

Collect, analyze and share real-time production, productivity and machine performance/OEE data from any shop floor.

Collect: Real-time data from all types of machinery.



Analyze: Managers, Supervisors, Scheduling, Maintenance, QC.



Share: Enterprise-wide visibility with ERP connectivity.



Prevent problems with a real-time OEE dashboard.

View overall plant/department OEE and its three components on four "gages". Capture those same metrics from each machine as well as:

- * Cycle Time, Production Rate.
- * Production and Scrap counts.
- * Run Time, Down Time.

Track, analyze and improve OEE.

Record downtime due to breakdowns and start-up. Analyze speed losses due to small stops and reduced speed operation. Measure quality loss by automatically recording start-up rejects.

Notify managers to potential problems with e-mail "alerts".

E-mails are sent when performance/OEE targets aren't being met, or machine status/operation changes.

Open a real-time Web window onto production operations.

Display your choice of data, view anywhere, any time, in real-time.

Eliminate unproductive labor and manual recording errors.

Print reports with Crystal Reports or export data to Excel.

Replace ineffectual calendar scheduled maintenance.

Schedule PM based on actual machine cycle count and run time--and you can export that data to any CMMS.

Enterprise-wide, real-time operating data visibility.

From a single dashboard view summary data for the entire enterprise, or drill down to individual plants or individual machines.

Benchmark processes, then track results continuously.

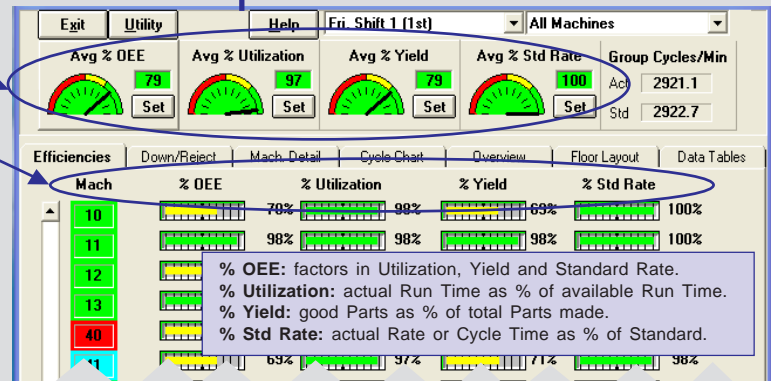
Support your Lean/Continuous Improvement and Six Sigma initiatives with automated tracking of KPI's you choose.

Give real delivery dates with Job Queue, ERP link.

With optional visual Job Queue, schedule and track Job progress on each machine. ERP interface downloads production requirements to Job Queue, then uploads production data at job and shift end.

An economical way to improve your manufacturing productivity.

This off-the-shelf solution is proven in hundreds of plants in all types of manufacturing. More at www.productionprocess.com

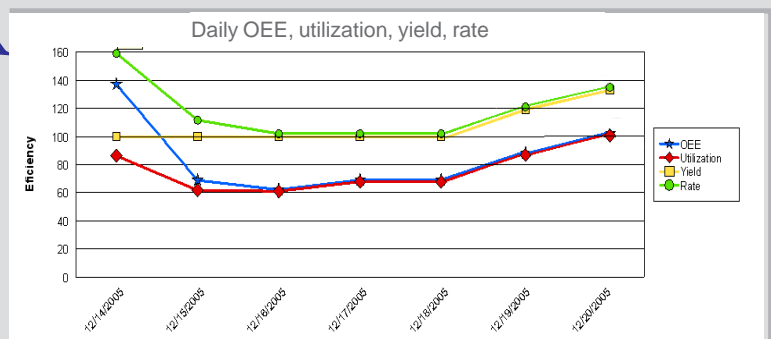


Mach	Cycle	Std	Cycle	Good	Shift	Run	Down	Mach	Mach	
1	2.0	0.0	2.0	100.0	1803	0	52.0	0.0	100.0	60.3
2	2.0	2.0	2.0	101.9	1801	0	58.8	0.0	100.0	68.4
11	2.0	2.0	2.0	100.9	1680	117	58.7	0.0	93.5	68.3
40	2.0	2.0	2.0	102.0	1679	117	51.6	0.0	93.5	60.1
41	2.0	2.0	2.0	101.9	677	1117	58.6	0.0	37.7	68.3
42	0.6	0.5	2.0	51.7	9307	0	75.8	0.0	100.0	100.0

Summary Managers

Printed 3/9/09 at 13:32
 From 3/8/09 to 3/8/09

Machine	Date	Shift	Prod ID	Overall Eff%	Run Hrs	Dwn Hrs	Mach Util. %	Shift Parts	Shift Rejs	Yield %	Shift Rate
14 Emba	9/6/08	Day	36SSA	92.9	4.4	3.6	55.5	38,747	102	99.7	145.3
14 Emba	9/6/08	PM	36SSA	49.0	2.8	5.2	34.5	20,620	254	98.8	123.3
14 Emba	9/6/08	Eve	36SSA	99.2	5.0	3.0	62.8	41,416	158	99.6	137.3
Grand Totals:				80.3	12.2	11.8	50.9	100,783	514	99.7	135.3



MDT-02 connects to machine, collects and transmits data to **ProductionACE** software.

MDT-02 connects directly to the 24V-120V AC/DC “signals” that operate the machine. Signal Input #1 is activated each time the machine makes a Part(s). Signal Input #2 can be selected to automatically track machine downtime, count Rejects and filled Cases, or it can be used in conjunction with Signal #1 in machines with separate Cycle Start and Cycle Stop controls.

Signal Input #1: Machine Cycling or Cycle Start.

Signal Input #2: Choose one at installation:

- Tracks downtime when signal is absent.
- Tracks downtime when signal is present.
- Counts Rejects.
- Counts filled Cases. (*Number of Parts in Case set automatically for each Product run.*)
- Indicates End-of-Cycle (*as in CNC machines with separate Cycle Start, Cycle Stop controls.*)

MDT-02

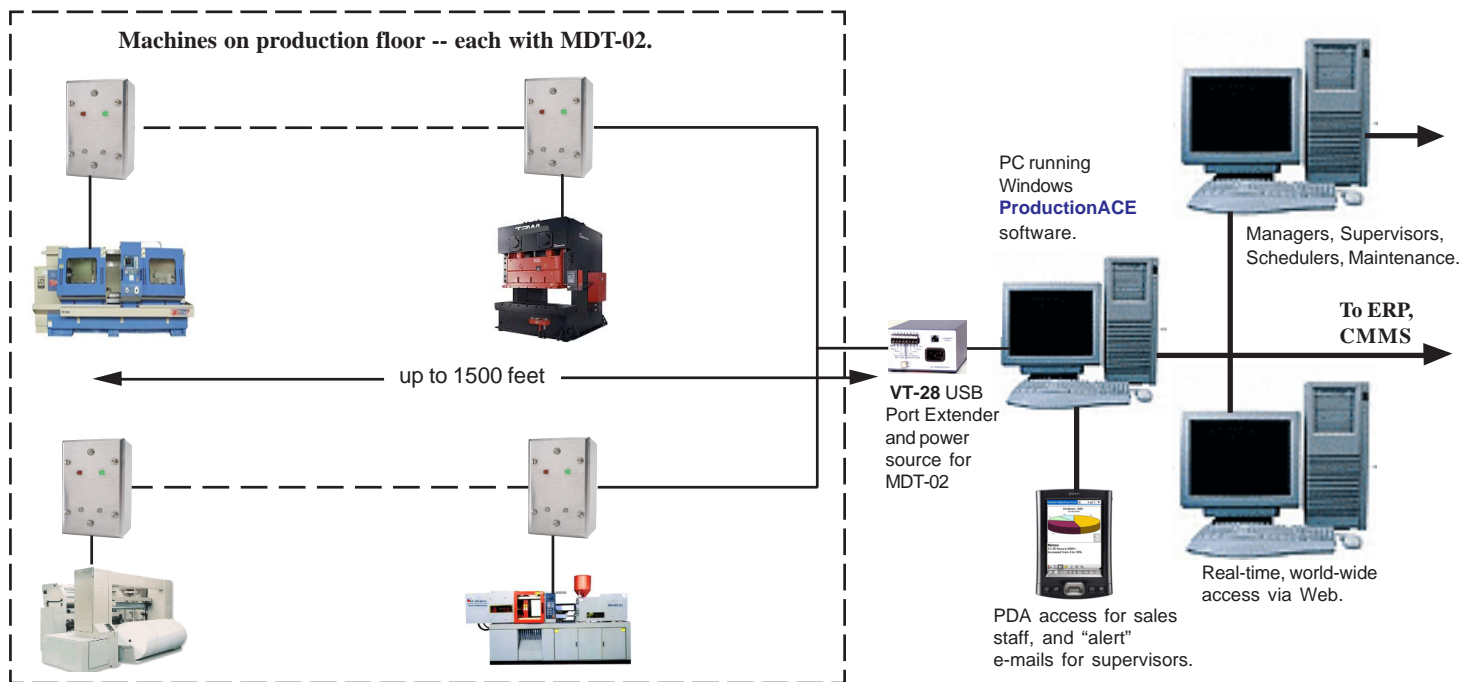
Some Data Functions collected:

- * Cycle Time and Machine and Parts production rate.
- * Parts Count, or material amount processed/made.
- * Process Time: dwell/duration/fill/ inject/form time.
- * Downtime #1: based on machine operating limit you set.
- * Downtime #2: based on absence of Signal #2.
- * Downtime #3: based in presence of Signal #2. (*You may define this as Setup Time in the System reports.*)
- * Reject Parts: from Signal #2.
- * Case Count: Number of filled Cases from Signal #2.

Scale Factor enables MDT to automatically track multiple Parts made or material processed each machine operation. Scale Factor can be number of mold cavities/dies, or the circumference of a cylinder with a once-per-revolution sensor.

Installation is simple, so installed cost is low.

MDT-02 is powered from **VT-28** USB Extender, so you don't need a separate power source from the machine. “Mount-anywhere” unit is housed in standard metal (2” x 3” x 4”) electrical junction box with 1/2” conduit fittings.



Production Process offers a family of economical systems to improve manufacturing productivity.

For more information or to schedule a “live” system demonstration on your PC with GoToMeeting.com, go to www.productionprocess.com, or contact us at 603-434-2300.