

DESIGN SYSTEMS, INC.

Manufacturing Engineering & Consulting

Manufacturing IT Solutions

Plant Visualization and Alarm Monitoring

Solution Factsheet

Overview

dsidsc.com/mits

With greater reliance on automation and increased complexity in manufacturing processes, the need to effectively visualize production operations has become extremely important.

The ability to not only view, but analyze the production process, provides measurable metrics that can help drive more effective performance and reduce costs.

Real-time dashboards keep key personnel in touch with the immediate situation as it occurs on the manufacturing floor, fostering an agile and timely response, keeping operations on track.



Breakdown

The effective operation of manufacturing facilities can be greatly enhanced by the provision of an accurate, real-time depiction of equipment and work-piece status. The increased availability of technology within a typical manufacturing facility provides the perfect environment to implement this increasingly important facet of the modern manufacturing world.

The analysis of both historical and current production as well as operational statistics, can increase the efficiency of continuous improvement efforts. This can maximize the effectiveness of capital investment, giving the modern manufacturer an edge over the competition.

Use of these performance indicators within the framework of a disciplined manufacturing process puts facts in the hands of those responsible for quality, volume and profitability.

"BOTTOM-LINE" RESULTS

- Increased visibility and control
- Quick identification and resolution of production bottlenecks
- Enhanced efficiency through visible KPIs
- Continuous improvement supported by scheduled production and maintenance reports

Our Solution

Plant Visualization and Alarm Monitoring is part of our new line of Manufacturing IT Solutions. Built on proven, world class technology; these solutions offer off-the-shelf functionality designed to target the typical challenges encountered in manufacturing.

The technologies are highly scalable, cost effective and can be seamlessly integrated into new or existing processes with great ease.

Our Plant Visualization and Alarm Monitoring tool is a valuable way to gain better visibility and insight into your production operation.

DSIDSC.COM

DESIGN SYSTEMS, INC.
38799 WEST 12 MILE ROAD
FARMINGTON HILLS, MI 48331-2903
800-660-4DSI • 248-489-4300
FAX: 248-489-4321

DESIGN SYSTEMS CANADA, LTD.
3585 RHODES DRIVE,
UNIT A
WINDSOR, ONTARIO, CANADA N8W 5B3
519-944-8807 • FAX 519-944-8853

DESIGN SYSTEMS de MEXICO
BOULEVARD RUFINO, TAMAYO #304-A
COL. ALPES NORTE
SALTILLO, COAHUILA, MEXICO CP 25270
O: (011.52) 844-180-2621 • C: (011.52) 844-254-4029

PLANT VISUALIZATION
and ALARM MONITORING

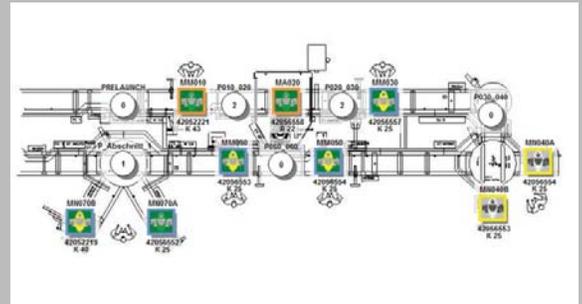


Powered by
KON-CEPT

Visualization Screens

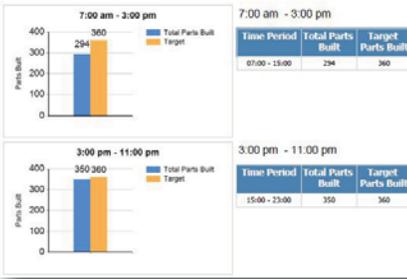
Puts real-time information in the hands of those who need it

Customized screens deliver needed information based on a viewer's role. Whether it's high-level KPIs for the boardroom or a detailed equipment status for the maintenance crib, screens deliver facts in the office, on the shop floor and on the go.



Line Statistics Last 24 Hours

7:00 am to 7:00 am



Production Reports

Drive production meetings with facts, figures and trends

In order to support the key objectives of your production staff, reports are designed to your specifications. These reports are an automated factsheet of performance, driving improvement initiatives and insuring maximum performance.

Maintenance Reports

Keeps maintenance operations on task with statistical analysis

These customized reports use analysis techniques such as top-10 stoppage reasons and alarm frequency, amongst many others. They help to remove the clutter of data and expose the true root cause of production interruption, making maintenance activities more effective.

Top 10 Alarm Occurrences Last 24 Hours

Sorted By No. Occurrences
Execution Time: 1/21/2016 4:45:10 PM

Overall Top 10 Alarms Based on Total Number of Occurrences over last 24 Hours

Alarm	Alarm Name	Alarm Class	No. Events	Total Duration	Avg. Duration	Longest Single Event
OP404-FEL	OP404-REG LOAD CYCLE TIME - OP404-FEL_PAN_0217	500 Robot Warning	96	00:02:04	00:00:16	00:00:28
OP404-FEL	OP404-REG LOAD CYCLE TIME - OP404-FEL_PAN_0217	600 Robot Warning	233	00:01:46	00:00:08	00:00:40
OP404-FEL	OP404-REG LOAD CYCLE TIME - OP404-FEL_PAN_0217	400 Robot	237	01:00:08	00:00:25	00:00:50
OP404-FEL	OP404-REG LOAD CYCLE TIME - OP404-FEL_PAN_0217	10 Operator Error	13	00:00:13	00:00:10	00:00:14
OP404-FEL	OP404-REG LOAD CYCLE TIME - OP404-FEL_PAN_0217	20 Operator Error	13	00:00:06	00:00:05	00:00:06
OP404-FEL	OP404-REG LOAD CYCLE TIME - OP404-FEL_PAN_0217	30 Operator Error	13	00:00:47	00:00:13	00:00:30
OP404-FEL	OP404-REG LOAD CYCLE TIME - OP404-FEL_PAN_0217	500 Robot Warning	236	00:00:44	00:00:09	00:00:46
OP404-FEL	OP404-REG LOAD CYCLE TIME - OP404-FEL_PAN_0217	10 Operator Error	233	00:00:22	00:00:09	00:00:23
OP404-FEL	OP404-REG LOAD CYCLE TIME - OP404-FEL_PAN_0217	10 Unassigned Class	63	00:00:27	00:00:25	00:00:25
OP404-FEL	OP404-REG LOAD CYCLE TIME - OP404-FEL_PAN_0217	10 Operator Error	70	00:00:08	00:00:05	00:00:05

Top 10 Alarms for Each Classification over last 24 Hours

Alarm	Alarm Name	Alarm Class	No. Events	Total Duration	Avg. Duration	Longest Single Event
OP404-FEL	OP404-REG LOAD CYCLE TIME - OP404-FEL_PAN_0217	600 Robot	6	00:00:09	00:00:15	00:00:17
OP404-FEL	OP404-REG LOAD CYCLE TIME - OP404-FEL_PAN_0217	500 Robot Warning	6	00:00:18	00:00:30	00:00:30
OP404-FEL	OP404-REG LOAD CYCLE TIME - OP404-FEL_PAN_0217	600 Robot	6	00:00:28	00:00:46	00:00:46

Machine	Last	Min	Average	Max	Overhaul	Counts Total	Counts Remaining
Plasma Station	00:00:18	00:00:18	00:00:20	00:01:27	01:17:38	120	98
Plasma Station	00:00:20	00:00:19	00:00:20	00:01:30	00:00:28	117	78
Laser Station	00:00:04	00:00:03	00:00:03	00:01:00	00:00:04	175	98
Laser Station	00:00:10	00:00:10	00:00:10	00:01:30	00:00:36	117	78
Laser Station	00:00:04	00:00:11	00:00:10	00:01:30	00:00:32	117	22
Laser Station	00:00:04	00:00:11	00:00:10	00:01:30	00:00:36	117	44
Power Station	00:01:13	00:01:01	00:01:02	00:01:32	00:00:18	206	108
Power Station	00:00:36	00:00:12	00:00:12	00:01:34	00:01:17	206	131
Power Station	00:01:01	00:00:14	00:00:11	00:01:30	00:01:10	167	21
Power Station	00:01:19	00:00:22	00:00:22	00:01:34	00:01:30	178	41
Power Station	00:00:00	00:00:00	00:00:00	00:00:00	00:00:00	0	0
Power Station	00:00:00	00:00:00	00:00:00	00:00:00	00:00:00	0	0
Power Station	00:00:00	00:00:00	00:00:00	00:00:00	00:00:00	0	0
Power Station	00:01:13	00:01:11	00:01:11	00:01:32	00:01:28	400	25
Power Station	00:01:13	00:01:02	00:01:02	00:01:41	00:00:38	364	42
Power Station	00:01:11	00:01:04	00:01:11	00:01:32	00:01:20	366	10
Power Station	00:01:19	00:01:12	00:01:12	00:01:47	00:00:36	366	48
Power Station	00:01:19	00:01:12	00:01:11	00:01:38	00:01:27	318	13
Power Station	00:01:19	00:01:10	00:01:10	00:01:54	00:01:19	378	98
Power Station	00:01:19	00:01:10	00:01:11	00:01:37	00:01:41	371	47
Power Station	00:01:19	00:01:09	00:01:10	00:01:44	00:01:24	391	38
Power Station	00:01:19	00:01:08	00:01:10	00:01:54	00:01:14	400	38

Process Specific, Real-Time Screens

Delivers process-specific KPIs on customized screens

Whether it's analysis of operator load times, material shortage alerts or any of the hundreds of other key operational indicators which can keep your facility from reaching 100%, these customized screens can help prevent problems before they escalate.

Historical Data-Mining and Analysis Tools

Provides deep analysis of trends and effects of improvement efforts

With the wealth of historical data available, comes the benefit of hindsight. Instead of this being a sour reminder of mistakes made, these tools can help to prevent future mistakes and increase the robustness of processes within the facility.

