



# MITTS

## Maintenance Support



### Real-World Applications

#### Alarm Annunciation and Alerts:

Increases maintenance teams' reaction times with visual and mobile alerts.

#### Reactive Maintenance Management:

Generate and manages maintenance orders based on unplanned events.

#### Preventative Maintenance Management:

Prevent unplanned downtime with preventative maintenance triggers.

#### Integration with Maintenance Systems:

Seamlessly integrates with your systems or functions as a stand-alone solution.

#### Continuous Improvement Reports:

Focus on continuous improvement efforts through fact-driven event reports.

### Plant Maintenance

Unplanned stoppages are a significant source of waste in the manufacturing environment. From unreliable equipment to overly complex processes, these events can derail the goals of the manufacturing organization and result in substantial costs in both money and reputation. However, with the right approach, this type of waste can be effectively managed. Alongside a disciplined maintenance procedure, reliable and quantifiable data can help lead preventative maintenance activities in the right direction, targeting the root cause of downtime and measuring the effectiveness of remedial activities.

Plant Maintenance	Active Alarms	Alarm History	Basic Screen(Base Model)	DEBUG						
Filter	Delete Filter									
Started	Acknowledged	Ended	Duration	Parent Objekt	Object	Alarmname	Alarm Text	Alarm Class	Alarm Category	Comment
16.04.2020 12:59:45.390	16.04.2020 12:59:45.390	-----	-----	COEProduction	COEConveyor	E01 ESTOP PRESSED	E01 ESTOP PRESSED	Critical	Critical	

### The DSI Advantage

Our Maintenance Support Module offers a comprehensive solution for managing unplanned stoppage events by leveraging various tools such as overhead graphics displays, alarm status displays, and mobile technology. By facilitating timely communication to the maintenance team, we can significantly reduce the duration of downtime events and Mean Time To Repair (MTTR), thus minimizing their impact on production and associated costs. Proactive management of maintenance schedules and disciplined processes can also help to prevent unplanned stoppages from occurring in the first place. Through proper analysis of historical downtime events, we can identify root cause of the issues and implement targeted continuous improvement activities to address them. Regular use of these analysis tools can also help to measure the effectiveness of your efforts and provide a data-driven standard for future benchmarking. By utilizing our Maintenance Support Module, organizations can streamline their maintenance processes, reduce lost production time, and improve overall equipment effectiveness.



#### 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

Station	Alarm	Alarm Number	Alarm Class	No. Events	Total Duration	Avg Duration	Longest Single Event
OP480-F01	OP480-R02 DROPOFF OVER CYCLE TIME -- OP480_F01_Fault[10]27	539	Robot Warning	501	00:53:04	00:00:05	00:00:28
OP480-F01	OP480-R02 DROPOFF OVER CYCLE TIME -- OP480_F01_Fault[10]27	635	Robot Warning	310	00:41:46	00:00:08	00:00:43
Zone-2A	ZONE 2A STARVED -- Z01_Fault[1]11	415	Starved	177	01:09:58	00:00:23	00:06:55
OP200-F02	STATION OPERATOR LOAD 1 OVER CYCLE TIME -- OP200_F02_Fault[0]11	11	Operator Error	161	00:28:13	00:00:18	00:29:41
OP240-L01	OPERATOR RUNBAR 1 CYCLE START PB FAULTED -- OP240_L01_Fault[1]1	33	Operator Error	119	00:27:06	00:00:13	00:01:06
OP240-L02	OPERATOR RUNBAR 1 CYCLE START PB FAULTED -- OP240_L02_Fault[1]1	33	Operator Error	119	00:20:47	00:00:15	00:01:02
OP480-F01	OP480-R02 DROPOFF OVER CYCLE TIME -- OP480_F01_Fault[10]27	539	Robot Warning	106	00:09:44	00:00:05	00:00:46
OP444-F03	OPERATOR RUNBAR 1 CYCLE START PB FAULTED -- OP444_F03_Fault[1]1	33	Operator Error	103	00:01:22	00:00:06	00:00:23
OP314-F01	OP314-F01 OPERATOR LOAD 1 OVER CYCLE TIME -- OP314_F01_Fault[0]11	11	Unassigned Class	82	01:37:27	00:01:25	00:32:01
OP334-F01	STATION OPERATOR LOAD 1 OVER CYCLE TIME -- OP334_F01_Fault[0]11	11	Operator Error	72	00:04:09	00:00:43	00:25:03

Top 10 Alarms for Each Classification over last 24 Hours

Station	Alarm	Alarm Number	Alarm Class	No. Events	Total Duration	Avg Duration	Longest Single Event
OP444-F03	OP444-F03 BK 1 / HD 2-CELLAR PART PRESENT PPS DMS1_BK211200 FAILED OFF -- OP444_F03_Fault[1]17	103	Part Placement or Presence Error	8	00:02:49	00:00:21	00:01:47
OP440-C01	OP440-C01 LOAD LH PPS PART PRESENT FAILED OFF -- OP440_C01_Fault[0]17	103	Part Placement or Presence Error	6	00:01:16	00:00:12	00:00:20
OP610-F01	OP610-F01 RH PRE-LOADER PPS PART PRESENT FAILED OFF -- OP610_F01_Fault[1]1	99	Part Placement or Presence Error	6	00:12:38	00:02:06	00:04:25

## DSI DELIVERS

- ◆ Faster reaction to unplanned stoppages.
- ◆ Improved focus for preventative maintenance activities.
- ◆ More disciplined maintenance.