

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.

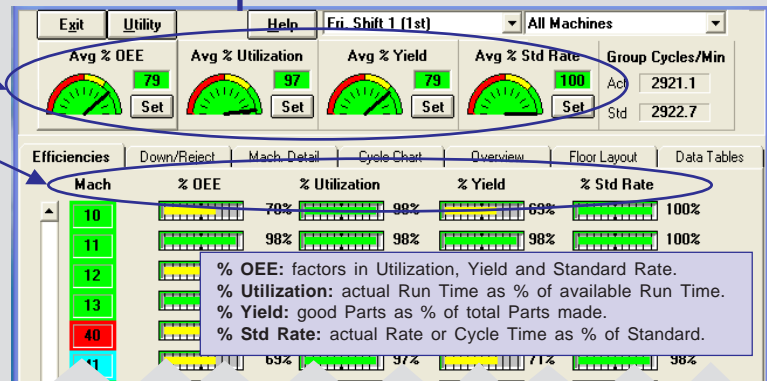
Support your Lean/Continuous Improvement and Six Sigma initiatives with automated tracking of KPI's you choose.

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

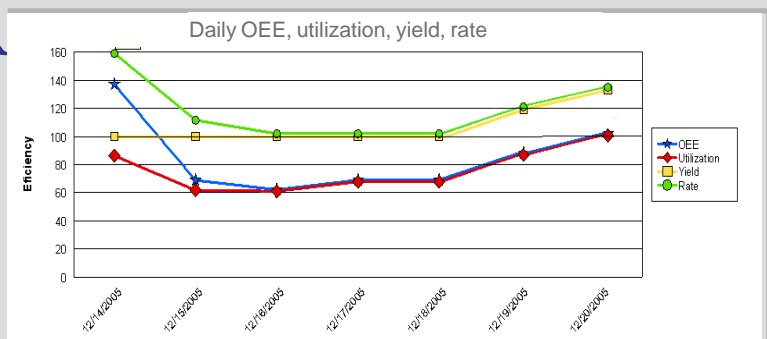


Mach	Cycle	Sec	Cycle	Eff %	Parts	Rej	Run Time	Setup	Yield%	Util%
1	2.0	0.0	2.0	100.9	1800	0	52.0	0.0	100.0	60.9
2	2.0	2.0	2.0	101.9	1801	0	58.8	0.0	100.0	68.4
11	2.0	2.0	2.0	100.9	1680	117	58.7	0.0	93.5	68.3
40	2.0	2.0	2.0	102.0	1679	117	51.6	0.0	93.5	60.1
41	2.0	2.0	2.0	101.9	677	1117	58.6	0.0	37.7	68.3
4	0.6	0.5	2.0	11.7	9307	0	75.8	0.0	100.0	100.0

Summary Managers

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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



A universal, standard data collection connection to all types of production machines.

Machine Data Transducers (**MDT**) are a combination man-machine interface and data collection connection to any kind of production machine. Three models of MDT enable you to match each machine to the appropriate MDT for the most economical system possible. MDTs rugged, steel-cased enclosures will stand up to your shop floor environment.



MDT-150



MDT-40



MDT-02

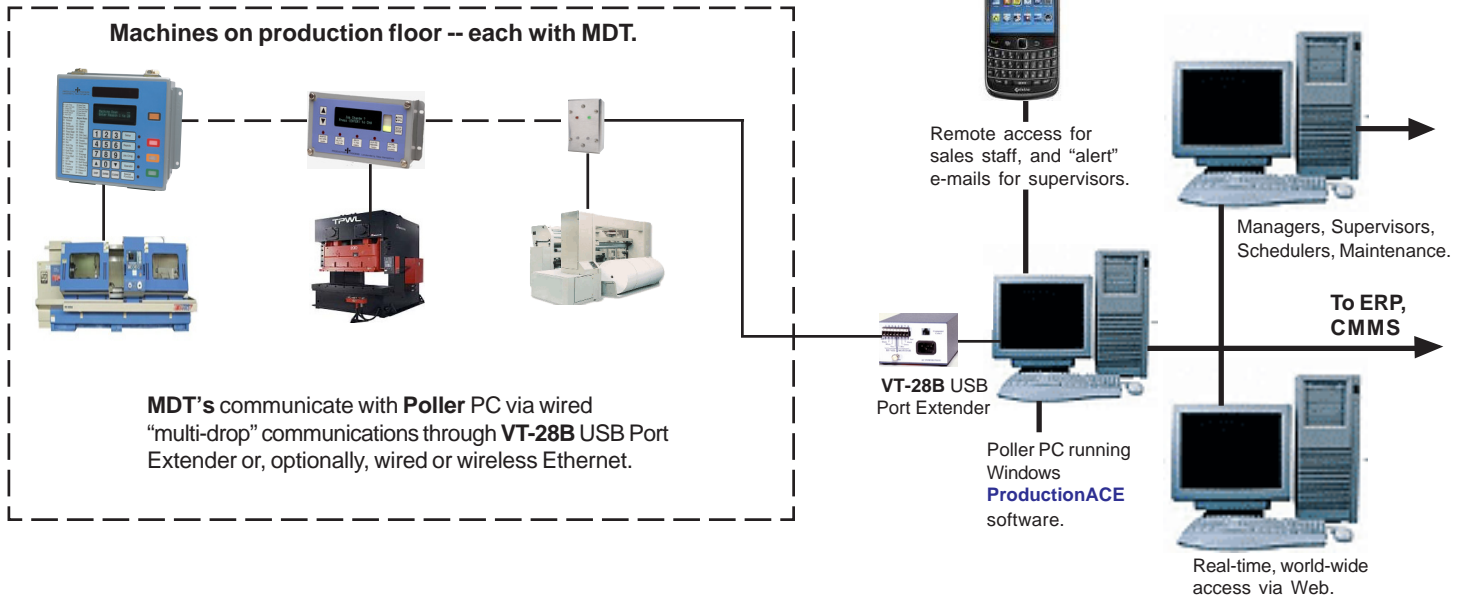
Typical Signal Inputs for MDT-150 and MDT40.

- Input #1:** Machine Cycling or Cycle Start (for CNC).
- Input #2:** Tracks Downtime when signal is present.
- Input #3:** Counts Rejects.
- Input #4:** End-of-Cycle (for CNC machines with separate Cycle Start, Cycle Stop controls).
- Input #5:** Tracks Downtime when signal is absent.
- Input #6:** Counts filled Cases.

MDTs connect directly to up to six of the 24V-120V AC/DC “signals” that operate the machine. All MDT models support the features shown on the front of this document. The main difference between MDT-150 and MDT-40 is the number of Down and Reject Reasons and options available, eg: MDT-150 offers bar code wand job change, serial interface to weigh scales and large “Marquee” data displays, etc. The MDT-02 with two signal inputs is for simple machines where no operator interface is required.

MDTs collect, display and transmit data to **ProductionACE** software.

There are two levels of Software: **Production Manager** and **Job Manager** with several options. Summary capabilities are outlined on front of this document, but for more detail, go to www.productionprocess.com and click on the “Download brief PDF Slide show.....”



Let us prove the system’s payback to you with a “live” system demonstration on your PC.

Go to www.productionprocess.com, or contact us at 603-434-2300 or info@productionprocess.com



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