SHOP LINK

UPDATE

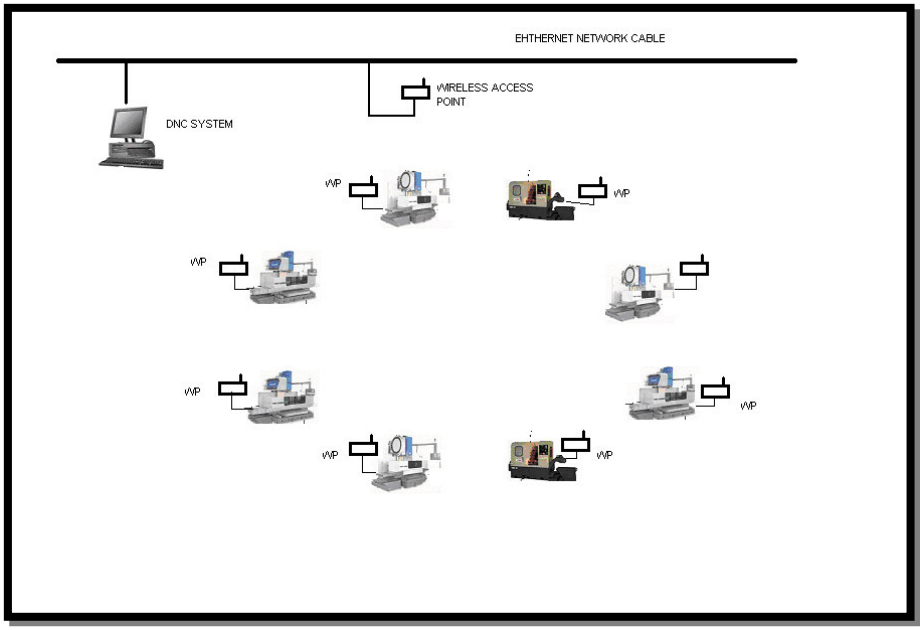
MORE INFORMATION

April 2006

Shop link is a combination of Electronic hardware & software for collecting valuable data from factory on line. It can be connected to various CNC machines as well as manually and NC operated machines. It can monitor events & collects some data from operator's panel. Data from operator panel can be customized. Collected data can be utilized to generate various MIS reports. This reports are useful for Management to calculate overall efficiency of the plant.

What is shop link?

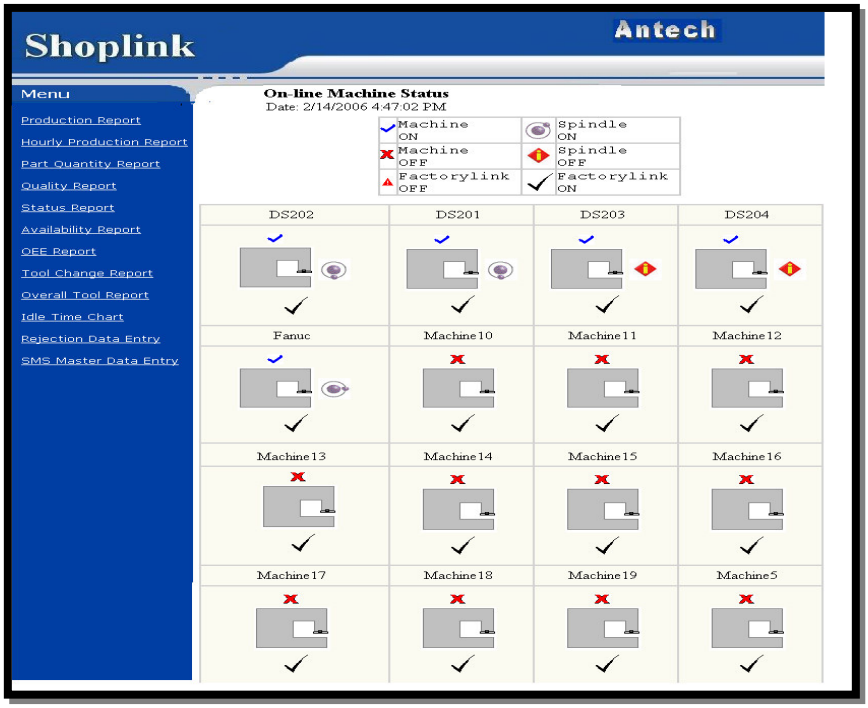
Shop link can be integrated with wireless or wired DNC network. Shop link hardware interface units can be connected between PC and NC/CNC for collecting on line data from CNC.



Feautures

- **Uses existing DNC wiring.**
- **It shows On line data**
- **OEE is quickly generated**
- **Video connectivity**

Shop link Software



Shop link software shows on line status of all NC/CNC machines from Server. It has simplified menus for on line selection of various reports to be generated on line.

This shows Machine on/off status, Cycle or spindle on/off and shop link on/off status on line.

This can even monitors old NC and manual machine. And can be accessed from anywhere

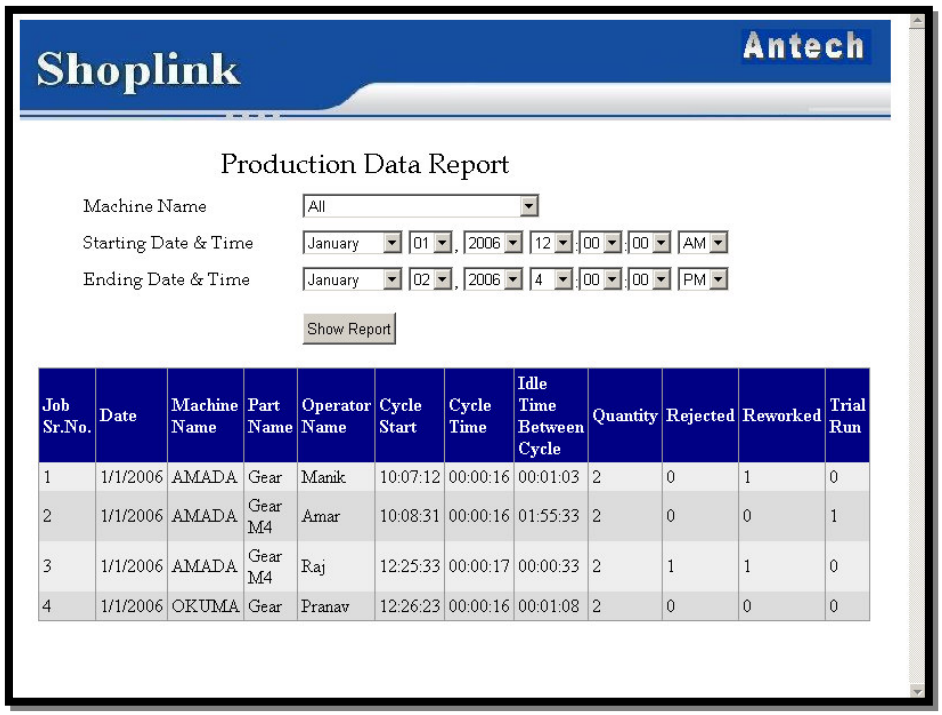
Important parameters of the machines also can be monitored and displayed on line like temperature, vibrations, acoustics etc.

What Shop Link can generate ?

It generates production data from each NC/CNC machines with cycle time and idle time. It also shows whether it is rejected one or reworked or trial one.

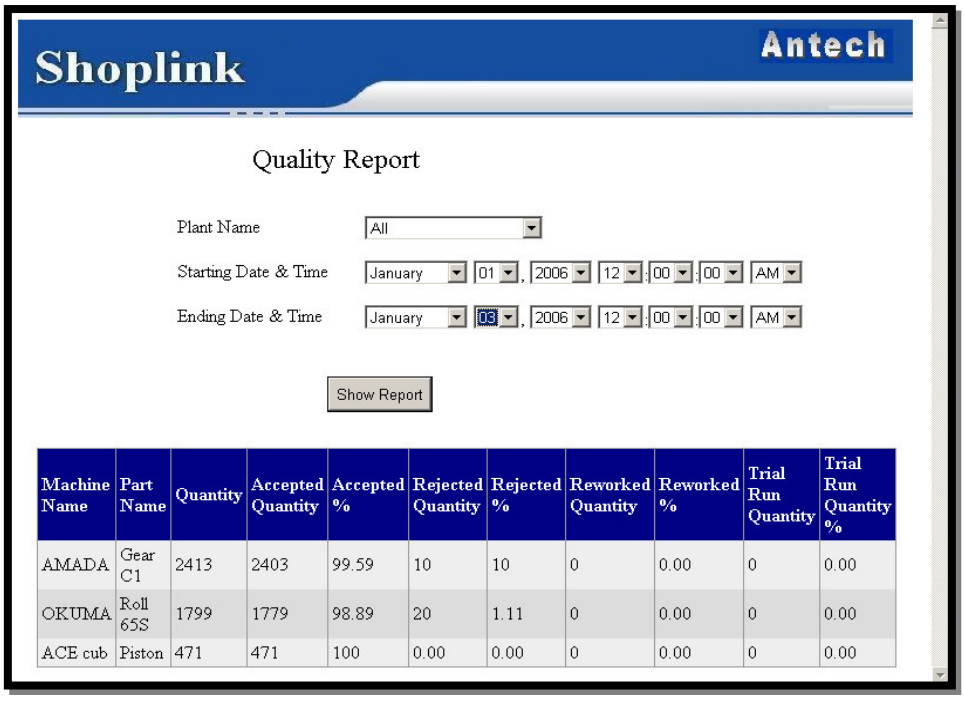
Average cycle time, idle time is shown in this report so that quality checks can be put and monitored.

Operator name is also displayed at each job indicating his credit which can be counted at the end of the day for calculating his productivity which can be rewarded in the form of incentive.



Job Sr.No.	Date	Machine Name	Part Name	Operator Name	Cycle Start	Cycle Time	Idle Time Between Cycle	Quantity	Rejected	Reworked	Trial Run
1	1/1/2006	AMADA	Gear	Manik	10:07:12	00:00:16	00:01:03	2	0	1	0
2	1/1/2006	AMADA	Gear M4	Amar	10:08:31	00:00:16	01:55:33	2	0	0	1
3	1/1/2006	AMADA	Gear M4	Raj	12:25:33	00:00:17	00:00:33	2	1	1	0
4	1/1/2006	OKUMA	Gear	Pranav	12:26:23	00:00:16	00:01:08	2	0	0	0

Machine Quality Report



Machine Name	Part Name	Quantity	Accepted Quantity	Accepted %	Rejected Quantity	Rejected %	Reworked Quantity	Reworked %	Trial Run Quantity	Trial Run Quantity %
AMADA	Gear C1	2413	2403	99.59	10	10	0	0.00	0	0.00
OKUMA	Roll 65S	1799	1779	98.89	20	1.11	0	0.00	0	0.00
ACE cub	Piston	471	471	100	0.00	0.00	0	0.00	0	0.00

This generates quality related reports on line. It shows accepted, rejected and trial run quantity and it's %.

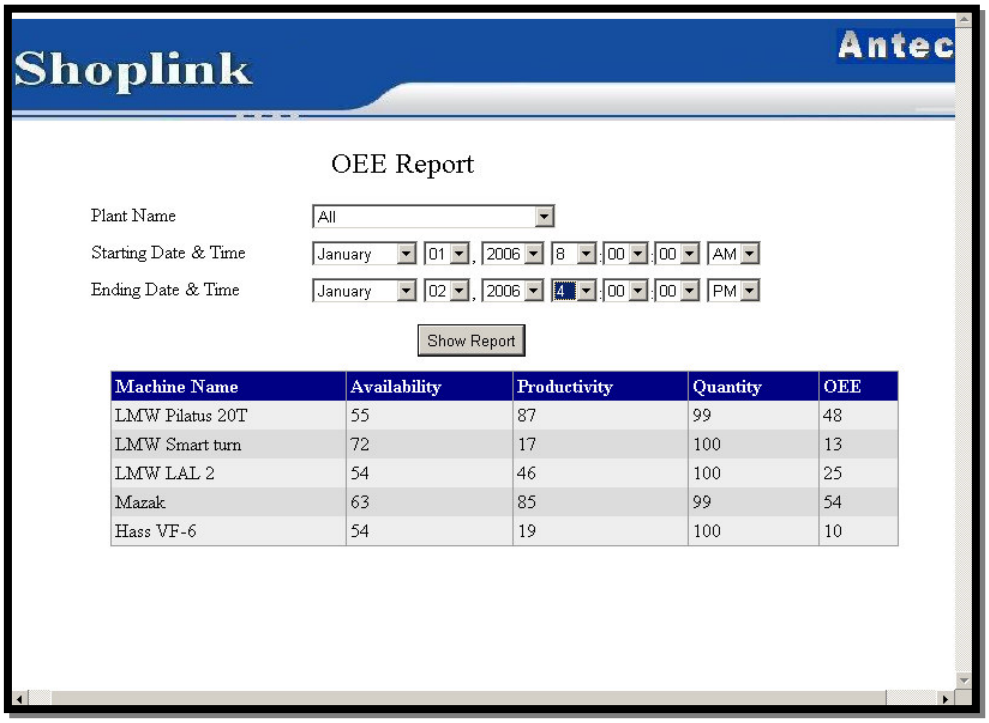
With this you get data from each machine as well as operator to calculate operator efficiency so that incentives based on production can be paid.

This can be made available to the customers for finding exact status of produced quantity.

Machine Utilization Report

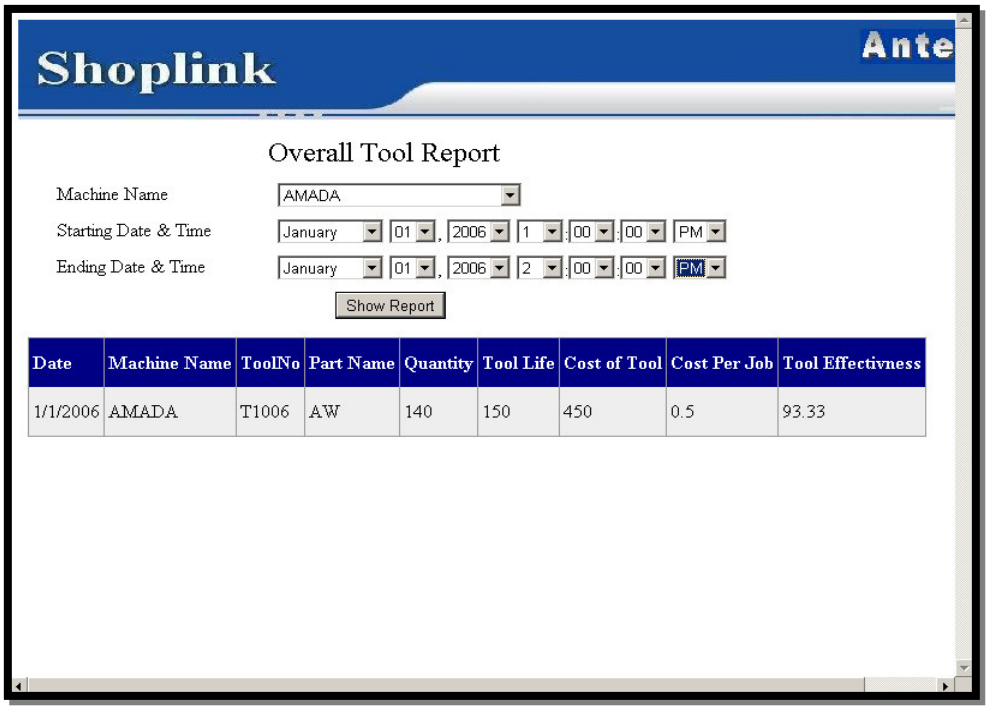
This generates machine utilization report in the form of OEE. This OEE can be generated at any point of time; Specify period and OEE is generated for a machine or cell.

This is very important report. Management would like to know the OEE and it's improvement. Even 2% increase in this efficiency would get ROI of Shop link system.



Machine Name	Availability	Productivity	Quantity	OEE
LMW Pilatus 20T	55	87	99	48
LMW Smart turn	72	17	100	13
LMW LAL 2	54	46	100	25
Mazak	63	85	99	54
Hass VF-6	54	19	100	10

Tool Management Reports



Date	Machine Name	ToolNo	Part Name	Quantity	Tool Life	Cost of Tool	Cost Per Job	Tool Effectivness
1/1/2006	AMADA	T1006	AW	140	150	450	0.5	93.33

This report reflects effective utilization of tools during machining. It also compares with listed tool life.

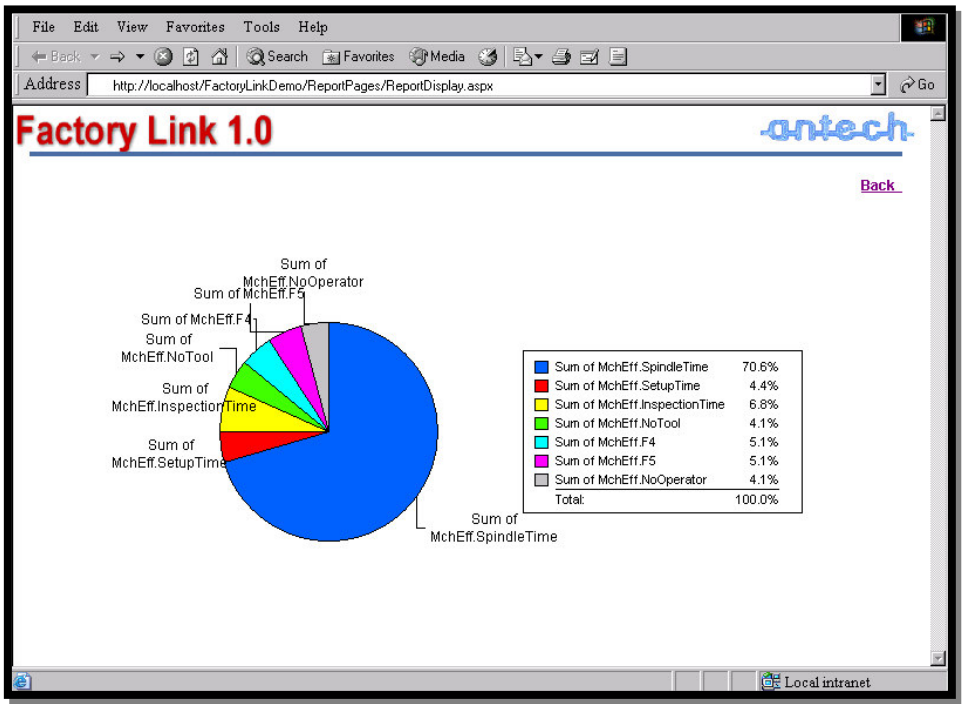
With this report tool usage effectiveness can be monitored. Tooling cost per job can be verified and controlled.

With the fixed production plan tooling inventory also can be fixed and arranged for avoiding production loss due to unavailability of tooling.

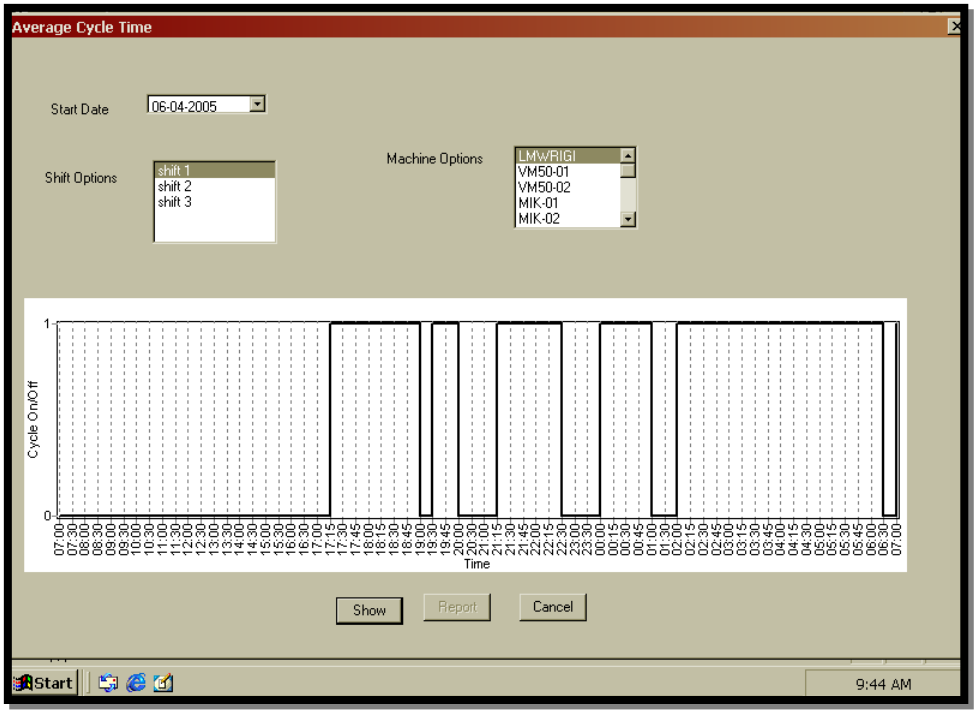
Shop link graphs

This graphs can show effectiveness of production time and idle time. Idle time in various areas are displayed in different colors to understand it quickly.

This can be used for presenting effective utilization of production time. It can be generated with various combination like single machine, multiple machines, cell, plant, line and with specified period like week, months, quarter and yearly.



Average Cycle time graph



This report shows cycle time and idle time in graphical format.

This would be very important to check whether average cycle time is maintained over a period of time to maintain consistent quality and efficient utilization of tooling.

This would also show trial run cycle run time.

This can be used to analyze job rejection causes.

For Further Information contact

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