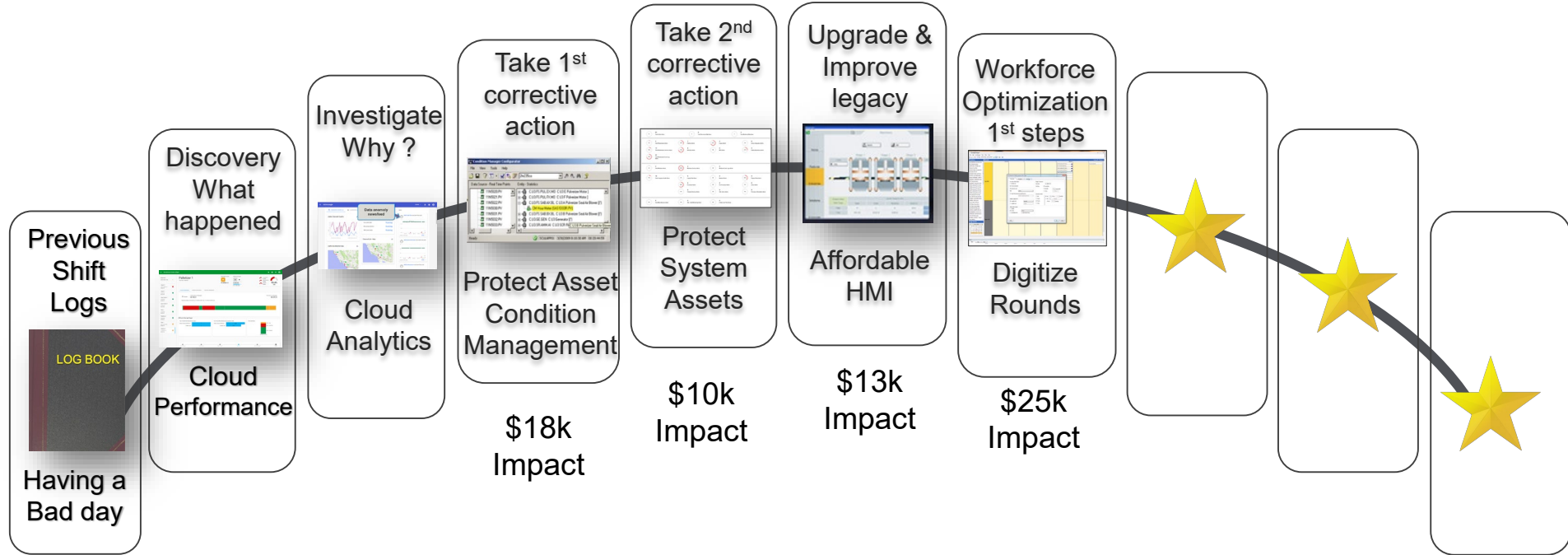
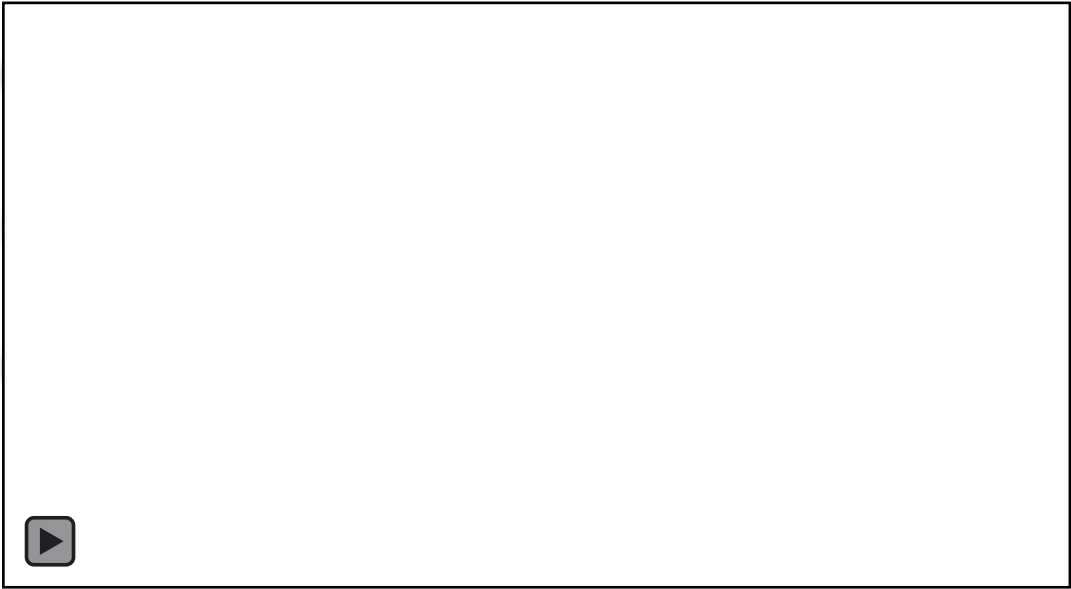
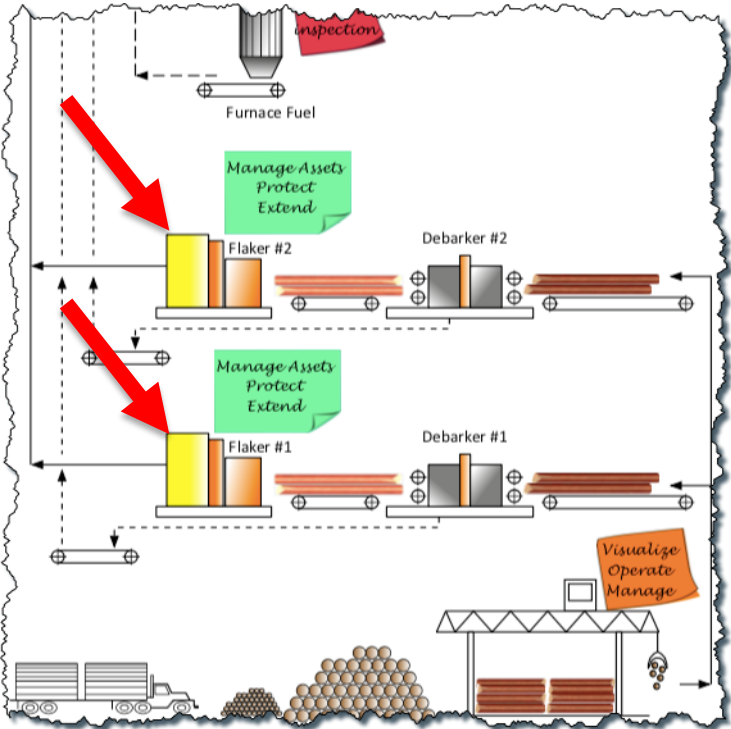


Our journey today – the cadence of the shift

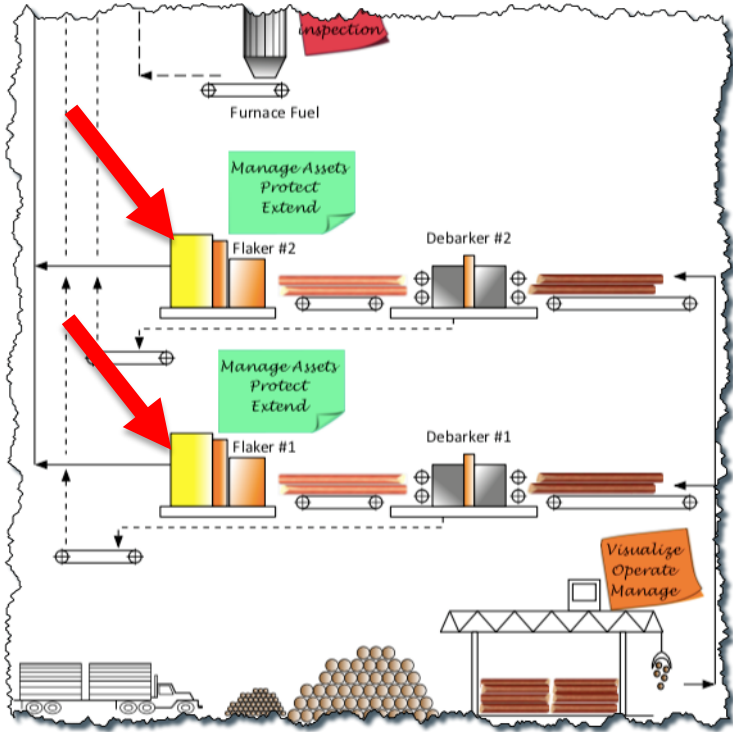
Steps toward being more Digitized



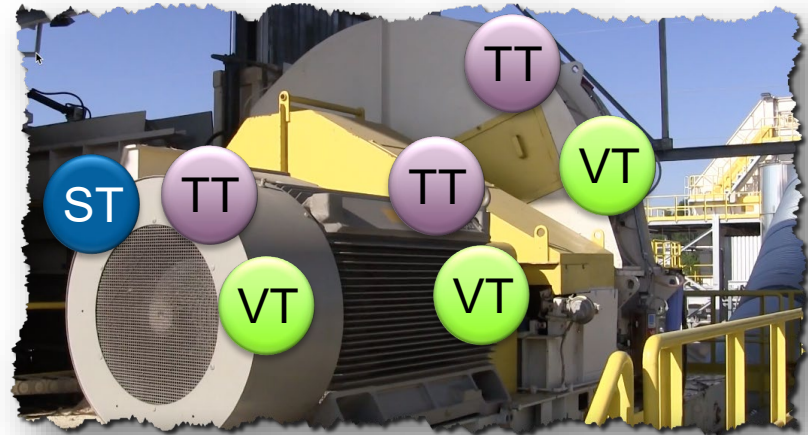
Critical Asset Protection – High Risk Failure Prevention



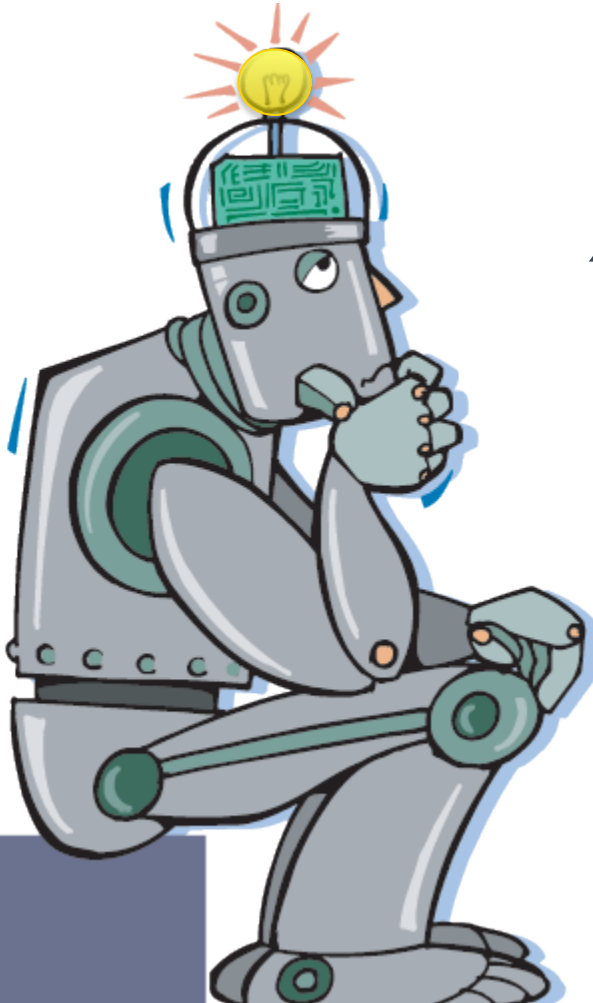
How we're addressing the issue



- 1 Leverage instrumentation to capture data
- 2 Combine with maintenance data, build a baseline of good operation
- 3 Monitor using Advanced Predictive tools to schedule inspection or maintenance



It's a Journey



Strategic,
Proactive,
Optimized



**Predictive
Maintenance**

Condition-Based Maintenance

Preventive Maintenance

Reactive Maintenance

Lets take a look



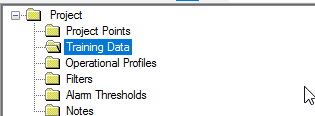
Industry 4.0

**Driving Operational Results
Through Digitization**

WISH LIST

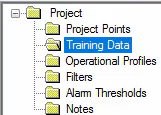
1
2

Learn the relationships between
all of our data points



Key Points:

- We train PRiSM on our plant data, so it can detect when anomalies occur.



Start

Step 1: Import Training Data

Please add one or more sets of training data to the project

Click [here](#) to add points from eDNA.

Click [here](#) to add points from an external file.

Or select "Import Data" from the file menu for a full list of data sources.

Step 2: Create Operational Profiles

Create one or more operational profiles from the training data

Click [here](#) to create a new operational profile.

Click [here](#) to test the profile.

Step 3: Deploy and Monitor

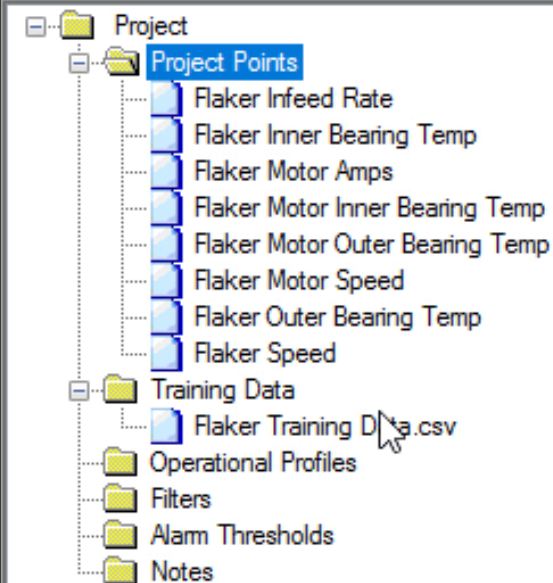
Deploy the operational profiles and monitor your system

Click [here](#) to deploy the operation profile.

Click [here](#) to set up alarms.

Click [here](#) to monitor points.

Click [here](#) to view alarms.



- Correlation
- Statistics
- Visual Comparison
- New Operational Profile

- Project
 - Project
 - Flaker Motor Amps
 - Flaker Motor Inner Bearing Temp
 - Flaker Motor Outer Bearing Temp
 - Flaker Motor Speed
 - Flaker Outer Bearing Temp
 - Flaker Speed
 - Training Data
 - Flaker Training Data.csv
 - Operational Profiles
 - Filters
 - Alarm Thresholds
 - Notes

Eastern Time (US & Canada)

Trend: Training Data

Select Data Set to Graph

Flaker Training Data.csv

Select Points to Graph

- Flaker Infeed Rate
- Flaker Inner Bearing Temp
- Flaker Motor Amps
- Flaker Motor Inner Bearing Temp
- Flaker Motor Outer Bearing Temp**
- Flaker Motor Speed
- Flaker Outer Bearing Temp
- Flaker Speed

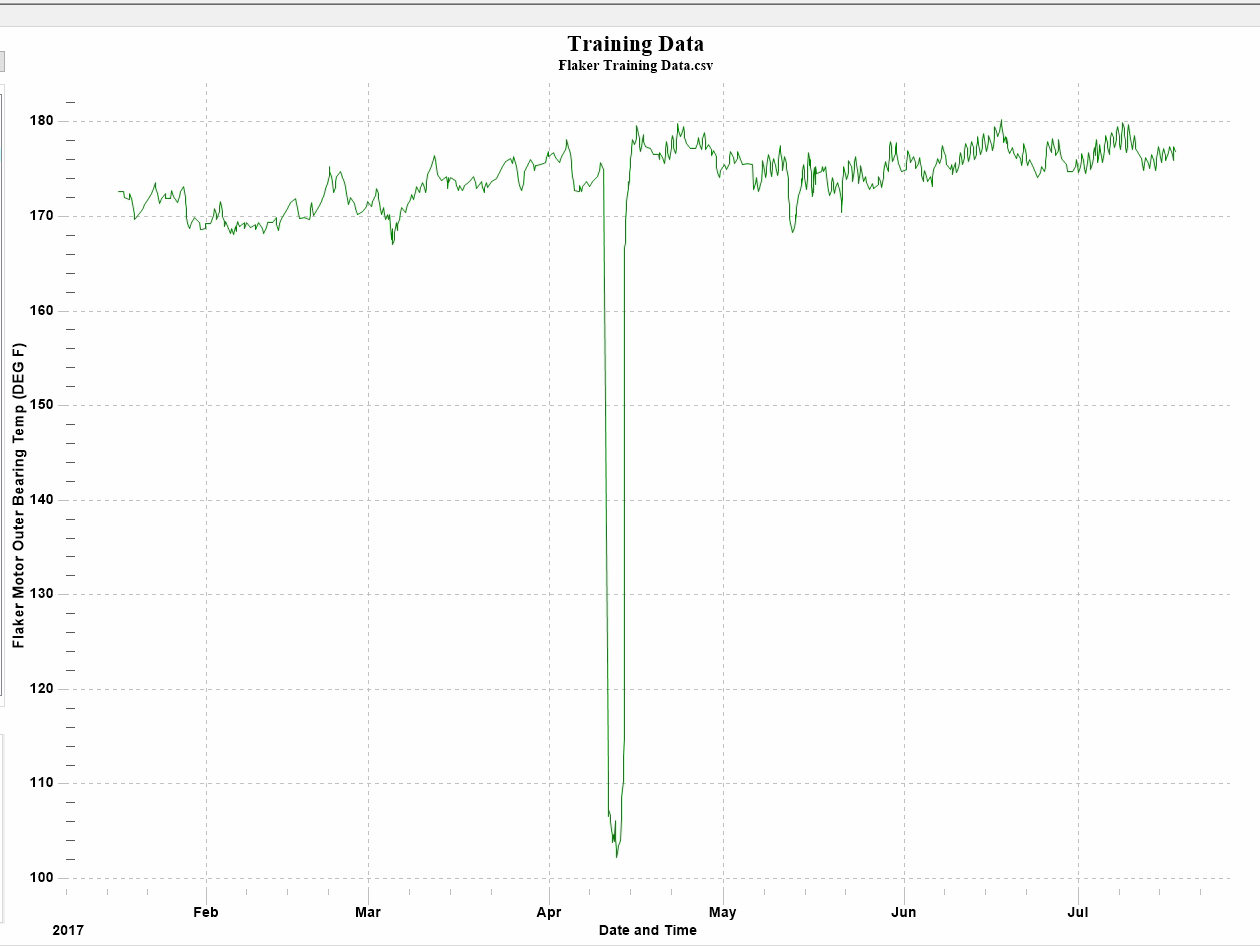
Display Data Editing

Select Data to...

- [Include](#)
- [Exclude](#)
- [Delete](#)

Draw mode: ▾

Data Selection Mode



Project

- Project Points
 - Flaker Infeed Rate
 - Flaker Inner Bearing Temp
 - Flaker Motor Amps
 - Flaker Motor Inner Bearing Temp
 - Flaker Motor Outer Bearing Temp
 - Flaker Motor Speed
 - Flaker Outer Bearing Temp
 - Flaker Speed
- Training Data
 - Flaker Training Data.csv
- Operational Profiles
- Filters
- Alarm Thresholds
- Notes

Trend: Training Data Correlation: Training Data

Training Sets

- All Training Sets
- Flaker Training Data.csv

Point for X-Axis

- Flaker Infeed Rate
- Flaker Inner Bearing Temp
- Flaker Motor Amps
- Flaker Motor Inner Bearing Temp
- Flaker Motor Outer Bearing Temp
- Flaker Motor Speed
- Flaker Outer Bearing Temp
- Flaker Speed

Point for Y-Axis

- Flaker Infeed Rate
- Flaker Inner Bearing Temp
- Flaker Motor Amps
- Flaker Motor Inner Bearing Temp
- Flaker Motor Outer Bearing Temp
- Flaker Motor Speed
- Flaker Outer Bearing Temp
- Flaker Speed

Display Options

- Show Overview

Excluded Data: Show

Filtered Data: Show

Outliers: Show 3.0 %

Select Data To...

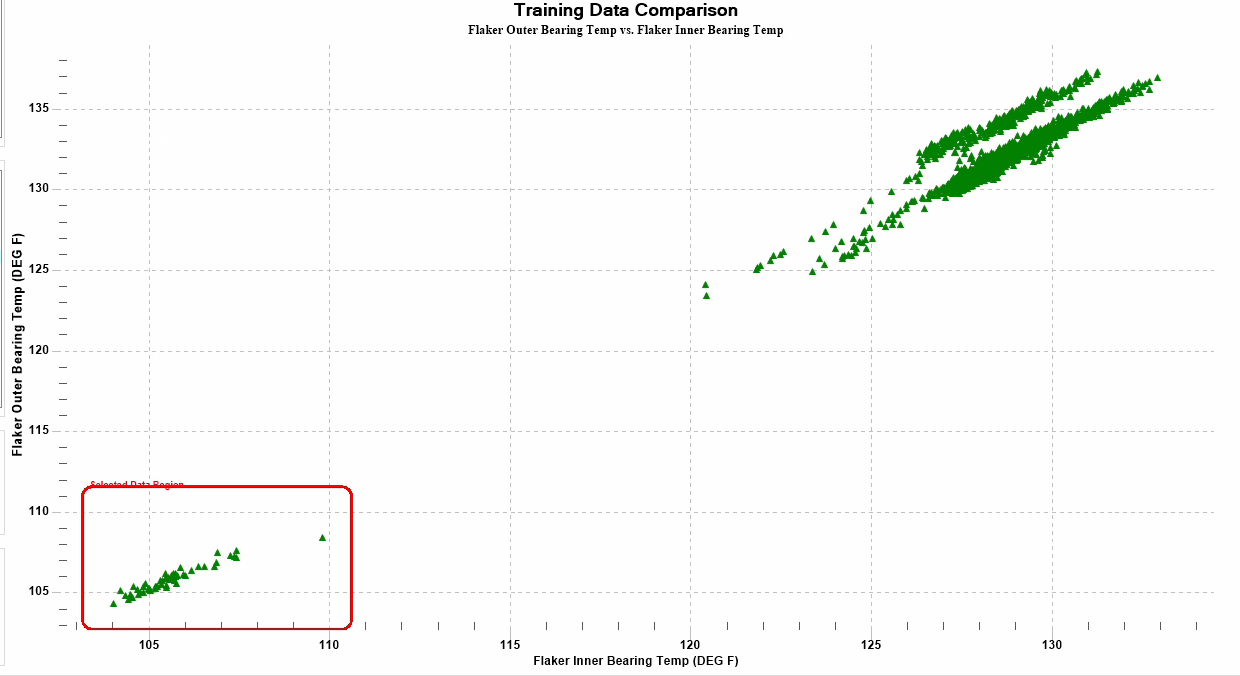
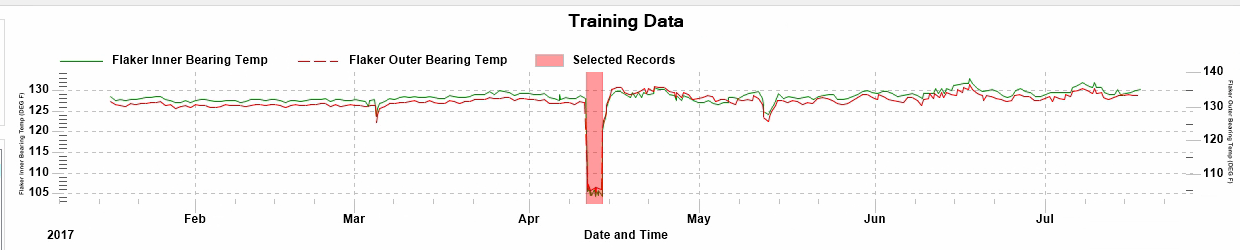
Overview

- Include
- Exclude
- Delete

Comparison

Draw mode:

- []



Project

- Project Points
 - Flaker Infeed Rate
 - Flaker Inner Bearing Temp
 - Flaker Motor Amps
 - Flaker Motor Inner Bearing Temp
 - Flaker Motor Outer Bearing Temp
 - Flaker Motor Speed
 - Flaker Outer Bearing Temp
 - Flaker Speed
- Training Data
 - Flaker Training Data.csv
 - Operational Profiles**
 - Filters
 - Alarm Thresholds
 - Notes

Point for X-Axis

- Flaker Infeed Rate
- Flaker Inner Bearing Temp
- Flaker Motor Amps
- Flaker Motor Inner Bearing Temp**
- Flaker Motor Outer Bearing Temp
- Flaker Motor Speed
- Flaker Outer Bearing Temp
- Flaker Speed

Point for Y-Axis

- Flaker Infeed Rate
- Flaker Inner Bearing Temp
- Flaker Motor Amps
- Flaker Motor Inner Bearing Temp
- Flaker Motor Outer Bearing Temp**
- Flaker Motor Speed
- Flaker Outer Bearing Temp
- Flaker Speed

Display Options

Excluded Data Show

Filtered Data Show

Outliers Show 3.0 %

Select Data To...

Overview Comparison

- Include
- Exclude
- Delete

Draw mode:

Trend: Training Data Correlation: Training Data

Training Sets

- All Training Sets
- Flaker Training Data.csv

Point for X-Axis

- Flaker Infeed Rate
- Flaker Inner Bearing Temp
- Flaker Motor Amps
- Flaker Motor Inner Bearing Temp**
- Flaker Motor Outer Bearing Temp
- Flaker Motor Speed
- Flaker Outer Bearing Temp
- Flaker Speed

Point for Y-Axis

- Flaker Infeed Rate
- Flaker Inner Bearing Temp
- Flaker Motor Amps
- Flaker Motor Inner Bearing Temp
- Flaker Motor Outer Bearing Temp**
- Flaker Motor Speed
- Flaker Outer Bearing Temp
- Flaker Speed

Display Options

Excluded Data Show

Filtered Data Show

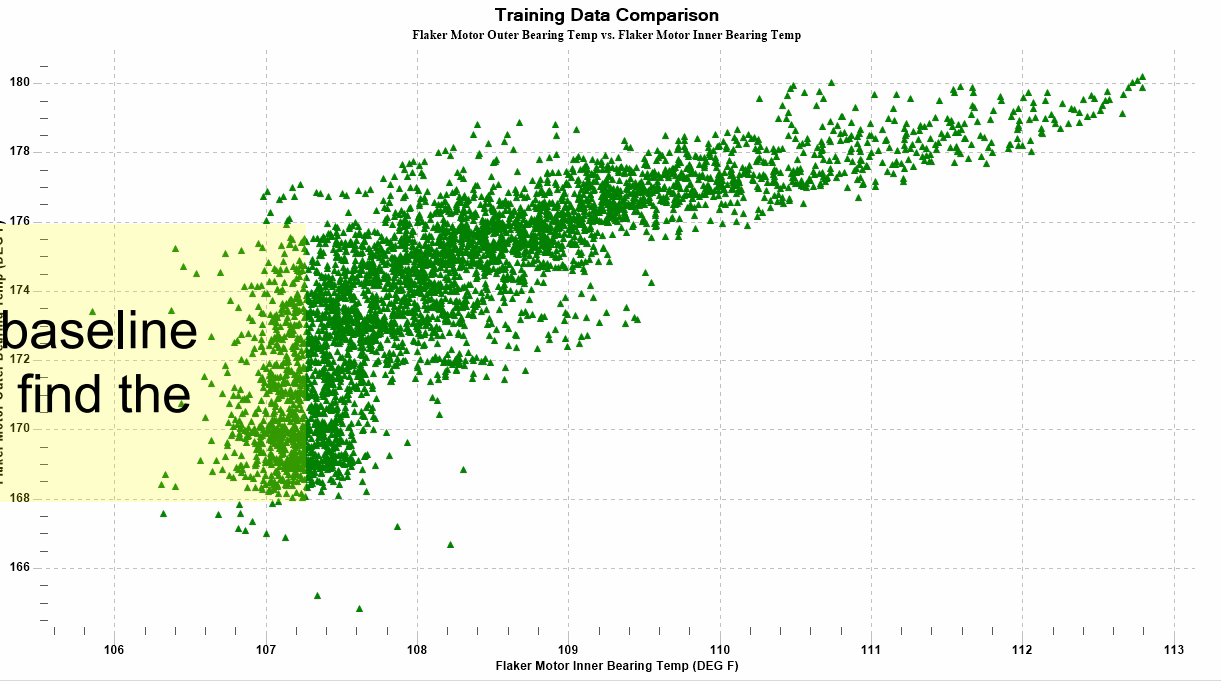
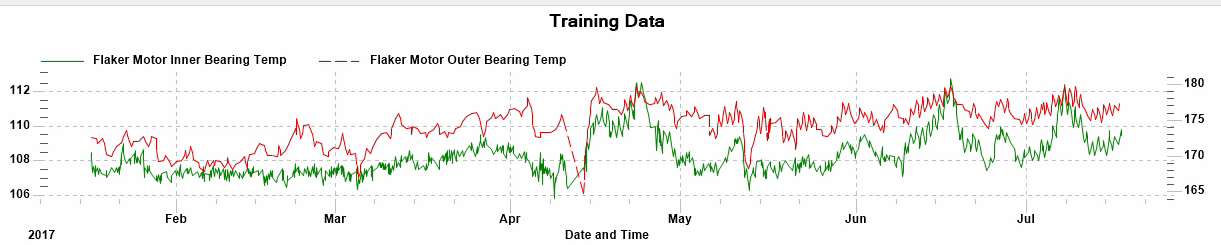
Outliers Show 3.0 %

Select Data To...

Overview Comparison

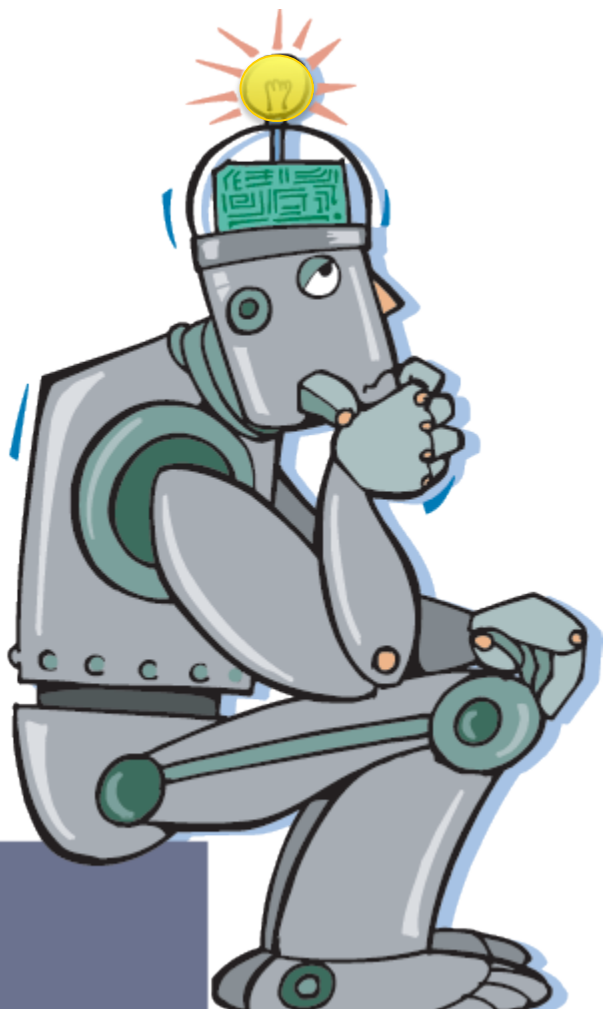
- Include
- Exclude
- Delete

Draw mode:



Key Points:

- Once we've cleansed the baseline data, we can have PRISM find the underlying patterns.



Lets take a look



Industry 4.0

**Driving Operational Results
Through Digitization**

WISH LIST

1

Learn the relationships between all of our data points



2

An easy way to monitor the equipment long term

Key Points:

Quickly see if current process follows expected behavior.

See a breakdown by component.

Name	Alarm State	Runtime Status	Case Status	Open Cases	Closed Cases	7 Day Alarm History (days)	Alarms	Earliest Alarm	Latest Alarm	Warnings	Earliest Warning	Latest Warning
All Assets					2	5	35,535	01-29-2019 12:14:42	03-29-2019 10:56:13	59,420	01-29-2019 12:14:42	03-29-2019 10:57:11
COMPANY					2	5	35,535	01-29-2019 12:14:42	03-29-2019 10:56:13	59,420	01-29-2019 12:14:42	03-29-2019 10:57:11
PLANT 1					2	3	2,387	02-07-2019 13:09:25	03-29-2019 09:34:39	4,513	01-29-2019 14:11:08	03-29-2019 09:34:40
COMPRESSOR 1					1	1	2,843	01-29-2019 12:14:42	03-29-2019 10:55:09	194	01-29-2019 12:14:42	03-29-2019 10:57:11
COMPRESSOR 1 MECH					1	1	2,843	01-29-2019 12:14:42	03-29-2019 10:55:09	194	01-29-2019 12:14:42	03-29-2019 10:57:11
FLAKER 1							2,843	01-29-2019 12:14:42	03-29-2019 10:55:09	194	01-29-2019 12:14:42	03-29-2019 10:57:11
FLAKER 1							2,843	01-29-2019 12:14:42	03-29-2019 10:55:09	194	01-29-2019 12:14:42	03-29-2019 10:57:11
MILL 1							360	02-07-2019 13:22:08	03-29-2019 09:20:44	1,732	01-29-2019 13:21:40	03-29-2019 10:43:39
MILL 1 PERFORMANCE							360	02-07-2019 13:22:08	03-29-2019 09:20:44	1,732	01-29-2019 13:21:40	03-29-2019 10:43:39
PUMP 1					1	1	2,684	01-29-2019 12:49:56	03-29-2019 10:30:30	3,927	01-29-2019 12:30:06	03-29-2019 10:48:39
CIRCULATING WATER PUMP 1 RELIABILITY					1	1	1,970	01-29-2019 12:49:56	03-29-2019 10:30:30	2,905	01-29-2019 12:30:06	03-29-2019 10:48:39
PUMP MOTOR 1 (Water Cooled)							714	01-29-2019 14:00:59	03-28-2019 13:53:20	1,022	01-29-2019 13:46:45	03-29-2019 09:34:40
TURBINE 1					1	1	3,357	02-07-2019 15:10:52	03-29-2019 10:56:13	8,794	02-07-2019 15:10:52	03-29-2019 10:57:11
STG 1 Mechanical Combined					1	1	3,357	02-07-2019 15:10:52	03-29-2019 10:56:13	8,794	02-07-2019 15:10:52	03-29-2019 10:57:11
WIND TURBINE 1					1	1	117	01-29-2019 13:53:03	03-28-2019 12:09:23	411	01-29-2019 13:26:34	03-29-2019 10:48:39
Wind Turbine 1 Mech					1	1	117	01-29-2019 13:53:03	03-28-2019 12:09:23	411	01-29-2019 13:26:34	03-29-2019 10:48:39
PLANT 2					2	2	11,894	01-29-2019 12:14:42	03-29-2019 10:56:13	19,925	01-29-2019 12:14:42	03-29-2019 10:57:11
BOILER 2					1	1	2,846	01-29-2019 12:14:42	03-29-2019 10:55:31	159	01-29-2019 12:14:42	03-29-2019 10:55:31
BOILER ECONOMIZER 2					1	1	2,846	01-29-2019 12:14:42	03-29-2019 10:55:31	159	01-29-2019 12:14:42	03-29-2019 10:55:31
COMPRESSOR 2					1	1	2,387	02-07-2019 13:09:25	03-29-2019 09:34:40	4,512	01-29-2019 14:11:08	03-29-2019 09:34:40
COMPRESSOR 2 MECH					1	1	2,387	02-07-2019 13:09:25	03-29-2019 09:34:40	4,512	01-29-2019 14:11:08	03-29-2019 09:34:40
MILL 2							360	02-07-2019 13:22:08	03-29-2019 09:20:44	1,732	01-29-2019 13:21:40	03-29-2019 10:43:39
MILL 2 PERFORMANCE							360	02-07-2019 13:22:08	03-29-2019 09:20:44	1,732	01-29-2019 13:21:40	03-29-2019 10:43:39
PUMP 2							2,684	01-29-2019 12:49:56	03-29-2019 10:30:30	3,927	01-29-2019 12:30:06	03-29-2019 10:48:39
CIRCULATING WATER PUMP 2 RELIABILITY							1,970	01-29-2019 12:49:56	03-29-2019 10:30:30	2,905	01-29-2019 12:30:06	03-29-2019 10:48:39
PUMP MOTOR 2 (Water Cooled)							714	01-29-2019 14:00:59	03-28-2019 13:53:20	1,022	01-29-2019 13:46:45	03-29-2019 09:34:40

Clear Filters

Auto Refresh | Hierarchical View

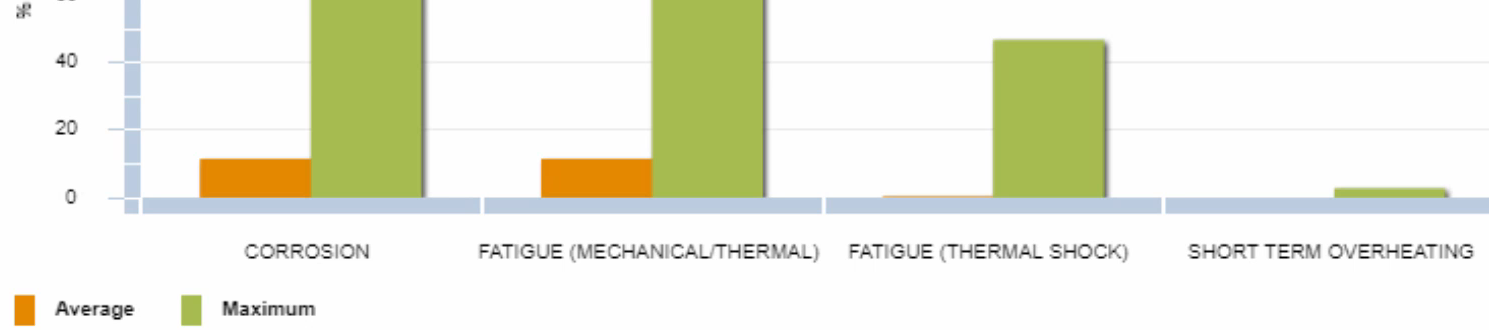
Name	Alarm State	Runtime Status	Case Status	Open Cases	Closed Cases	7 Day Event History (days)	Alarms	Earliest Alarm	Latest Alarm	Warnings	Earliest Warning	Latest Warning
All Assets				2	5		35,535	01-29-2019 12:14:42	03-29-2019 10:56:13	59,420	01-29-2019 12:14:42	03-29-2019 10:57:22
COMPANY				2	5		35,535	01-29-2019 12:14:42	03-29-2019 10:56:13	59,420	01-29-2019 12:14:42	03-29-2019 10:57:22
PLANT 1				2	3		11,748	01-29-2019 12:14:42	03-29-2019 10:56:13	19,571	01-29-2019 12:14:42	03-29-2019 10:57:22
COMPRESSOR 1				1			2,387	02-07-2019 13:09:25	03-29-2019 09:34:39	4,513	01-29-2019 14:11:08	03-29-2019 09:34:39
COMPRESSOR 1 PERFORMANCE				1			2,387	02-07-2019 13:09:25	03-29-2019 09:34:39	4,513	01-29-2019 14:11:08	03-29-2019 09:34:39
FLAKER 1							2,843	01-29-2019 12:14:42	03-29-2019 10:55:09	194	01-29-2019 12:14:42	03-29-2019 10:57:22
Flaker 1							2,843	01-29-2019 12:14:42	03-29-2019 10:55:09	194	01-29-2019 12:14:42	03-29-2019 10:57:22
MILL 1							360	02-07-2019 13:22:08	03-29-2019 09:20:44	1,732	01-29-2019 13:21:40	03-29-2019 10:43:22
MILL 1 PERFORMANCE							360	02-07-2019 13:22:08	03-29-2019 09:20:44	1,732	01-29-2019 13:21:40	03-29-2019 10:43:22
PUMP 1				1	1		2,684	01-29-2019 12:49:56	03-29-2019 10:30:30	3,927	01-29-2019 12:30:06	03-29-2019 10:48:22
CIRCULATING WATER PUMP 1 RELIABILITY				1	1		1,970	01-29-2019 12:49:56	03-29-2019 10:30:30	2,905	01-29-2019 12:30:06	03-29-2019 10:48:22
PUMP MOTOR 1 (Water Cooled)							714	01-29-2019 14:00:59	03-28-2019 13:53:20	1,022	01-29-2019 13:46:45	03-29-2019 09:34:39
TURBINE 1					1		3,357	02-07-2019 15:10:52	03-29-2019 10:56:13	8,794	02-07-2019 15:10:52	03-29-2019 10:57:22
STG 1 Mechanical Combined					1		3,357	02-07-2019 15:10:52	03-29-2019 10:56:13	8,794	02-07-2019 15:10:52	03-29-2019 10:57:22
WIND TURBINE 1					1		117	01-29-2019 13:53:03	03-28-2019 12:09:23	411	01-29-2019 13:26:34	03-29-2019 10:48:22
Wind Turbine 1 Mech					1		117	01-29-2019 13:53:03	03-28-2019 12:09:23	411	01-29-2019 13:26:34	03-29-2019 10:48:22

Key Points:
 - See how runtime values differ from the predicted values.

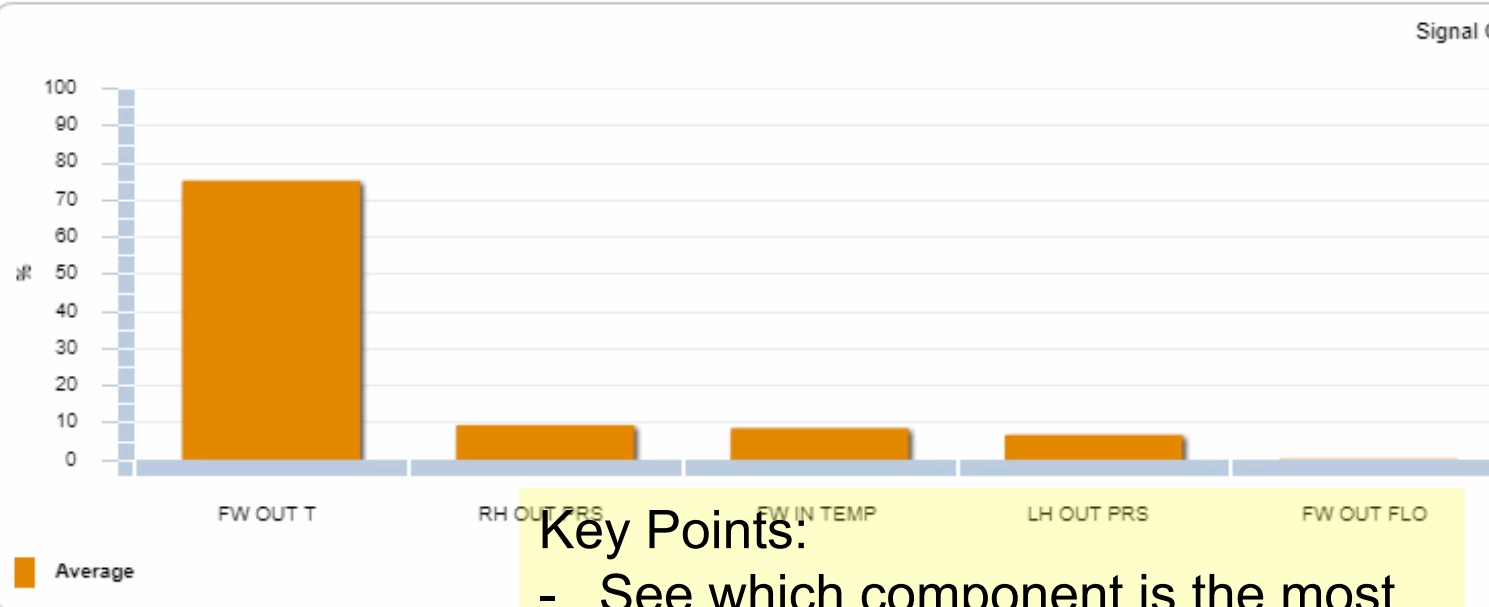
X Flaker 1

Clear Alarms

Description	Name	Alarm Criticality	Alarm Status	Runtime Status	Alarms	Earliest Alarm	Latest Alarm	Warnings	Earliest Warning	Latest Warning
Flaker 1 Overall Model Residual	DEMO.ARCHIVE.0010OMR				2,843	01-29-2019 12:14:42	03-29-2019 10:55:09			
FW IN PRES	DEMO.SIM.CHI3EC02							7	03-29-2019 10:44:51	03-29-2019 10:57:30
FW IN TEMP	DEMO.SIM.CHI3EC03							4	03-29-2019 10:44:37	03-29-2019 10:55:31
FW OUT PRS	DEMO.SIM.CHI3EC05							6	03-29-2019 10:44:44	03-29-2019 10:57:30
FW OUT T	DEMO.SIM.CHI3EC06							159	01-29-2019 12:14:42	03-29-2019 10:55:31



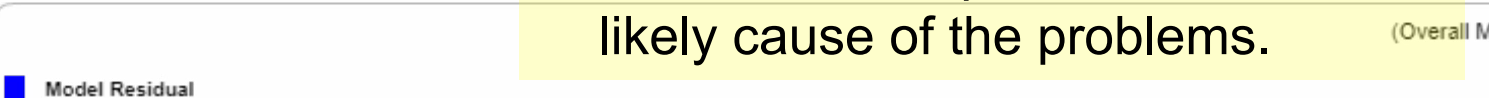
SHORT TERM OVERHEATING



Signal Contributions

Signal
FW OUT T
RH OUT PRS
FW IN TEMP
LH OUT PRS
FW OUT FLO
FW OUT PRS
FW IN PRES
FW IN FLOW
RH OUT T

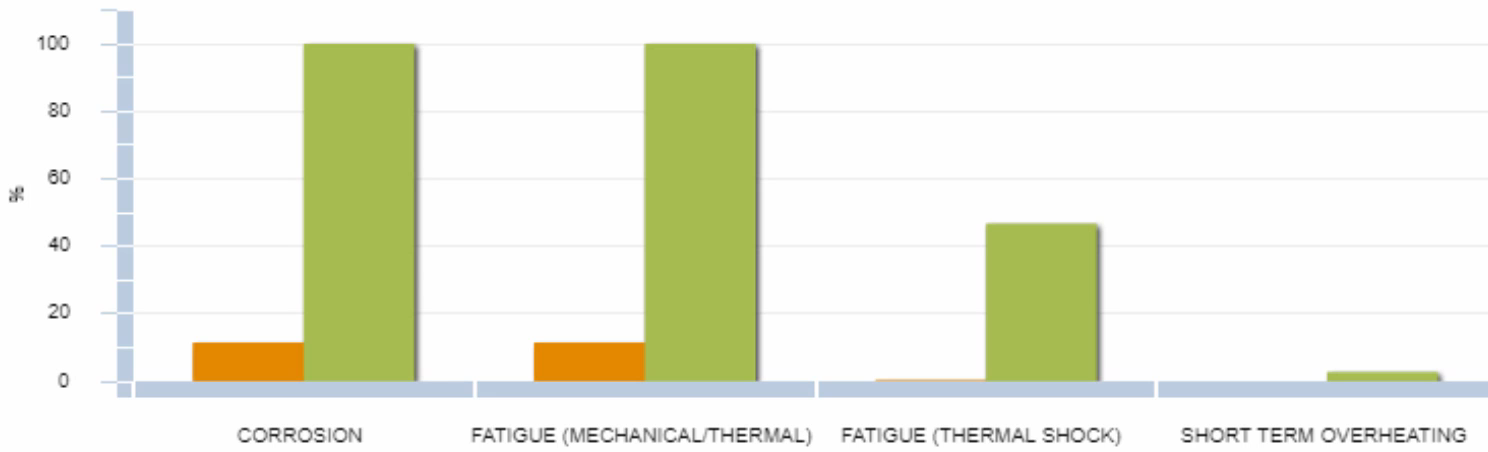
Key Points:
 - See which component is the most likely cause of the problems.



(Overall Model Residual)

Component Comparison Add Scatter Plot Clear All

Fault Diagnostics



Fault
CORROSION
FATIGUE (MECHANICAL/THERMA
FATIGUE (THERMAL SHOCK)
SHORT TERM OVERHEATING

Average Maximum

Key Points:

- Provides root cause analysis, based on known failure modes.

Signal Contributions

Signal
FW OUT T
RH OUT PRS
FW IN TEMP

Lets take a look



Industry 4.0

**Driving Operational Results
Through Digitization**

WISH LIST

1
2

Learn the relationships between all of our data points



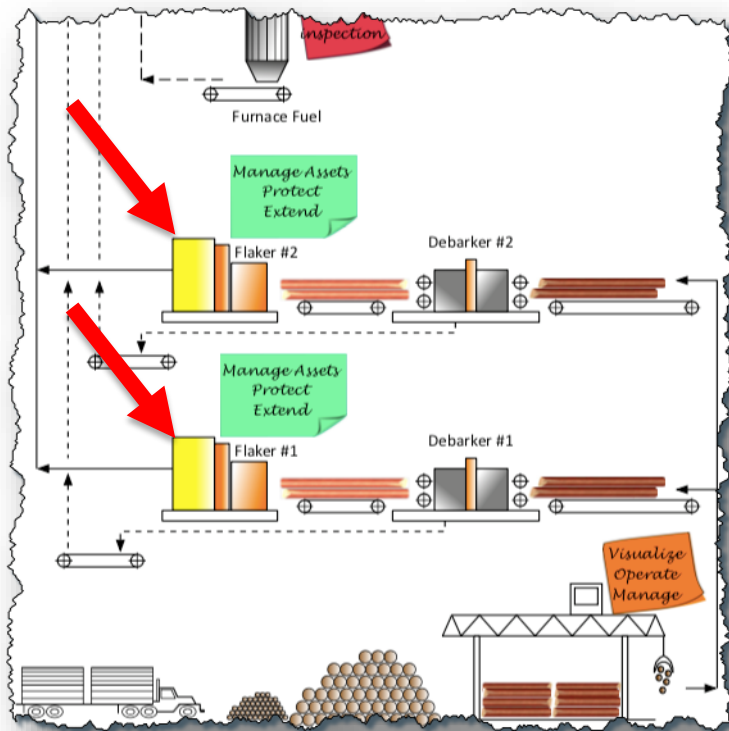
An easy way to monitor the equipment long term



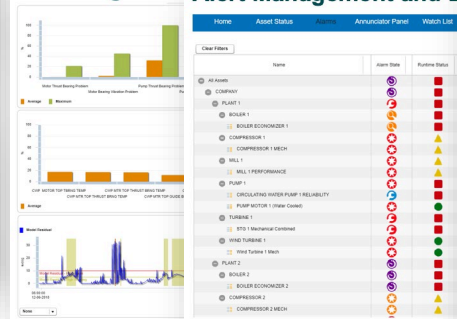
Summary – Predictive Analytics Protects Critical Asset

Prism Predictive Analytics

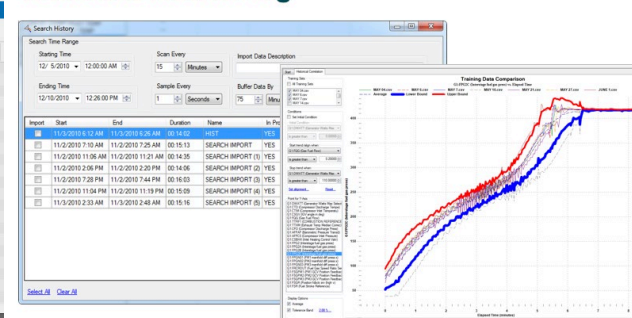
- 1 PRISM provides early warning of equipment health using Advanced Pattern Recognition
- 2 Simple point and click interface. No need to be a data scientist or programmer
- 3 Prescriptive – Provides best guess of what to do to correct the problem



Fault Diagnostic Alert Management and

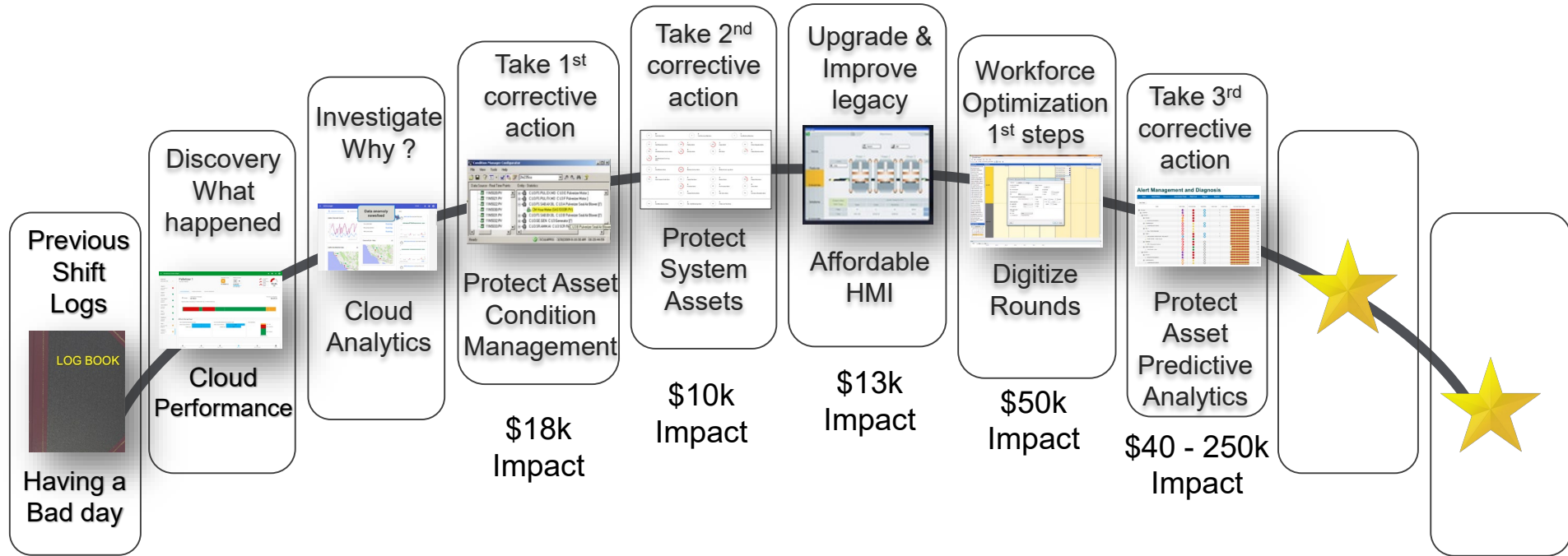


Transient Monitoring

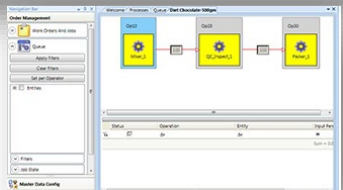
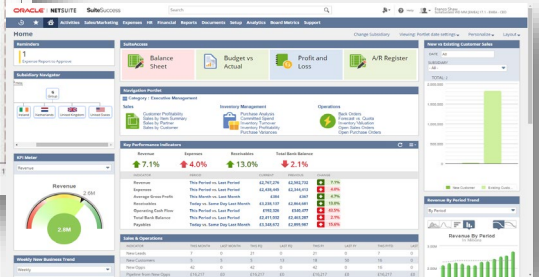
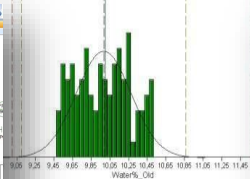
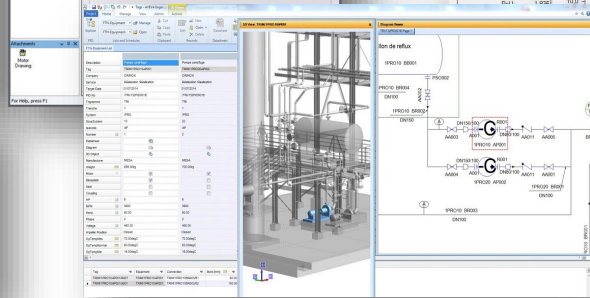
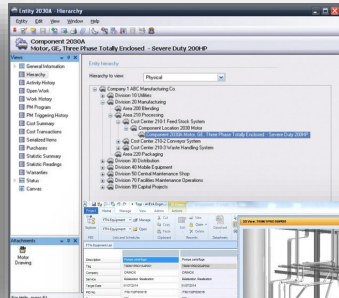
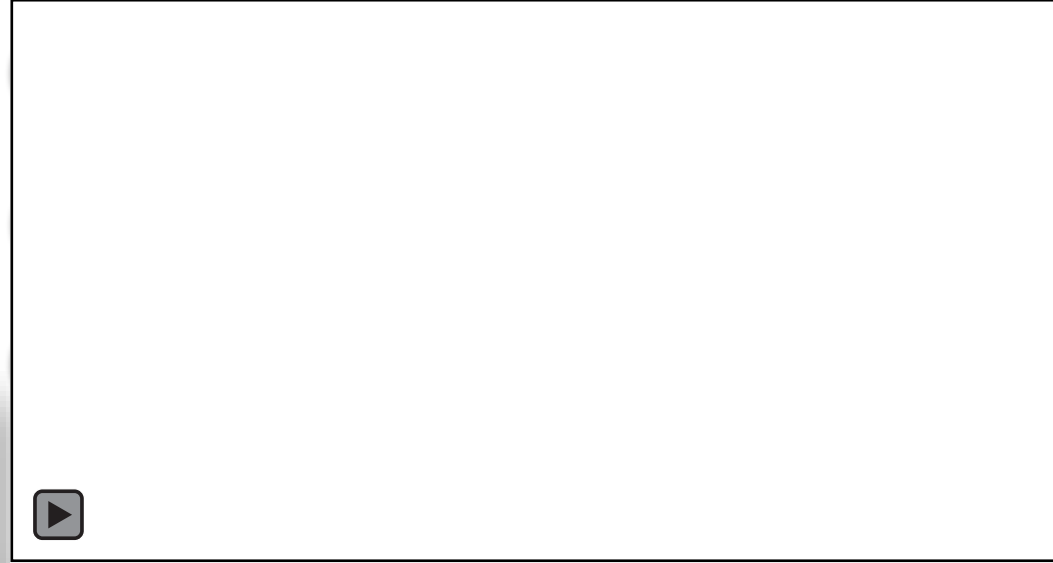


Our journey today – the cadence of the shift

Steps toward being more Digitized



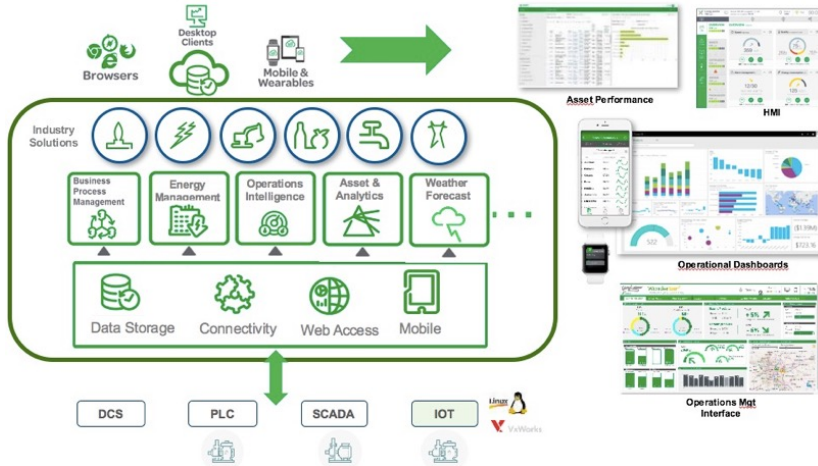
Common IT/OT platform – reduce silo's



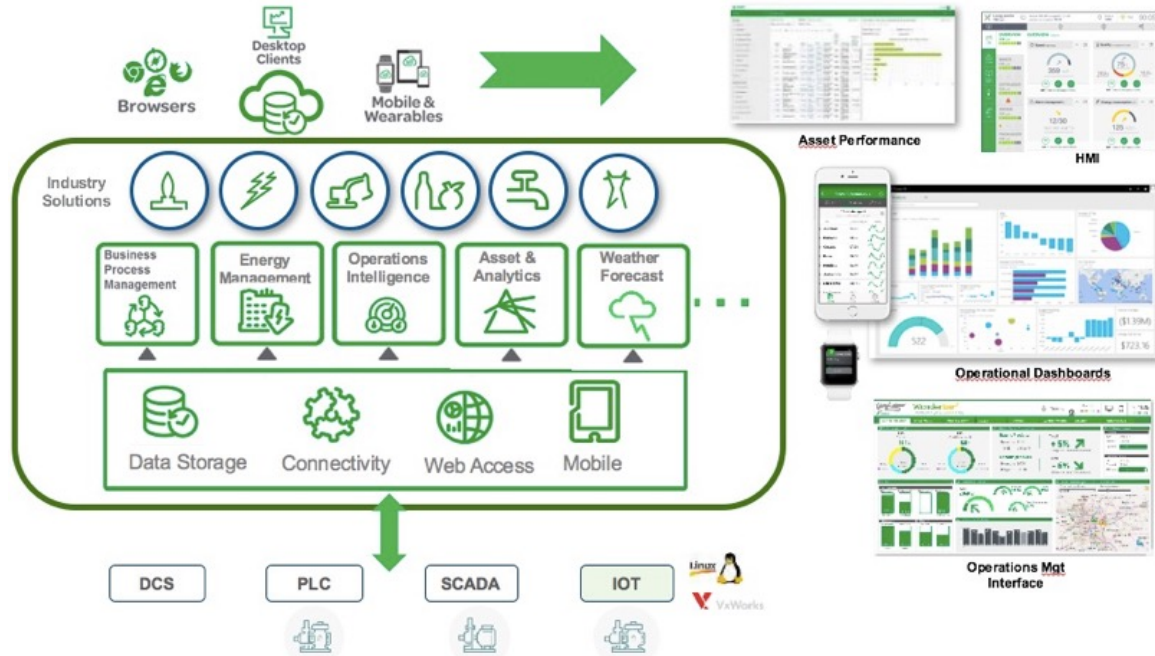
How we're addressing the issue



- 1 Deploy a platform solution that goes beyond HMI, reduce silo, Apps, Mobile
- 2 One platform for local and corporate that leverages common goals & requirements
- 3 One platform that our IT and Operations can get behind



Lets take a look



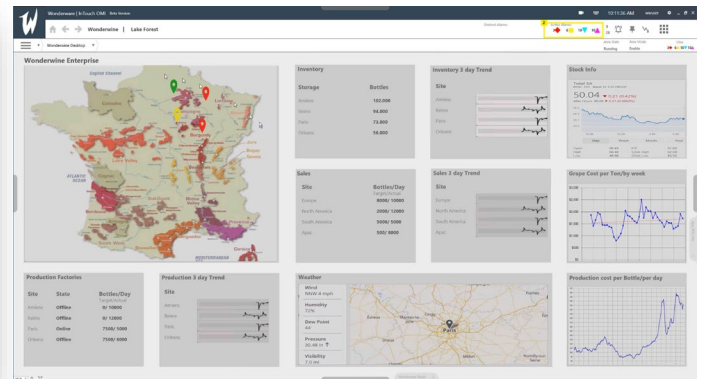
Industry 4.0

Driving Operational Results Through Digitization

Summary - 'Digitization' Common Platform IT/OT

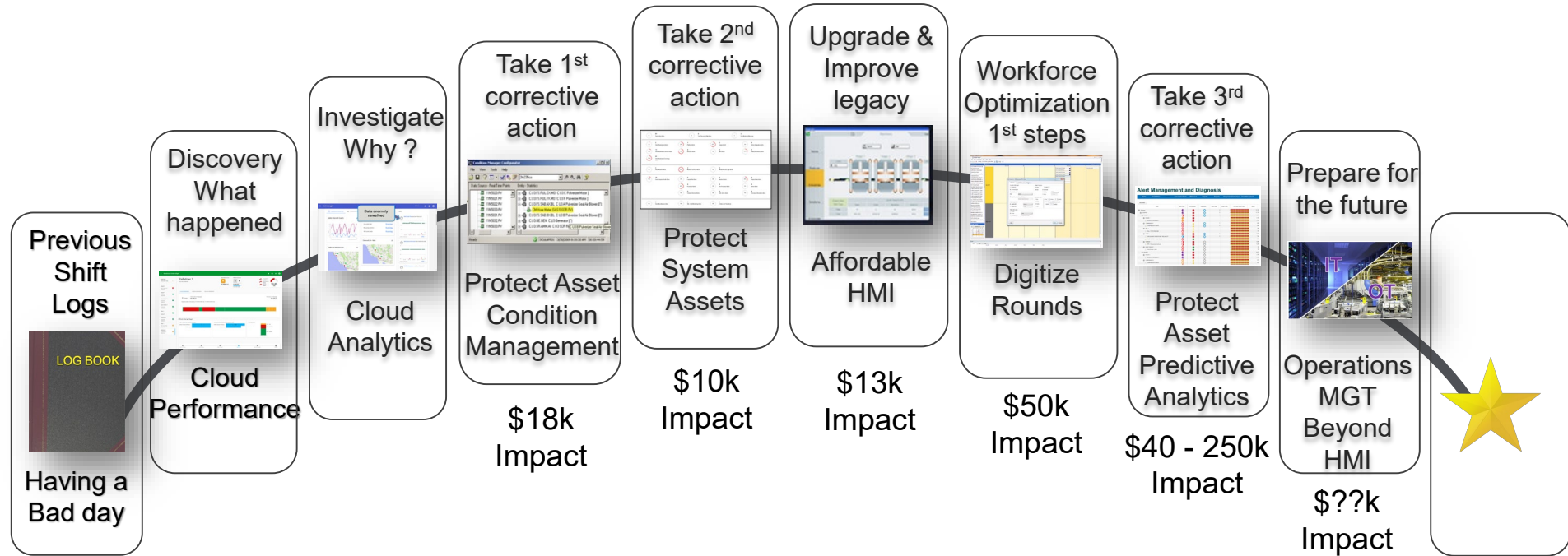
Wonderware Operations Management

- 1 OMI is the System of systems for building manufacturing solutions. Beyond HMI
- 2 More functionality, Less work, Easier, Faster, Less risk than before
- 3 Modernize, Digitize, Mobilize, Context aware Apps, IT/OT friendly

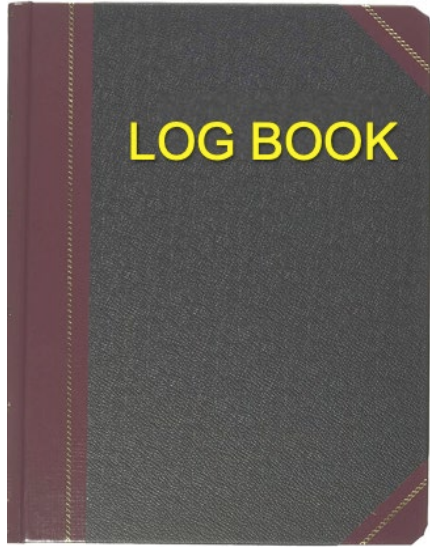


Our journey today – the cadence of the shift

Steps toward being more Digitized

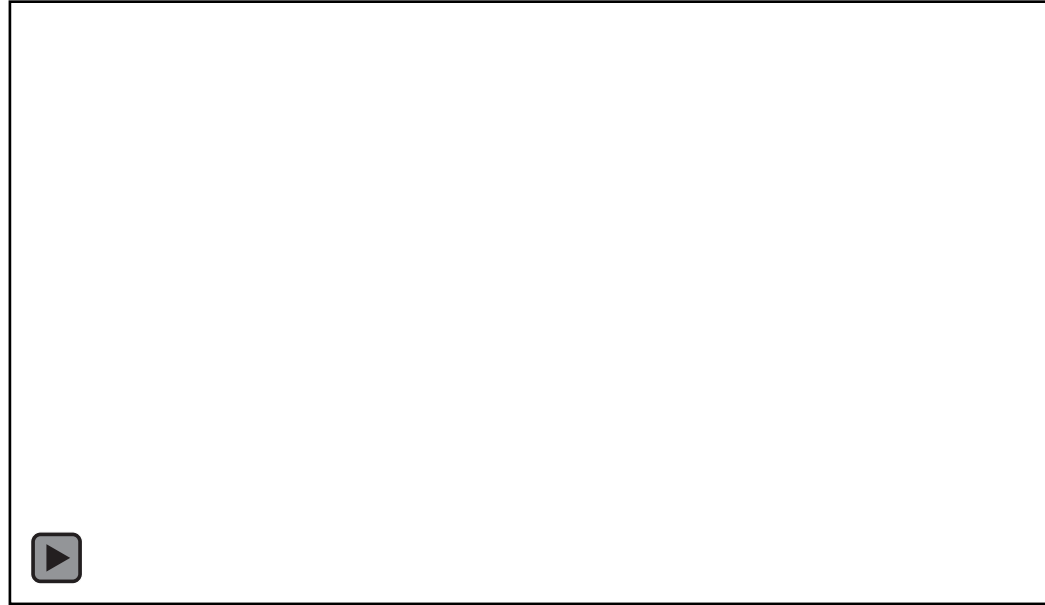


Establishing Shift Cadence – eLogging & Procedure Automation



61% of paper logbook users admit they have no method of tracking operations procedures

Copyright InSource Solutions @2019



- Silo's of data for shift operations
- Errors in recording
- No enforcement of procedure
- Little accountability

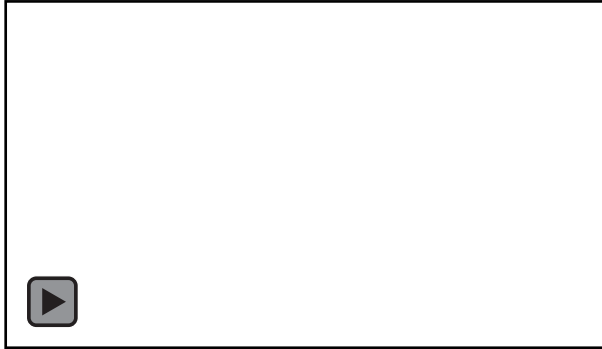
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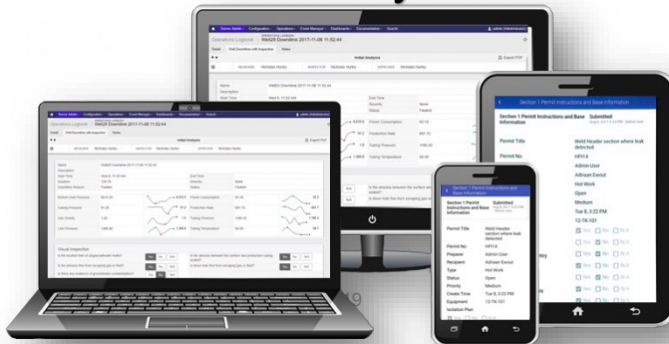
s to take us

What we envision in the future

Old way



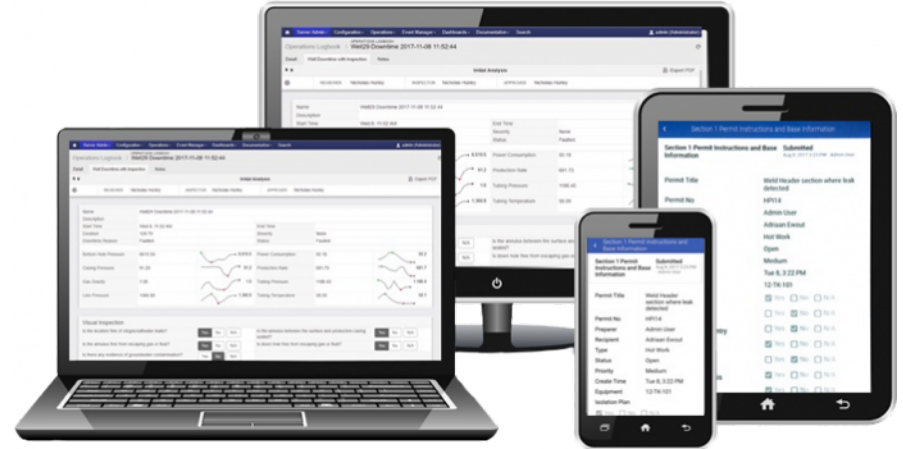
New way



- 1 Digitize Operator Logs, Work List, Standing orders, Shift handover | Mobile
- 2 Create & Enforce rules, Provide Accountability, Facilitate instructions
- 3 Integrates with existing systems to eliminate duplicate entry.

Event Time	Site	Section	Area	Category	Message	Status	Notes
Sep 14, 2015 10:17 PM	Process System	Area 50N	Unit 34 - Light Ends Recovery Unit	Operations	User can add whatever they need to This predefined message is accessible for any user who lists "Process System" only as their location selection. If they define their log entry more granularly they will not see this item as a selectable choice	Closed	1
Aug 25, 2015 10:18 PM	Process System	Area 50N	Unit 30 - Delaying Cooling Unit	Operations	add my log	Closed	
Jul 3, 2015 4:19 AM	Process System	Area 50S	Unit 88 - Fuel Gas and Thermal DeNOx System	Operations	CT2 bad at 191 MW CT2 pre SCR NOx at 47 ppm, outlet NOx 4.1 ppm. CT2 taken out of AGC control. CT2 MW setpoint 177 MW to lower the NOx emissions.	Open	
Jul 3, 2015 3:28 AM	Process System	Area 50N		Environment	Checklist item has triggered an alarm. Checklist: Effluent Treats -> Category: Discharge sample collection -> Item: Awwc. Item Value: 17.0	Open	
Jul 3, 2015 3:13 AM	Storage System	Area 12	Unit 12 - Vacuum Residuum Storage Unit	Operations	Received and pumped 25MT of UFC-85	Open	
Jul 3, 2015 2:29 AM	Process System	Area 50N		Personal	Employee Megan Smith issued with PTW675	Closed	

Lets take a look



Industry 4.0
Driving Operational Results
Through Digitization

Waste using of
Flake Vibration?
X2 once several
Days.

Training on new
Parade System
not Responding
on why
Low Air

very hot, mint on it.

Flake 3rd shift Log.

- 11:00a Clean up walk started.
- 11:40a Press Alarm, Low Thermal Oil, Adjusted setpoint
- 12:31a Roll Res in hopper, Truck Late.
- 12:31 started inspections Rounds @ WWTP. Looking seal on Pump.
- 12:45 Moisture Check on Flake outfeed, to 70.
- 12:48a Moisture Check on Flake outfeed, to 70.
- 1:00a Low Air Flow on Core Dayer., Reset Alarm.
- 1:15a Started Clean up @ Green end.
- 1:30 Core Flake high Vibration Alarm. Called maint.
- 2:10a Purge Core Plug. All stop, Called maint.
- 2:22a Core Dayer Clean up.
- 2:50a Core Cyclone Alarm. Called maint.
- 3:10a Lost end of material. Called maint.
- 3:20a Surface well. Flake to purge, more necessary
- 3:22a Flake to purge, more necessary
- 3:30a Flake to purge, more necessary
- 3:36a Flake to purge, more necessary
- 3:42a Safety Low Temp Alarm. Reset & Called maint.
- 3:46a Still not vibrating. Removed obstruction / Restarted
- 3:55a Melt started.
- 4:01a Multiphase Vibration Alarm. Reset & Called maint.
- 4:15a Core Dayer on Foaming Data. RTO's ok but no DATA
- 4:40a MANT on Core Dayer. No Problems discovered
- 5:00a Finkers Aired us that Finkers will be down a while 7AM
- 6:55a Core Dayer. Projected upturn 7AM
- 7:08a Product Lack online.
- 7:10a Enviro 446, Actual 250K. Boffl.
- 7:15a Shift
- 7:20a Bnd
- 7:25a over.

Lets take a look



Industry 4.0

**Driving Operational Results
Through Digitization**

WISH LIST

Better tracking of “memos”



File Message Help Mimecast Tell me what you want to do

Delete Archive Reply Reply All Forward Quick Steps Move Assign Policy Tags Editing Read Aloud Zoom

Wed 4/24/2019 8:15 PM

DP

Dillon Perera

Insight Training - Every Friday during May

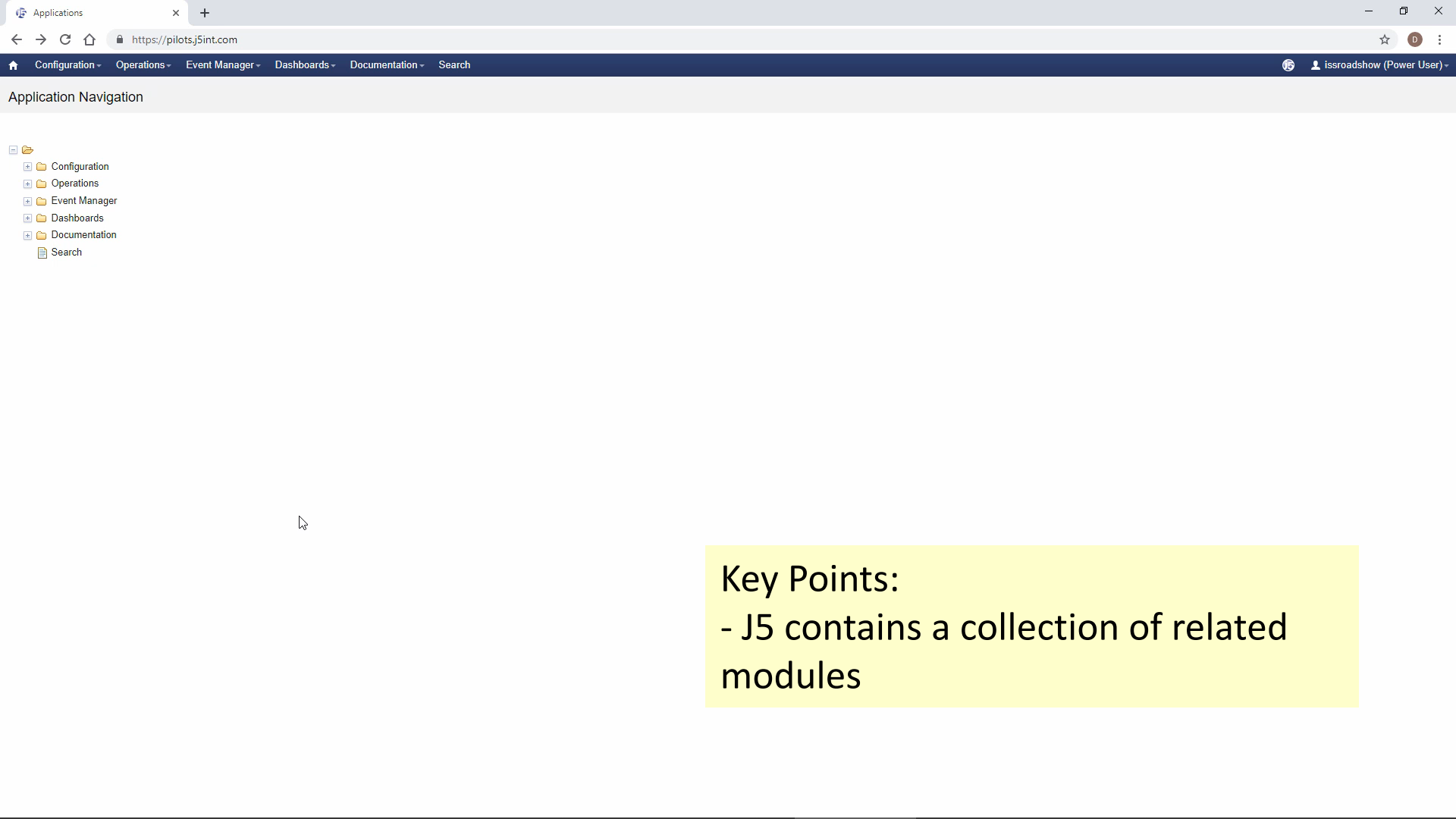
To

Team,
We will be holding training sessions each Friday during May on our new tool Aveva Insight.
You are required to signup for a session via the training department calendar.

Please reply back with an "Ok" so that I know you've read this email.







Dillon Perera | InSource Solutions | System Consultant
704.897.1451 (direct) | dperera@insourcess.com | www.insource.solutions

[Driving Operational Results thru Digitization Roadshow: Register Now](#)



Key Points:
- J5 contains a collection of related modules

Application Navigation

- 📁  Configuration
- 📁  Operations
- 📁  Event Manager
- 📁  Dashboards
- 📁  Documentation
- 📄  Search



STANDING ORDERS
Standing Orders > Adding...

Detail Acknowledged By

ADDING

Site	InSource Manufacturing	<div style="border: 1px solid #ccc; padding: 5px;"> <p>I 10pt B <i>I</i> <u>U</u> [List Icons] [Text Color] [Background Color]</p> <p style="text-align: center;">I</p> </div>	Target Group(s)	<input type="button" value="Select All"/> <input type="button" value="Select None"/> <input type="button" value="Invert Selection"/> <input type="checkbox"/> Engineer <input type="checkbox"/> Manager <input type="checkbox"/> Operator <input type="checkbox"/> Power User <input type="checkbox"/> Supervisor	
Section	-		Created By	ISSRoadshow Pow	
Area	-		Status	Preparing	
Unit	-		Acknowledge		
Start Time	04/17/2019 18:58:14				
End Time					
Acknowledgement Renewal Period	<input type="text"/> Hours				
Attachment	<ul style="list-style-type: none"> Add an attachment... 				
Email Target Group(s) on Activation?	<input checked="" type="checkbox"/> Yes	Email Distribution List on Activation	<input type="text"/>	Reminder Email	<input type="text"/>

Standing Orders

https://pilots.j5int.com/logbook_standard/view/standing_orders#Lv01/standing_orders

Configuration - Operations - Event Manager - Dashboards - Documentation - Search

issroadshow (Po)

STANDING ORDERS

Standing Orders > Adding...

Detail Acknowledged By

ADDING

Site	InSource Manufacturing	<p>10pt B I U</p> <p>Mandatory training will be held for Supervisors and Engineers on Aveva Insight.</p> <p>Please sign up for one of the sessions.</p> <p>Sessions will be held each Friday during the month of May.</p>	Target Group(s)	<input type="button" value="Select All"/> <input type="button" value="Select"/>	
Section	-		<input type="checkbox"/> Engineer <input type="checkbox"/> Manager <input type="checkbox"/> Operator <input type="checkbox"/> Power User <input type="checkbox"/> Supervisor		
Area	-		Created By	ISSRoadshow Pow	
Unit	-		Status	Preparing	
Start Time	04/17/2019 18:58:14		Acknowledge		
End Time					
Acknowledgement Renewal Period	<input type="text"/> Hours				
Attachment	<ul style="list-style-type: none"> Add an attachment... 				
Email Target Group(s) on Activation?	<input checked="" type="checkbox"/> Yes	Email Distribution List on Activation	-	Reminder Email	



	<p>Target Group(s)</p>	<p>Select All Select None</p> <p>Invert Selection</p> <ul style="list-style-type: none"><input checked="" type="checkbox"/> Engineer<input type="checkbox"/> Manager<input type="checkbox"/> Operator<input type="checkbox"/> Power User<input checked="" type="checkbox"/> Supervisor
	<p>Created By</p>	<p>ISSRoadshow Power User</p>
	<p>Status</p>	<p>Preparing ▾</p>
	<p>Acknowledge</p>	

Standing Orders

Filters Deleted Rows Search

Simple Advanced Clear Filters Site - Section - Area - Unit - Status -

+ Add	Area	Order	Attachment	Acknowledge	Status [▲]	Acknowledged
	InSource Manufacturing	Mandatory training will be held for Supervisors and Engineers on Aveva Insight. Please sign up for one of the sessions. Sessions will be held each Friday during the month of May.		<input type="button" value="Acknowledge"/>	Active	<input type="text" value="0 / 8"/>
	InSource Manufacturing > Davidson OSB Plant	Standing Order pertains to keeping the 2019 Roadshow on track (I know we can do it!) Please sign in and acknowledge when you have time available. Thanks - j5 internal Administrator		<input type="button" value="Acknowledge"/>	Active	<input type="text" value="0 / 7"/>

Lets take a look



Industry 4.0

**Driving Operational Results
Through Digitization**

WISH LIST

Better tracking of “memos”









Scheduling of recurring tasks

3rd Shift Log.

- 11:30A Clean up walk started.
- 11:42A Press Alarm, Low Inertial Oil, Adjusted setpoint
- 12:31A Refill Resin hopper, Truck Late.
- 12:31 Started inspection rounds @ WWTP. Looking seal on Pump. Notified maint.
- 12:45 Moisture check on Flaker outfeed. 64%
- 12:48A Low Air Flow on Core Dryer., Reset Alarm.
- 1:00A Snyder Trip. Maint Reset and seems ok.
- 1:15A Started Clean up @ Green end.
- 1:30 Core Flaker High Vibrations Alarm. Called maint.
- 1:30 Core Dryer Plug. All stop. Called maint.
- 2:10A Purge Core Dryer. Too many flakes to purge, more necessary
- 2:22A Core Cyclone Clean up.
- 2:50A Core Dryer Back online (Down 1:20min)
- 3:10A Lost environmental. Data. Called Automation Team.
- 3:20A Surface Debraker Jam, removed obstruction / Restored
- 3:28A Wellons Furnace Low Temp Alarm: Reset
- 3:30A Flaker high vibrations alarm, reset & called maint.
- 3:42A Safety walk started.
- 3:46A Still no environmental data. RTU's ok but no data
- 3:55A Metal Detect on Forming Belt. No Problems discovered
- 4:01A Multiple Fire Detects on Core Dryer. Greycon Activated
- 4:15A Core Flaker Down. Notified maint.
- 4:40A Maint notified us that Flaker will be down a while 7AM predict.
- 5:00A Flakers still Down. Projected up time 7AM

Application Navigation

- 📁  Configuration
- 📁  Operations
- 📁  Event Manager
- 📁  Dashboards
- 📁  Documentation
- 📄  Search



Work Planning

Filters Deleted Rows Search Export

Simple Advanced Clear Filters Status Work Category Schedule Type Site Section Inspection Rounds Templates Current Plans

+	Add	Start Time	Finish Time	Work Category	Description	Status	Action
		04/24/2019 15:00		Regular Work	Perform Safety Walk	Released	Disable Work
		04/17/2019 11:15		Regular Work	Perform Cleanup walk.	Released	Disable Work





Work Planning











Filters Deleted Rows Search

Simple Advanced Clear Filters Status Work Category Schedule Type Site Section Inspection Rounds Templates Current Plans

	Start Time	Finish Time	Work Category	Description	Status	Action
			Regular Work	Perform Safety Walk	Released	<button>Disable Work</button>
	04/17/2019 11:15		Regular Work	Perform Cleanup walk.	Released	<button>Disable Work</button>

ADDING  Cancel  Save

Work Description

Plan/Template Site Section Area Unit Work Category Assigned Group IndustraForm  I_x 10pt B I U            A A

Perform Security Walk


Form Version

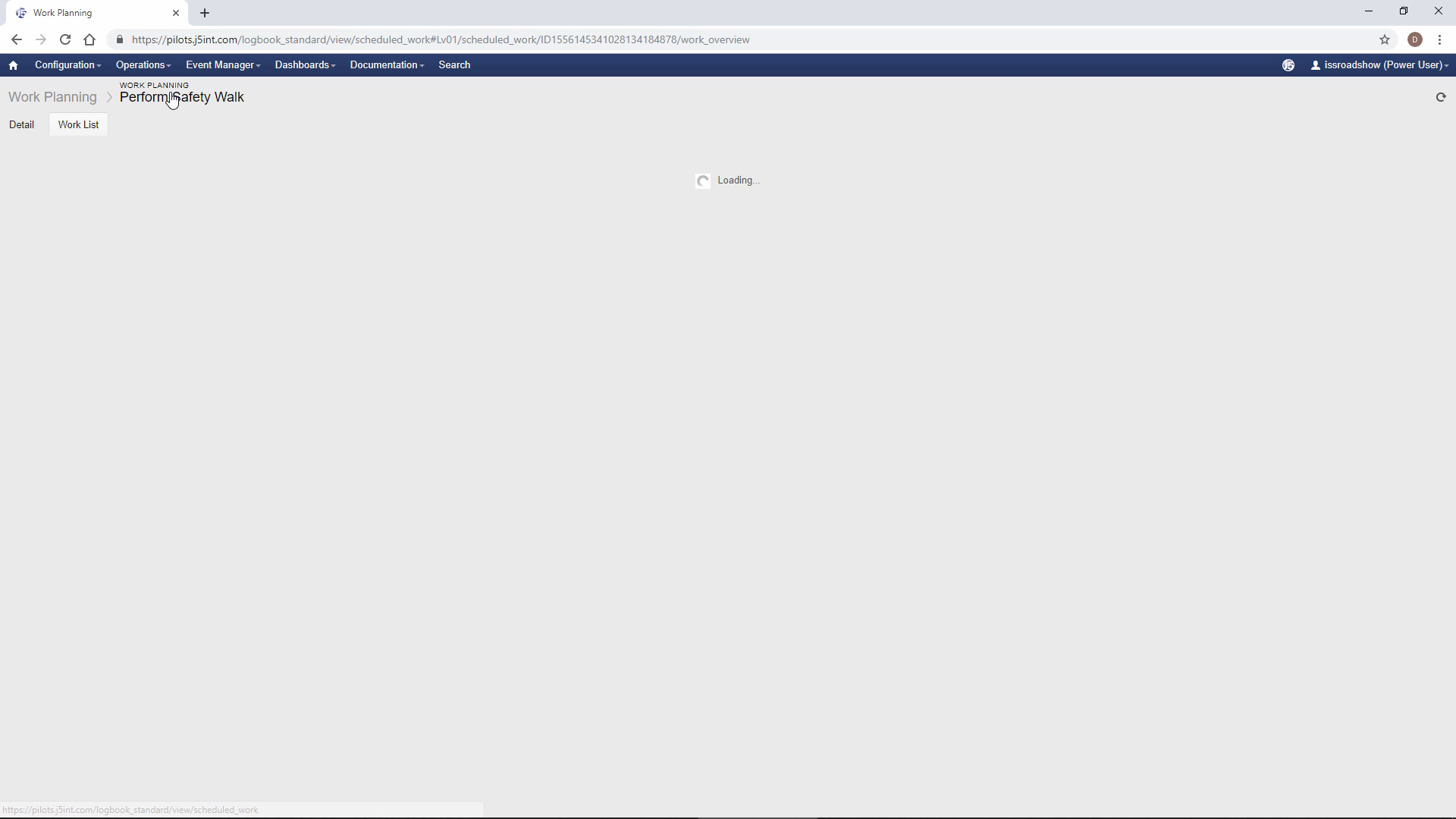
Schedule Description

Schedule Type

Work Description			
Plan/Template	Plan	Perform Security Walk	
Site	InSource Manufacturing		
Section			
Area			
Unit			
Work Category	Regular Work		
Assigned Group	Supervisor		
IndustraForm	-	Form Version	
Schedule Description			
Schedule Type	Simple		
Start Time	04/24/2019 06:00		
Finish Time			
Timezone	America/New_York		
Repeat Every	8	Hours	
Duration(h)	1		

Tasks

 Add	Task #	Description	Attachment



Lets take a look



WISH LIST

Better tracking of “memos”



Scheduling of recurring tasks



Digitized operator log entries

Industry 4.0

**Driving Operational Results
Through Digitization**

A dark, industrial-themed background image showing a factory floor with blue and yellow lighting, suggesting a modern manufacturing environment.

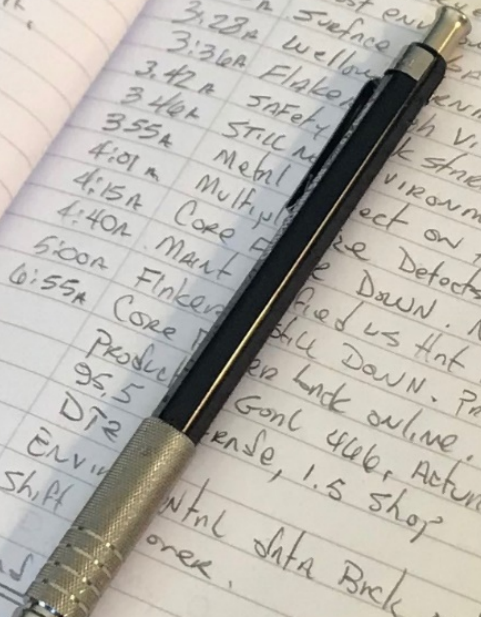
Waste using of
Flake Vibration?
X2 once several
Days.

Training on new
Parade System
not Responding
on why
Low Air

very hot, mint on it.

flakes 3rd shift log.

- 11:00a Clean up walk started.
- 11:40a Press Alarm, Low Thermal Oil, Adjusted setpoint
- 12:31a Roll Resin hopper, Truck Late.
- 12:31 started inspections Rounds @ WWTP. Looking seal on Pump.
- 12:45 Moisture Check on Flake outfeed, to 49.
- 12:48a Moisture Check on Flake outfeed, to 49.
- 1:00a Low Air Flow on Core Dayer., Reset Alarm.
- 1:15a Started Clean up @ Green end.
- 1:30 Core Flake high Vibration Alarm. Called maint.
- 2:10a Purge Core Dayer plug. All stop, Called maint.
- 2:22a Core Dayer Clean up.
- 2:50a Core Dayer Clean up.
- 3:10a Lost end of material. Called maint.
- 3:20a Surface well. Flake outfeed. Data (Down 1:20am).
- 3:22a Flake outfeed. Data (Down 1:20am).
- 3:30a Safety Low Temp Alarm. Removed obstruction / Restarted
- 3:40a Still not vibrating. Alarm. Reset & Called maint.
- 3:55a Melt on Foaming Data. RTO's ok but no DATA
- 4:01a Multiphase detected. Alarm. Reset & Called maint.
- 4:15a Core Dayer. Alarm. Reset & Called maint.
- 4:40a MANT on Foaming Data. RTO's ok but no DATA
- 5:00a Finkers. Alarm. Reset & Called maint.
- 6:55a Core Dayer. Alarm. Reset & Called maint.
- 7:08a Product. Alarm. Reset & Called maint.
- 7:10a DTI. Alarm. Reset & Called maint.
- 7:10a Env. Alarm. Reset & Called maint.
- 7:10a Shift. Alarm. Reset & Called maint.
- 7:10a Bad. Alarm. Reset & Called maint.



4/23/13

3rd shift Log.

3

11:30A Clean up work started.

11:42A Press Alarm, Low Thermal Oil, Adjusted setpoint

12:31A Refill Resin hopper. Truck Late.

12:31 Started inspection rounds @ WWTP. Looking seal on Pump. Notified MAINT.

12:45 Moisture check on Flaker outfeed. 64%.

12:48A Low Air Flow on Core Dryer

1:00A Sander Trip. MAINT

1:15A Started Clean up @ Green end.

1:30 Core Flaker High Vibration Alarm. Called MAINT.

1:30 Core Dryer Plug. All Stop. Called MAINT.

2:10A Purge Core Dryer. Too many flakes to purge. More necessary

Problems with this log entry:

- 1) Which resin tank?
- 2) When did it occur?
- 3) Who wrote this?



Application Navigation



+ Configuration

Operations

Operations Logbook

Shift Handover

Standing Orders

Work List

Work Planning

+ Event Manager

+ Dashboards

+ Documentation

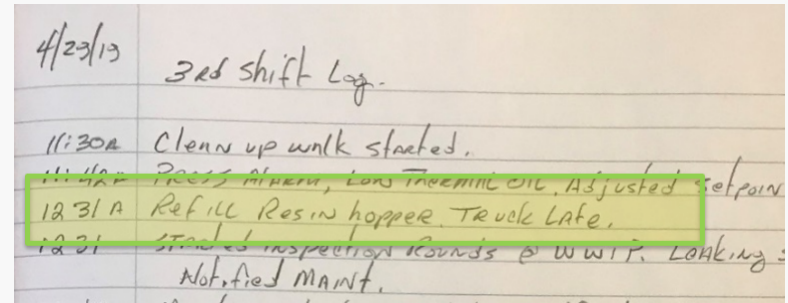
Search

Operations Logbook

Filters List Timeline Calendar Deleted Rows Search Export

Simple Advanced Clear Filters Event Time Category Status Priority Site Section Saved Filters

+ Add Event Time Area Category Message Status Notes



Operations Logbook > OPERATIONS LOGBOOK
Adding...

Detail

ADDING Cancel Save

Event Time 04/24/2019 12:41:33

Status Closed

Category -

-

Priority







Site InSource Manufacturing

Section -

Area -

Unit -

Equipment ...

Ix 10pt **B** *I* U       A **A**

Refill resin hopper. Truck Late.

Detail

ADDING Cancel Save

Event Time	04/24/2019	12:41:33
Status	Closed	
Category	-	
Priority		
Site	InSource Manufacturing	
Section	Davidson OSB Plant	
Area	Blending	
Unit	-	
Equipment	Resin Tank for the Core Blender <input type="button" value="..."/>	
IndustraForm		
Add to Handover Report	<input checked="" type="checkbox"/> Yes	
Attachment	<ul style="list-style-type: none">Add an attachment ...	

Ix 10pt **B** *I* U A **A**

Refill resin hopper. Truck Late.



Predefined Messages

Detail

ADDING Cancel Save

Event Time	04/24/2019	12:41:33
Status	Closed	
Category	Operations	
	-	
Priority		
Site	InSource Manufacturing	
Section	Davidson OSB Plant	
Area	Blending	
Unit	-	
Equipment	Resin Tank for the Core Blender ...	
IndustraForm		
Add to Handover Report	<input checked="" type="checkbox"/> Yes	
Attachment	• Add an attachment ...	

Ix 10pt **B** *I* U A

Refill resin hopper. Truck Late.



Predefined Messages

Operations Logbook

https://pilots.jsint.com/logbook_standard/view/general_logbook?#Lv01/general_logbook

Configuration - Operations - Event Manager - Dashboards - Documentation - Search

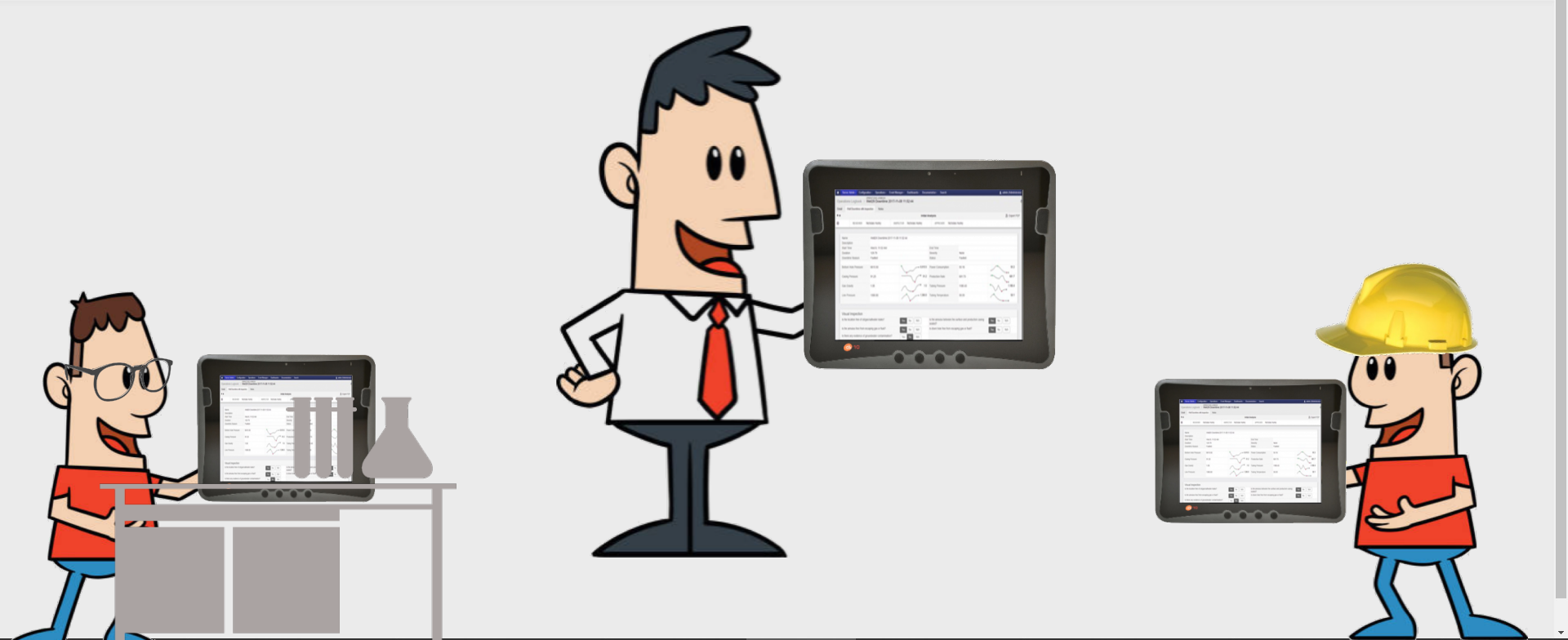
isroadshow (Power User)

Operations Logbook

Filters List Timeline Calendar Deleted Rows Search

Simple Advanced Clear Filters Event Time Category Status Priority Site Section Saved Filters

+	Add	Event Time	Area	Category	Message	Status	Notes
🗑️ ✏️		04/24/2019 12:41	InSource Manufacturing > Davidson OSB Plant > Blending	Operations	Refill resin hopper. Truck Late.	Closed	



Lets take a look



Industry 4.0

**Driving Operational Results
Through Digitization**

WISH LIST

Better tracking of “memos”



Scheduling of recurring tasks



Digitized operator log entries



Automatic data entry for logs

4/23/13

3rd shift Log.

11:30A Cleanup walk started

11:42A PRESS ALARM, Low Thermal Oil Adjusted setpoint

12:31A Refill Resin hopper. Truck Late.

12:31 started inspection Rounds @ WWTP. Looking seal on Pump.
Notified Maint.

12:45 Moisture check on Flake outfeed. 64%.

12:48A Low Air Flow on Core Dryer. Reset Alarm.

1:00A Sander Trip. Maint Reset and seems ok.

1:15A started Cleanup @ Green end.

1:30 Core Flake High Vibrations Alarm. Called Maint

1:30 Core Dryer Plug. All stop. Called Maint.

2:10A Turge Core Dryer. Too many Flakes to purge. More necessary

2:22A Core Cyclone Cleanup.

2:50A Core Dryer Back online (Down 1:20min).

3:16A Lost environmental. DATA. Called Automation Team.

3:20A Surface Debraker Jam, Removed obstruction / Restored

4/23/13

3rd shift Log.

11:30A Clean up walk started.

11:42A PRESS ALARM, Low THERMAL OIL Adjusted setpoint

12:31A Refill Resin hopper. Truck Late.

12:31 started inspecting Pump @ WWTP. Looking SEAL on Pump. Notified MAINT

12:45 Moisture Check outfeed. 64%

12:48A Low Air Flow dryer., Reset ALARM.

lid Sander Top. and seems ok.

1:15 started Clean end.

1:00 Core Flaker ALARM. Called MAINT.

1:30 Core Dryer plug. ALL STOP. Called MAINT.

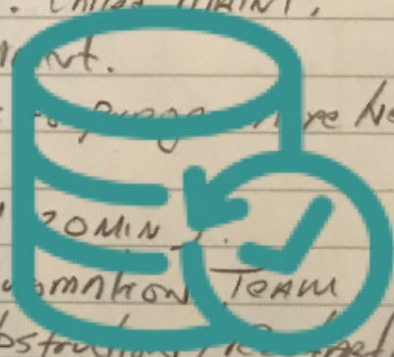
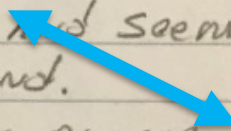
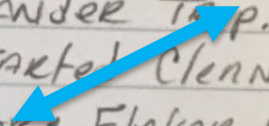
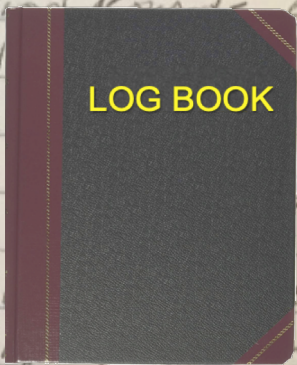
2:00 Core Dryer. Too many Flakes plug. more necessary

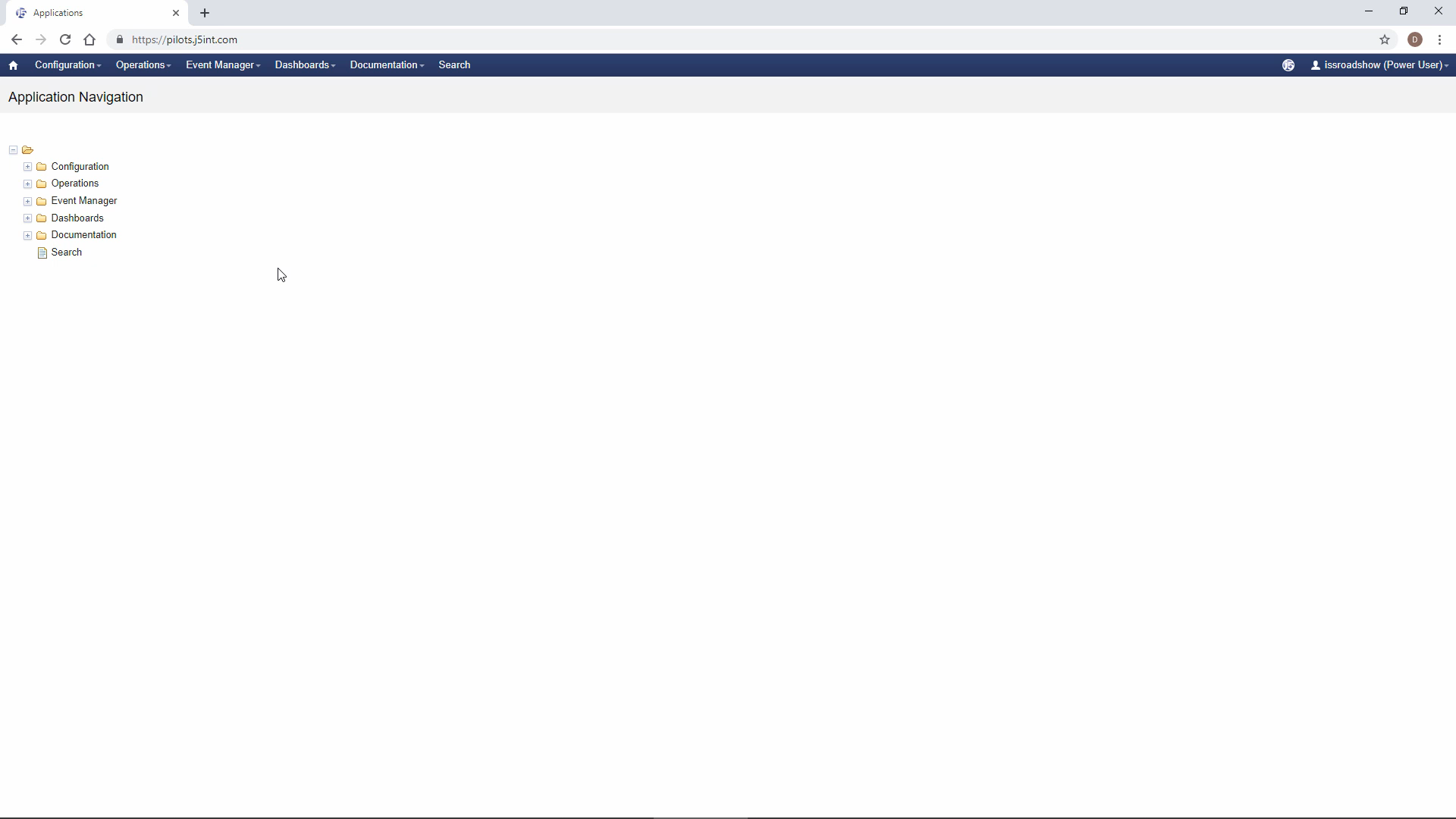
2:00 Core Cyclone CLEAN UP.

2:00 Core Dryer BACK online (DOWN 120MIN)

3:00 Lost environmental. DATA. Called Automation TEAM

3:00 Surface Debraker Jam, Removed obstruction, re started





Application Navigation

- 📁 Configuration
- 📁 Operations
- 📁 Event Manager
- 📁 Dashboards
- 📁 Documentation
- 📄 Search





Application Navigation



Configuration

Operations

Event Manager

Events

Tag Watch List

Dashboards

Documentation

Search



TAG WATCH LIST

Tag Watch List > Adding...

Detail Events (0)ADDING Cancel Save

Tag	<input type="text"/>	Description	<input type="text"/>
Variable Type	- <input type="text"/>		<input type="text"/>
Datasource	- <input type="text"/>		<input type="text"/>
Datasource Tag	<input type="text"/>		<input type="text"/>
UOM	<input type="text"/>		<input type="text"/>
Monitoring Strategy	Poll <input type="text"/>		<input type="text"/>
Target Polling Frequency	5 minutes <input type="text"/>		<input type="text"/>
			<input type="text"/>



ne Core Resin Tank.

Site	InSource Manufacturing ▾
Section	- ▾
Area	- ▾
Unit	- ▾
Monitoring Enabled?	Disabled
Target Form	▾
Aggregate Period (minutes)	60
Corrective Actions	



[Configuration](#) ▾[Operations](#) ▾[Event Manager](#) ▾[Dashboards](#) ▾[Documentation](#) ▾[Search](#)

Application Navigation

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Operations Logbook

Filters List Timeline Calendar Deleted Rows Search

Simple Advanced Clear Filters Event Time Category Status Priority Site Section Saved Filters

	Event Time	Area	Category	Message	Status	Notes
	04/24/2019 15:13		Production	Aggregate Event Information for tag: Core Resin Tank Level The following states were visited during the aggregate period: Standard Low, Target Low, Standard Low, Critical Low To view the Tag Watch List entry for these events, click here .	Open	
	04/09/2019 12:31	Davidson OSB Plant	Production	Refill resin hopper. Truck late.	Closed	
	04/09/2019 12:31	Davidson OSB Plant	Production	Refill resin hopper. Truck Late.	Closed	
	04/08/2019 20:15		Production	Line up around blender. Someone told the new hires that it makes smoothies.	Closed	
	04/08/2019 20:00		Production	Former (core) went down for maintenance.	Closed	
	04/08/2019 19:00		Production	All quiet, running normally.	Closed	
	04/08/2019 17:07		Production	Primary cyclone High delta pressure, 15"	Closed	
	04/08/2019 16:00		Production	Press Hydraulics low pressure. 1800 Bar. Reset.	Closed	
	04/08/2019 15:50		Production	Screen Reject. Dump.	Closed	
	04/08/2019 15:45		Production	Dryer fire. Greycon corrected.	Closed	

Lets take a look



Industry 4.0

**Driving Operational Results
Through Digitization**

WISH LIST

Better tracking of “memos”



Scheduling of recurring tasks



Digitized operator log entries



Automatic data entry for logs



Easily review past log entries

Operations Logbook

Filters | List | Timeline | Calendar | Deleted Rows Search Export

Simple | Advanced | Clear Filters | Event Time | Category | Status | Priority | Site | Section | Saved Filters

	Event Time	Area	Category	Message	Status	Notes
	04/24/2019 12:41	Davidson OSB Plant > Blending	Operations	Refill resin hopper. Truck Late.	Closed	



Operations Logbook

Filters | List | Timeline | Calendar | Deleted Rows | Search

Simple | Advanced | Clear Filters | Event Time | Category | Status | Priority | Site | Section | Saved Filters

<< < 04/07/2019 00:00 - 04/09/2019 00:00 > >>

Mon 8 April

15:10	15:20	15:30	15:40	15:50	16:00	16:10	16:20	16:30	16:40	16:50	17:00	17:10	17:20	17:30	17:40	17:50	18:00	18:10	18:20	18:30	18:40	18:50	19:00
		• Crane down due to ca... Closed		• Press Hydraulics low... Closed							• Primary cyclone High... Closed		• John and Tom called ... Closed			• ESP went down for an... Closed						• Break time... Clos	
		• Dryer fire. Greycon... Closed		• Screen Reject. Dump.... Closed		• Safety Walk started.... Closed							• Contractors ran over... Closed			• R&D wants to run a t... Closed					• Strapper needs new b... Closed		• All q
															• Contractors need ass... Closed								

Event Time	04/08/2019 15:50
Category	Production
Message	Screen Reject. Dump.
Status	Closed
Notes	
View full entry	

Lets take a look



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Better communication between shifts

On average, Shift-Handovers consume only 5% of Operations Time

Done poorly, they can be responsible for up to 40% of incidents



Application Navigation

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-  Event Manager
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-  Search



SHIFT HANDOVER

Shift Handover > Day - Apr 27, 2019 - OSB Plant - Handover Re... < >

[Summary](#) [InSource OSB Handover](#) [OSB Plant - Handover Report....](#) [Operations Logbook \(1\)](#) [Shift Crew](#) [Work List \(20+\)](#) [Stand...](#)INCOMING
SUPERVISOR

Daniel London

OUTGOING
SUPERVISOR

Dillon Perera

Shift Supervisor Handoff Report

Status	Underway	Handover Start
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Shift Summary Comments

|

I

Unit

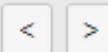
Target

Actuals



SHIFT HANDOVER

Shift Handover > Day - Apr 27, 2019 - OSB Plant - Handover Re...

[Summary](#) [InSource OSB Handover](#) [OSB Plant - Handover Report....](#) [Operations Logbook \(1\)](#) [Shift Crew](#) [Work List \(20+\)](#) [Stand...](#)INCOMING
SUPERVISOR

Daniel London

OUTGOING
SUPERVISOR

Dillon Perera

Shift Supervisor Handoff Report

Status	Underway	Handover Start
--------	----------	----------------

Shift Summary Comments

Did not meet production, overall a really bad day.



Unit

Target

Actuals



SHIFT HANDOVER

Shift Handover > Day - Apr 27, 2019 - OSB Plant - Handover Re... < >

[Summary](#) [InSource OSB Handover](#) [OSB Plant - Handover Report.....](#) [Operations Logbook \(1\)](#) [Shift Crew](#) [Work List \(20+\)](#) [Standing Orders](#)INCOMING
SUPERVISOR

Daniel London

OUTGOING
SUPERVISOR

Dillon Perera

Shift Supervisor Handoff Report

Status	Underway	Handover Start	04
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Shift Summary Comments

Did not meet production, overall a really bad day.

	Unit	Target	Actuals
Boards Produced	Bdft	466000	249648

Refresh Data

04/27/2019 09:00



Handover Finish



371.0

Comments

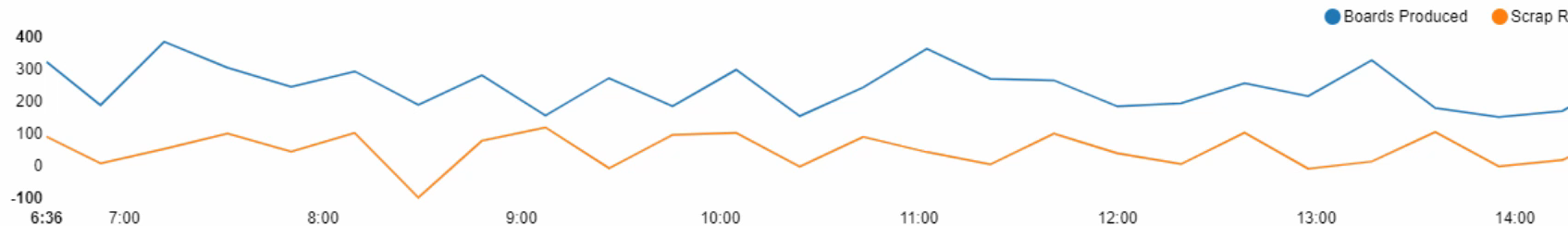
Dryer and Flaker went out, causing reduced production.



[Show Notes/Flags \(0\)](#)[Add a note or flag](#)

Process History

Production Rates



Description	Tag Number	Unit	Target	Actuals	Remarks	
NN feed to D-1132	FIC100	Kg/Hr	0	54.57	40.5	<input type="text"/>
NN feed to D-1133 outlet	FRQ60	Kg/Hr	500	300	300.0	<input type="text"/>
K-1134 Top Pressure	FT001	barg	1.58	105.74	102.9	<input type="text"/>
Top Temperature	OK100	Deg C	94	5.84	4.9	<input type="text"/>
K-3243Top Pressure	PL033	barg	0.19	10.25	10.1	<input type="text"/>
Top Temperature	TU131	Deg C	83	19.1	9.7	<input type="text"/>
M-1221 Water Analyzer	WT03	%	3,0	<input type="text"/>	<input type="text"/>	<input type="text"/>
K-2389 Cold feed to K2311	T337	Kg/Hr	Hold High	<input type="text"/>	<input type="text"/>	<input type="text"/>
K-564 Underflow to K2323	OK100	Kg/Hr	Hold High	<input type="text"/>	<input type="text"/>	<input type="text"/>
K-7654 Tray 2 Temperature	J5100	Deg C	Hold High	<input type="text"/>	<input type="text"/>	<input type="text"/>

[Show Notes/Flags \(0\)](#)[Add a note or flag](#)

Shift Handover > Day - Apr 27, 2019 - OSB Plant - Handover Re... < >

Summary | InSource OSB Handover | OSB Plant - Handover Report... | Operations Logbook (1) | Shift Crew | Work List (20+) | Standing Orders

	INCOMING SUPERVISOR	Daniel London	OUTGOING SUPERVISOR	Dillon Perera
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Shift Supervisor Handoff Report

Status	Underway	Handover Start	04/27/2019 09:00	Handover Finish	
Shift Summary Comments					
Did not meet production, overall a really bad day.					
Boards Produced	Unit	Target	Actuals	Comments	
	Bdft	466000	249648	Dryer and Flaker went out, causing reduced production.	
Show Notes/Flags (0)		Add a note or flag		Please complete all required inputs. Highlight required inputs Submit	

Log Entries

Time	Category	Message	Status	Escalate
04/16/2019 11:52	Operations_ISSRoadshow	No real problems - wanted to see if you are reading this	Open	<input type="checkbox"/>

Show Notes/Flags (0) | Add a note or flag | Submit

Task List

Operational Tasks							
Planned Start Time	Area	Description of Work	Assigned Group	Category	Due	Status	
04/26/2019 12:05	Davidson OSB Plant	Do some wood work	Operator	Regular Work	Overdue	Awaiting Start	

Show Notes/Flags (0) | Add a note or flag | Submit

Process History

Production Rates	Boards Produced	Scrap Rate				
400						

SHIFT HANDOVER
Shift Handover > Day - Apr 27, 2019 - OSB Plant - Handover Re...

Summary | InSource OSB Handover | OSB Plant - Handover Report... | Operations Logbook (1) | Shift Crew | Work List (20+) | Standing Orders

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Shift Supervisor Handoff Report

Status	Underway	Handover Start	04/27/2019 09:00	Handover Finish	
Shift Summary Comments					
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Boards Produced	Unit	Target	Actuals	Comments	
	Bdft	466000	249648	Dryer and Flaker went out, causing reduced production.	

371.0

Show Notes/Flags (0) | Add a note or flag | Please complete all required inputs. | Highlight required inputs | Submit

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Process History

Production Rates

400						
-----	--	--	--	--	--	--

Boards Produced | Scrap Rate

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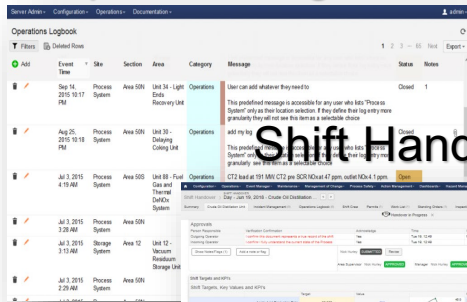


Better communication between shifts

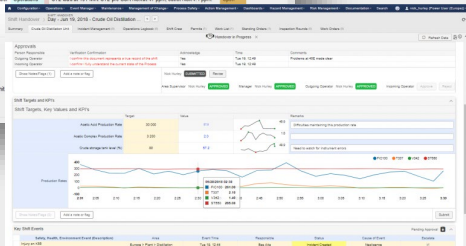


Summary – eLogging moves us toward digitization

Operator Logbook



Shift Handover



J5 international

- 1 Eliminates paper, Reduces Errors & Risk in Logbook & Shift handover
- 2 Establishes shift cadence by enforcing standards, methods, & work list
- 3 Mobile - anywhere, anytime | Frictionless Collects data from existing systems

