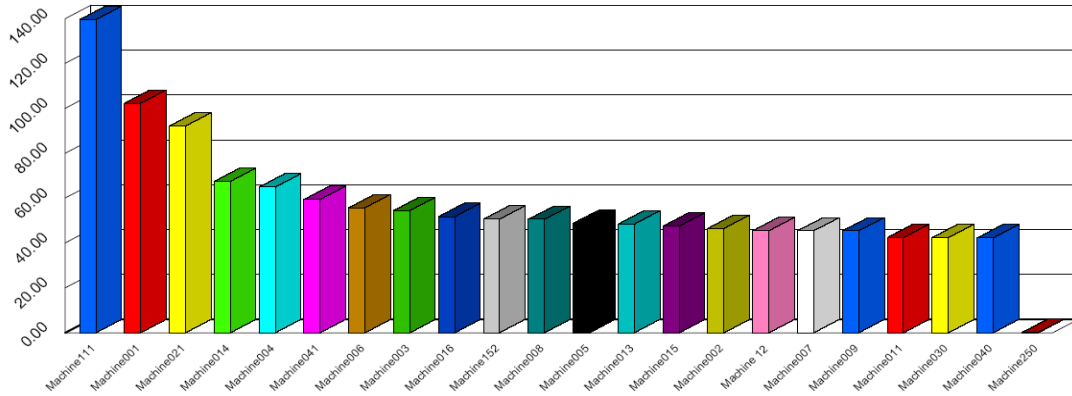
Summary: Managers														Page 1	
Product ID; Machine Number															
Printed		7/6/04		at 13:32											
From		7/6/04		to 7/7/04											
Machine	Date	Shift	Product ID	Work Order	Overall Eff%	Run Hours	Down Hours	Mach Util. %	Shift Parts	Shift Rejcts	Yield %	Std Rate	Shift Rate	Rate Eff. %	
14 Emba	7/6/04	Day	36SSA		92.0	4.4	3.6	55.5	38,747	102	99.7	86.7	145.3	167.6	
14 Emba	7/6/04	PM	36SSA		48.1	2.8	5.2	34.0	20,620	254	98.8	86.7	123.2	142.1	
14 Emba	7/6/04	Eve	36SSA		99.0	5.0	3.0	62.0	41,416	158	99.6	86.7	137.3	158.4	
Grand Totals:					79.1	12.2	11.8	50.5	100,783	514	99.7	-	-	156.0	

At first glance, who wouldn't be happy with the above report? **Day** and **Evening** Shifts obtained an **Overall Efficiency** of 92 and 99% respectively. However, review of all the components of the report shows a much different picture. Note that across three shifts, **Machine Utilizations** range from 34-62%. **ProductionACE** will help you increase those numbers by allowing you to determine root causes of the problems: in this case, the most important aspect is the comparison of the **Standard Rate** vs. **Shift Rate**, and the **Rate Efficiency**. Note that when the machine was running for 50.5% of the day, it was running on average at 156% faster than the standard calls for. How does this affect quality? Why is the machine running only half of the available time? Why is the machine running at almost twice the specified speed? **ProductionACE** will help you answer these questions so you can determine real job standards and improve your costing process.

Analyze causes for Downtime and Rejects -- then eliminate them.

MDT's collect Down Reasons and Reject counts -- automatically through direct machine connection and also by Operator keypad input. Depending on the model of MDT, you can track up to 40 Downtime Reasons. When the machine is "down," the MDT keeps track of the time and prompts the Operator to refer to a Down Reason menu on the MDT and enter a Reason number. You can prepare a **Pareto Chart** like the one below sorted by machine, product, operator, shift, etc., to help you focus on the most critical causes of downtime; then put in place appropriate programs to eliminate or minimize the causes. A Pareto chart of Rejects can be prepared in a similar fashion.

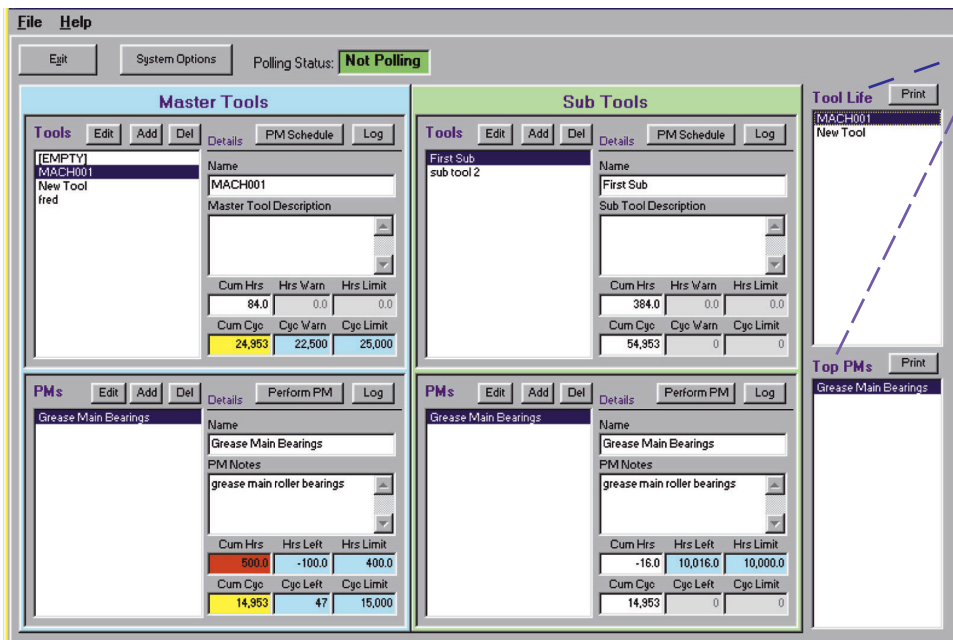
Pareto Down time



Calendar-scheduled Preventive Maintenance is inefficient and ineffective; replace it with maintenance scheduling based on run time and cycle count data.

Usage-based PM minimizes job interruptions due to unplanned maintenance. The **PM Module** tracks the number of cycles and run time for each machine, main tool, or sub tool/component -- data that is automatically collected by all models of MDT. Both number of cycles and run time have alarms/thresholds (total hours or total cycles) to trigger maintenance operations.

A **Master Tool** can be defined as either the machine the MDT is attached to, or a group of components. For example, a combination of printing plates and die cutters could be defined as a Master Tool. **Sub Tools** are components of the Master Tools and are typically used on more than one Master Tool; for instance, a die may use several punches depending on the job being run. Punches may also be shared by more than one die and may be set up so that their cycles and run time hours are also tracked. Only Master Tools may have associated Sub Tools.



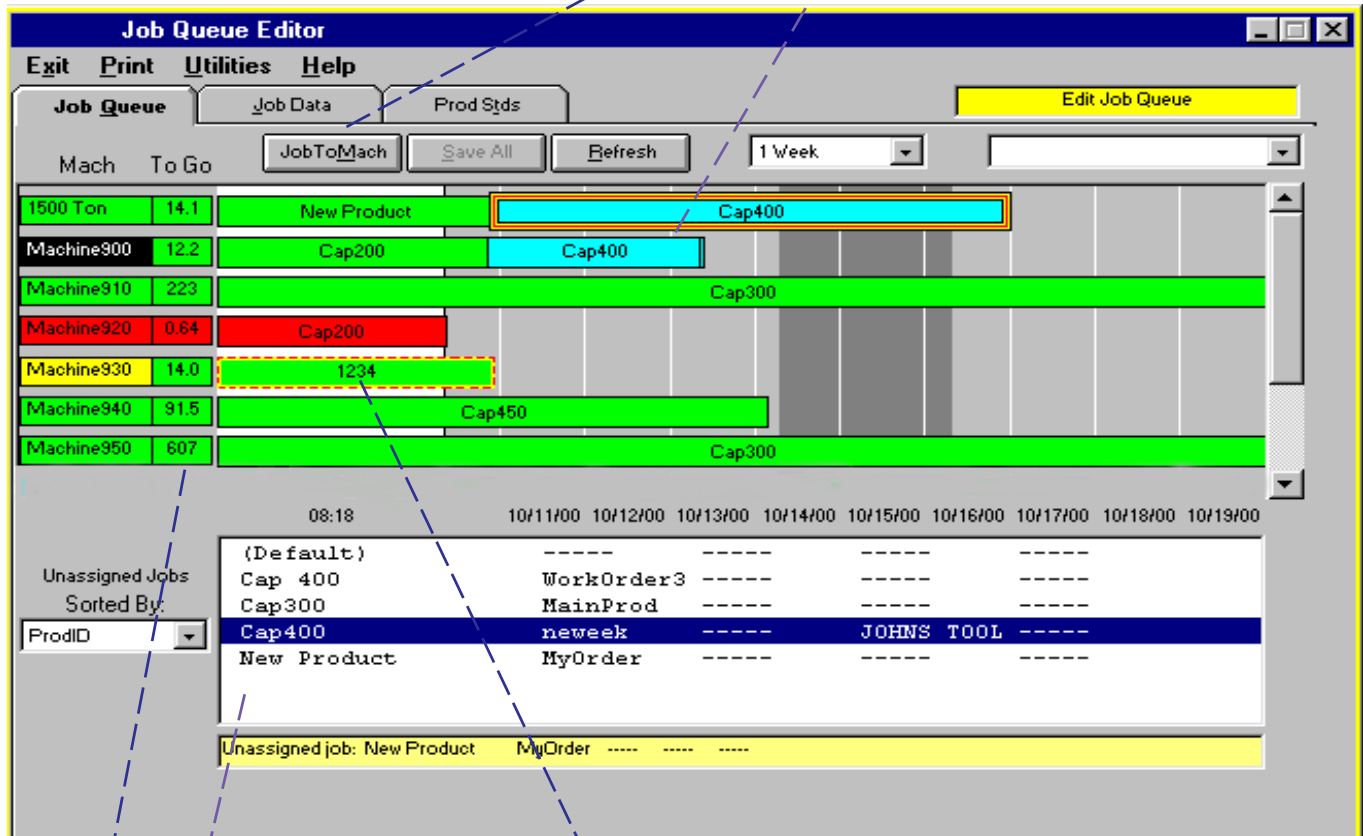
The **Tool Life** and **Top PMs** lists show Tools or Scheduled PMs that are currently due (that is, having reached 95% of their run time or cycle count). Selecting an item in either list allows the Main PM Window to update the selected PM. Color is used to graphically show which hourly or cycle count limit has been exceeded.

The PM module provides for logging changes and maintenance performed so that entries may be reviewed and analyzed to improve maintenance processes. Since all users must log in at a system PC, a record is kept of who enters changes and who performs maintenance.

Machine usage data (run time and cycle counts) can be automatically exported to any EAM/CMMS system to eliminate the errors and non-productive labor associated with manual "meter" reading.

Visual, “drag and drop” production scheduling and Job progress tracking based on actual shop floor conditions.

The colored horizontal bars represent Jobs. The bars under the **Job to Mach** button represent Jobs currently on the floor (they may be running or “queued up”). The blue bars (**Cap400**) represent Jobs that are waiting to run. To see more detail on any Job you can expand or contract the time base.



The **To Go** column displays the actual Hours To Go and an easy-to-understand color coded status:

- Hours to go greater than 8 (*Cap450 on Machine 940 has 91.5 hours to run*)
- Hours to go between 2 and 8
- Hours to go less than 2

The open area is the **Unassigned Jobs** “bull pen.” These Jobs are waiting to be assigned to a Machine. To start a Job, click and drag it onto a machine in the Queue. You can also pull Jobs off the Queue and put them into the bull pen. The Operator can call down the next job in the Queue with key entry at the MDT-40 and MDT-150. Or, using a barcode reader, the Operator can scan a Job Ticket/Work Order and the Job will be entered automatically.

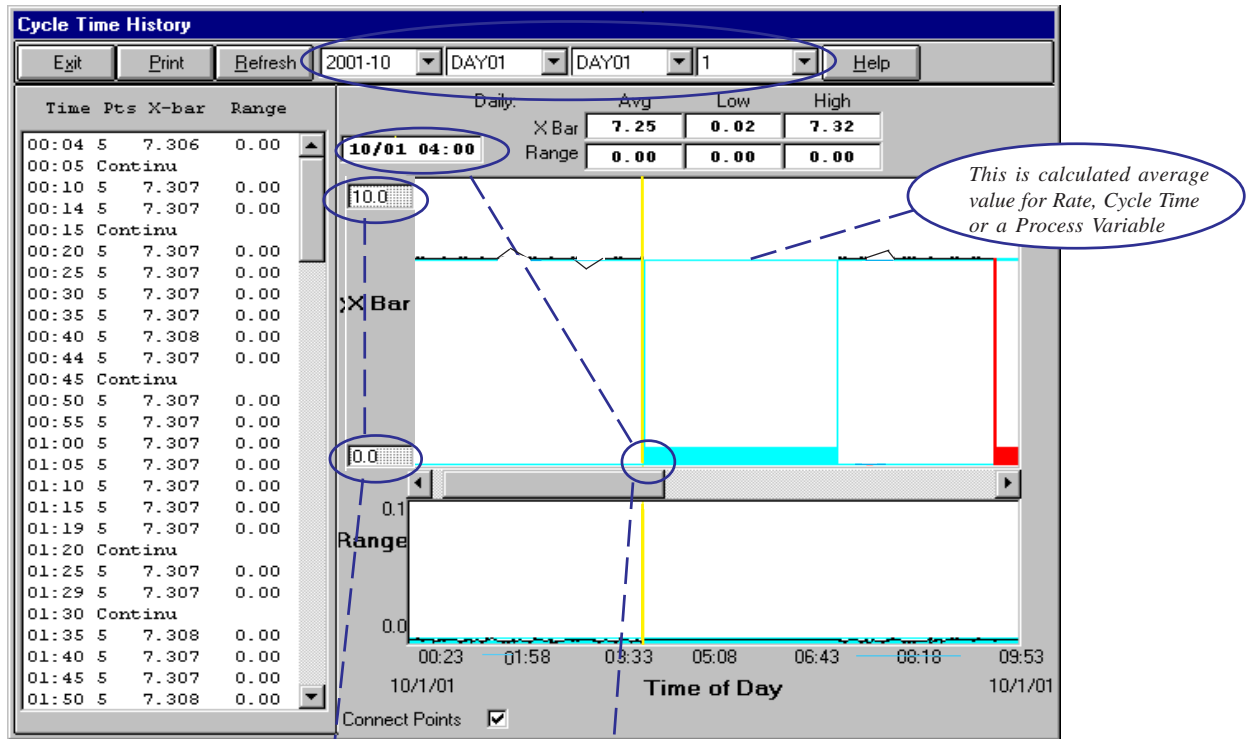
“Testing” a schedule change before committing.

To test a schedule change, “drag and drop” a Job from a machine or from the bullpen to a new location. Until saved, the moved Job will be shown in red (signifying it’s only a tentative change). If a yellow and red band appears around it, the Job won’t meet the required schedule or there may be conflict with a tool already scheduled to run on another machine. In the example above, Job **1234** was moved onto Machine **930** to see if it will complete on time. (*Note that it is outlined in red and yellow indicating that it won’t complete on time. The dashed lines indicate that this job is currently selected to be “tested” or moved.*)

If a running Job won’t meet the required due date, the Job (**Cap400** in the example above) will be outlined in solid yellow and red. When you have found the best fit for your jobs, click the **Save All** button to change the schedule or the **Undo** button to return the Job Queue to its original state.

“Paperless” Strip Chart shows detailed machine operating history.

Chart Machine Rate, Cycle Time and Process Variables using the **ProductionACE Strip Chart** feature. Easily “scroll through time” to view machine operating history over any time span you select.



See exact time of a process or operating change, as well as when “down” or Setup events occur.

Place the yellow cursor on a point of interest, the chart will show the exact time of any change in operation or status. Machine status is displayed on a horizontal bar: **Cyan** = Setup, **Red** = Down.

In the example above, the machine went into Setup at 4:00 AM and came out just before 7:00 AM.

The Upper and Lower Limits can be set to expand the vertical span of the Chart to let you focus only on data you want. For example, if your machine typically runs at 6.0 seconds per cycle, set the Limits to display from only 5.0 to 7.0 seconds per cycle (instead of 0.0 to 10.0 shown above). The readings in the Strip Chart are “sampled” at a frequency that you select. Typically five readings are taken every 15 minutes, then the “average” (X bar) and Range (the difference between the highest and lowest readings) are charted. In the example above, the table on the left displays the time of occurrence and the Reason for each Down Event.

Customize Shift Scheduling to your plant.

The **ProductionACE Shift Scheduling** feature allows you to define up to 12 shifts, identified with your specific shift names. You may “unschedule” any shift at any time. All data is stored to history by shift schedule for reporting and analysis.

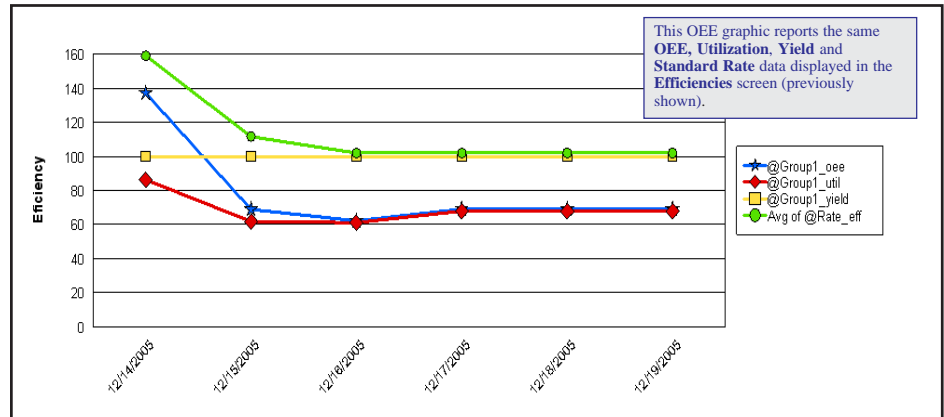
Shift Schedule						
Exit		Print		Help		
Shift Date: 11/28/00			Shift: 1. "Day"			
Calendar Date: 11/28/00			Time: 11:11:25			
12/3/00	12/4/00	11/28/00	11/29/00	11/30/00	12/1/00	12/2/00
Sun	Mon	Tue	Wed	Thu	Fri	Sat
07:00 Day	07:00 Day	07:00 Day	07:00 Day	07:00 Day	07:00 Day	07:00 Day
15:00 Eve	15:00 Eve	15:00 Eve	15:00 Eve	15:00 Eve	15:00 Eve	15:00 Eve
23:00 Night	23:00 Night	23:00 Night	23:00 Night	23:00 Night	23:00 Night	23:00 Night

Multi-shift scheduling allows you to schedule each department or machine on a separate shift schedule. This is especially useful if machines are occasionally run after the normal shift and you want to accurately account for the production and productivity of each shift. All data is stored to history by shift schedule.

Record and analyze real-time and historical performance/productivity/OEE.

Graphically display and compare your manufacturing productivity with the **Daily OEE** and **OEE Component Summary** chart.

You can track and chart OEE by entire plant, individual departments, single machines or a shift.



Use e-mail notification to alert appropriate personnel to potential or actual problems.

E-mails can be automatically generated to alert recipients regarding potential or actual issues occurring on the shop floor. This screen makes the selection of condition and recipient a simple process.

Messages contain the date and time stamp and Machine Identification Number where appropriate. You may select up to 100 recipients for each condition.

E-Mail Configuration - E-Mail Currently Enabled

Exit Save Add Delete Enable E-Mail **Email Alerts are Disabled**

E-mail address	Poller Down	Help Call	Down/Reject Edited	Shift Sched Change	Parts/Stroke change	Low Alarm	High Alarm	Down Reason	OEE low	Shift	Reject Reason
tim@productionprocess.com	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	6	<input type="checkbox"/>	<input checked="" type="checkbox"/>	5
dave@productionprocess.com	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	7	<input type="checkbox"/>	<input type="checkbox"/>	0
John@productionprocess.com	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0

Some of the conditions you can select to generate automatic e-mail alerts:

Help: if a Help Call is requested. The e-mail will specify the particular machine requesting the Help Call.

Down/Reject: if changes/edits are made in the Down and Reject Editor.

Shift Schedule: if at any time the Shift Schedule is changed.

Parts/Stroke: if the number of Parts made each machine operation are changed, e.g., closing off a mold cavity.

Low Alarm: if machine Rate (or corresponding Cycle Time) is below the user-set, Job-specific Low Limit.

High Alarm: if machine Rate (or corresponding Cycle Time) is above the user-set, Job-specific High Limit.

Down Reason: if a specified Down Reason is entered or occurs at the machine.

OEE: if OEE of a department, group or machine(s) is below a user-set limit.

Shift: if any changes have been made in the Shift Schedule.

Reject Reason: if a specified Reject Reason is entered or automatically occurs in the machine.

Process Variable: if a specified Process Variable (Cycle Time, Fill Time, Temperature, Pressure, etc.,) is out of user-set limits.

Monitor production schedule remotely in multiple locations with Web Job Queue.

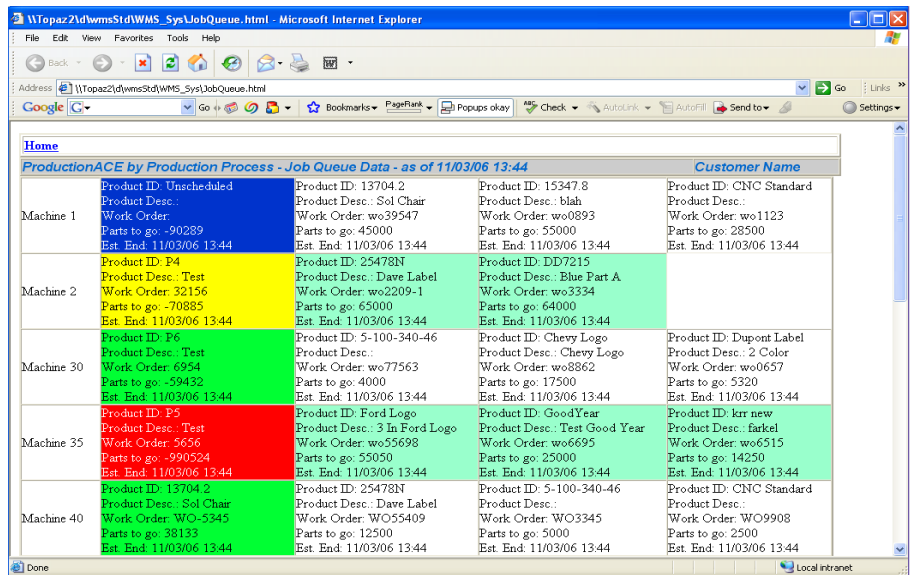
With **Web Job Queue** you can view individual machine status and estimated completion date of every Job on every machine in every plant -- in real-time -- on your Web browser.

Machine Name and Number block is color coded to show machine status:

- Red** - down.
- Green** - running.
- Yellow** - faster or slower than limits.
- Cyan** - in Setup.

Use Web Job Queue to:

- Coordinate production schedule at multiple plants.
- Enable sales staff to give real-world delivery dates while sitting in customers' offices.
- See status of production operations remotely.

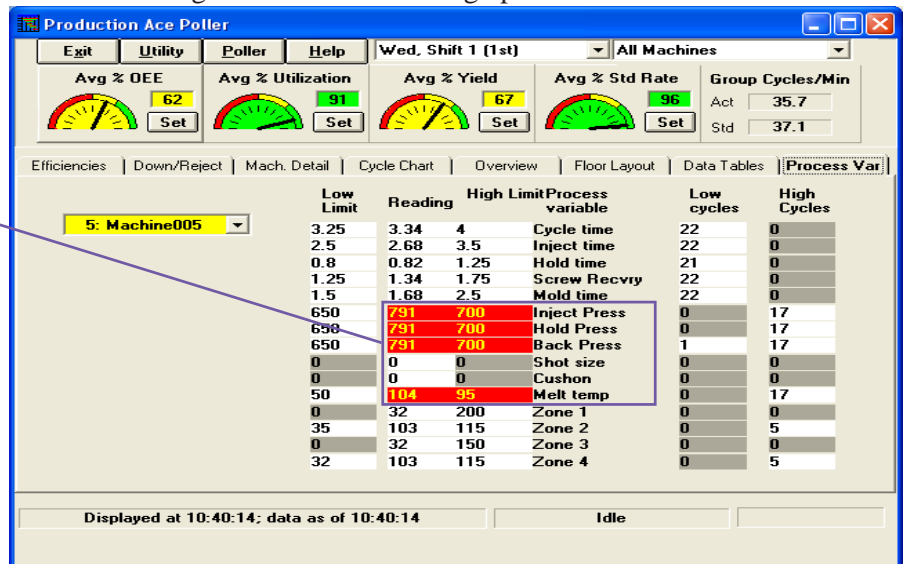


Real-time Process Variable monitoring prevents problems from occurring.

The MDT-210 can track up to 15 **Process Variables** in real-time, derived from combinations of 6 “discrete” (on/off) and 8 “analog” (voltage, current) inputs. If you see a problem machine on one of the color coded plant overview screens, clicking on the **Process Variable** Tab and selecting the machine will bring up the screen below.

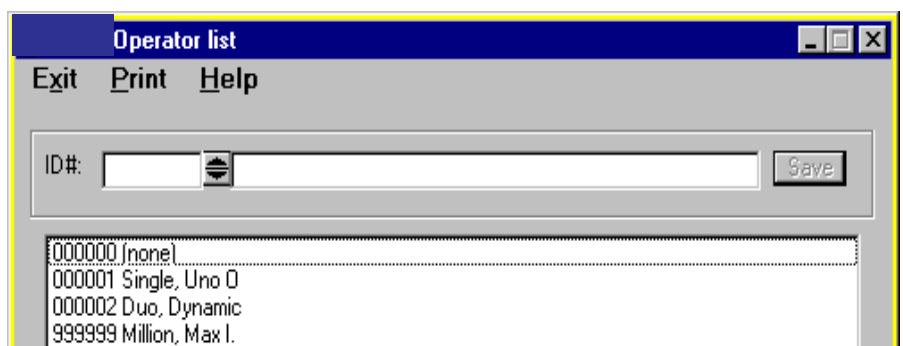
This screen shows the status of all of the Process Variables associated with a machine. A Process Variable that is out of limits, high or low, will be identified in color. Here, **Inject**, **Hold** and **Back Pressure** and **Melt Temperature** are out of limits. E-mail alerts can be sent when out of limits occur.

To determine your most frequent problem areas you can also display a Pareto Chart showing how often each Process Variable is out of limits. Standard and custom combinations of Process Variables are available, contact Production Process.



Analyze Operator and Maintenance staff performance.

The MDT-150 allows a total of 10 Operators and Maintenance personnel to “log on” using an up to six-digit ID#. The system records production totals, rejects, run time, downtime and calculated efficiencies by Operator ID#. A barcode reader input is available (in MDT-150) to allow Operators to log on using their employee badges.



Improve ERP inventory accuracy and scheduling performance: link shop floor to ERP.

For accurate planning, ERP needs near real-time data about production machine performance, job status, work in process, production and reject counts and downtime information. However, real-time information is typically not readily available from most production machines. Manual data collection and input to ERP is not only a non-productive use of labor, it is not accurate nor timely enough for effective decision-making.

The **Advanced ERP Interface** can import production schedules for each machine from ERP into the system's **Job Queue** resulting in production runtime, downtime, part and reject counts that are automatically tracked by the system. At the end of each Shift or Job, the software summarizes the results allowing users to view, verify and edit the data with the **Edit Utility** shown below. Should editing of Part or Reject quantities be required on Work Orders that are still running in production, the system automatically updates Parts to Go for the Work Order, thus ensuring that correct quantities are manufactured. Once approved, the information is exported to ERP.

Because production data is automatically created for export, keystroke errors are eliminated, non-productive labor is minimized, and updates to the ERP system occur on a much more timely basis. This ensures improved planning, accurate scheduling with real delivery dates, accurate tracking of work in process and timely updates of inventory.

Variance Reports are available to verify original versus edited data.

The screenshot displays the 'Advanced ERP Interface' software. It features a main data table with columns for Date, Shift, Machine, Work order, and Product ID. Below the table are three summary panels: 'Down Time' (listing incidents like Default, No Base, Cap Clutch, etc.), 'Rejects' (listing categories like Default, Matl, Cooling, etc.), and a 'Variance Reports' section. On the right side, there is a 'Product ID' field and a 'Machine' dropdown menu. At the bottom right, there is a 'Save' button.

Date	Shift	Machine	Work order	Product ID
2004/09/28	10:33 2nd	Machine190	wo-190-2	P1
2004/09/29	10:41 1st	Machine190	wo-190-2	P1
2004/09/29	10:44 1st	Machine190	wo-190-3	P1
2004/09/29	11:00 1st	Machine190	wo-p2-1	P2
2004/09/29	23:00 Tu2	Machine190	wo-p2-1	P2
2004/09/29	11:31 3rd	Machine190	wo-p2-1	P2

Expand capabilities with MDT-150 options. (Custom functions are available in all MDT).

Light tree. MDT-150 and MDT-40 can directly drive a solid state (LED) light tree. Standard configuration is shown below, but custom configurations (different colors, blinking, etc.) are available.

- Red: machine "down"
- Yellow: operating outside hi/low Cycle Time or Rate limits
- Green: "OK" (running within limits)
- Red and Green: machine is in Setup

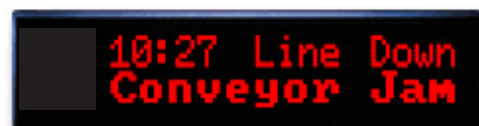


Barcode wand Job change. If Operators have control over which Job is to be run next, they can easily input Job information at the machine by scanning a barcoded Work Order. Operators can also log into the system using their barcoded ID badges.



Print product barcode labels. A barcode label can be printed each time a part(s) is made with information such as Part Description, Work Order, Time/Date and Operator, etc.

Custom data output to large ("Marquee") displays. Real-time, color-coded information about machine and Job status, Job Parts to Go, Job Hours to Go, Reason for stoppage, Operator help call, etc., can be transmitted to a Marquee via a RS-232 link.



Install only the data collection/display power you need on each machine.

MDT quick Selection Guide. Match individual machine data collection and data display requirements with the appropriate model MDT for the most cost-effective system possible. You can combine all types of MDT in the same system. Stainless steel enclosures available for food/pharmaceutical. This table provides only the major selection criteria.

Lowest cost. No data display, no keypad. MDT-02, MDT-03W (integral wireless)	Mid-range capabilities. 12 Down, 5 Reject Reasons, Job Change, Setup mode, automatic Down Reason entry. MDT-40, MDT-340	Full featured, with many options. 40 Down and 20 Reject Reasons, Job Change, Setup mode, Help Call, automatic Down Reason entry. MDT-150, MDT-350	Full featured with Process Monitoring. 20 Down and 20 Reject Reasons, Job Change, Help Call, Setup mode, 15 Process variables: temperatures, shot size, pressures, tonnage, fill time, cycle time, etc. MDT-210
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MDT capabilities. All MDT except MDT-02 and MDT-03W have alphanumeric display and data entry keypad. (* Denotes optional add-on.	MDT-02	MDT-03W	MDT-40	MDT-340	MDT-150	MDT-350	MDT-210
Number of Machine Signal Inputs: 24V to 120V, AC/DC, switch, open collector	2	4	6	6	6	6	6
Number of Down Reasons tracked: Operator Entered (O), Automatically Entered (A). Automatically entered with optional 16 Input Module (IA).	1 A	1 A	10 O 2 A	10 O 2 A	40 O 18 IA	40 O 2 A	20 O 2 A
Number of Reject Reasons, Operator entered (O), automatically entered (A).	1 A	1 A	5 O, 1 A	5 O, 1 A	20 O 1 A	20 O 1 A	20 O
Setup Time Tracking: (Parts made in Setup can be counted as Rejects.)	no	no	yes	yes	yes	yes	yes
Operator and Maintenance staff log on for performance tracking.	no	no	no	no	yes	yes	yes
Operator Help Call. Shows on real-time PC screens, also sends e-mail.	no	no	yes	yes	yes	yes	no
Outputs		Choose 1					
Machine Lockout (ensures entry of Down Reason by Operator)	no	yes	yes	yes	yes	yes	yes
Machine Fast/Slow	no	yes	yes	yes	no	yes	no
Machine Down	no	yes	yes	yes	yes	yes	yes
Batch	no	yes	yes	yes	yes	yes	yes
Running "ok"	no	no	no	yes	no	yes	no
Process Variable Alarm	no	no	no	no	no	no	yes
Initiate Job Change at MDT with keypad and/or bar code wand (B*)	no	no	yes	yes	yes, B*	yes, B*	yes
Case Count Input. Detect Waste: compare Case count to Parts Made	no	yes	yes	yes	yes	yes	no
Lot tracking. Enter Lot number via keypad (K) or barcode wand (B*)	no	no	no	no	yes	yes	no
Marquee (large alphanumeric data display) serial output.	no	yes*	no	yes*	yes*	yes*	no
Family Molding (Multi-product Mfg): Tracks production in multi-cavity molds.	no	no	no	yes	no	yes	no
Bar Code Printer output. Print Part name, Work Order, Date, Operator, etc.	no	no	no	yes	yes	yes	no
Number of Analog Input (8), and number of Process Variables tracked. (some Variables are combinations of "time" and analog process readings).	no	no	no	no	no	no	15
Communications to Poller PC: Wired multi-drop to 4000' (M), Ethernet (E), long range (250 feet) Wireless Modem (W)	M	W	M, W*	M, E*, W*	M, E*, W*	M, E*, W*	M

ProductionACE software: Modularity means cost-effective implementation.

Production Manager provides real-time monitoring and reporting, while **Job Manager** adds ability to schedule and track Job progress, plus provisions for options (*) and custom features. We routinely customize software.

Summary description of features in software version:	Production Manager	Job Manager
Real-time productivity and OEE data displays of Plant, Departments and individual Machines.	yes	yes
Automatic and on-demand production reporting with data selectable by Date, Shift, Machine and Work Order. Reports can be sorted by Machine, Shift, Product, Operator, etc.	yes	yes
Pareto charts of downtime and reject reasons, plus ability to enter and change reasons at PC.	yes	yes
User-formatted, Web-enabled, real-time display screens provide Enterprise-wide and world-wide access to all production, productivity/OEE and Job completion information.	yes	yes
Visual Job scheduling and Job completion tracking. Estimated end of Jobs are calculated based on current operating conditions, Jobs in Queue, scheduled maintenance and Shift calendar.	no	yes
History database for reporting and analysis: Records data for Job, Shift, Machine, Product, Operator, Lot Number, Material, Tooling, Work Order, Down Reasons, Reject Reasons and many other variables.	no	yes
Preventive Maintenance scheduling based on automatically collected run time and number of operations on the machine and its associated tooling/molds/dies and component parts.	no	yes
E-mail alerts sent for user selectable conditions such as a specific down or reject reason occurrence, machine OEE or Process Variable out of limits, a Machine slowdown/stoppage or operator help call, etc.	yes	yes
Operator and setup and maintenance staff productivity tracking: Up to 10 Operators and Setup/Maintenance personnel can log on at MDT (MDT-150 and MDT-350 only).	yes	yes
ERP Interface automatically transfers data between Enterprise system: Downloads production requirements from ERP into Job Queue, then uploads production data at Shift and Job end.	no	yes
Multi-product (Family Molding) Manufacturing: provides ability to track up to 10 different products being simultaneously fabricated in the same process/mold/die/tooling.	no	yes

A few of our more “visible” users from of a total of over 500 plant-wide installations in manufacturing facilities of all types and sizes worldwide.



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