

## Upgrade Kits

John Bean Technologies Corporation is a leading supplier of integrated food processing solutions. From single machines to complete processing lines, we enhance value and capture quality, nutrition, and taste in food products.

The equipment's we produce are intelligent mechatronic systems capable of generating lots of data. With the years of industry knowledge and know-how, data that once was lost can now be converted to information to increase yield and throughput.

By adding iOPS® to any of the machines in your factory, data can continuously be collected and securely uploaded to the iOPS® cloud service for analysis.

This Cloud solution will help expose insights from disparate factory environment easily and efficiently to key stakeholders. Standardized OEE, shift analysis, GEO fencing, Camera analysis based on alarms, and predictive maintenance reports will help drive business success. The possibilities are truly endless with new analysis added and discovered weekly for continuous improvements

If the iOPS® logics detect failures or abnormalities in the system, a voice call will be sent via text, email, voice or custom reports. Such critical insights help the maintenance team resolve issues more efficiently with pinpoint diagnostics and ordering the right parts to execute repairs on time.

iOPS® is designed with the highest security standards and following the best industry practice. Therefore you can be confident that your data is secure from unauthorized access.

From connection to transmission and storage, all data is fully encrypted with two-factor authentication for data access. The iOPS® system is designed from ground up with security in mind.

### By adding an iOPS® gateway you will

- Have access to up-to-date status/performance reports
- Can request for customized reports
- Can detect wear in parts like filters, valves, motors, etcetera
- Can have alarms configured
- Triggers for OEE lowering wear

### Eventually, this will result in

- Reduce unexpected downtime
- Visible efficiency over time (day, week, month, year)
- Improved efficiency.

Please contact your JBT customer care manager for more information.



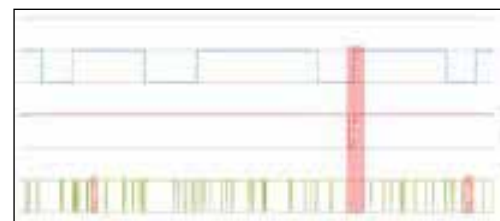
Overall current OEE values



Failure rates in sections of the machine



Production status over multiple lines



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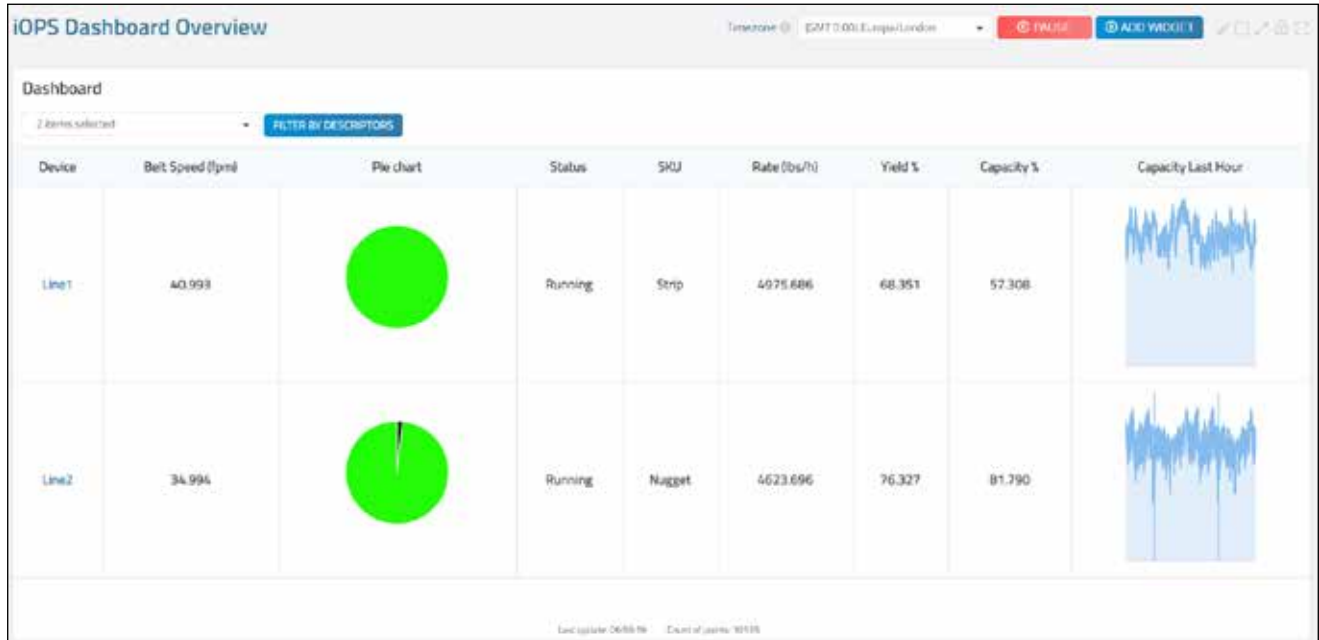
#### Ordering Information

As part of JBT's commitment to your success, our wide range of upgrade kits are designed to give you maximum return on your original investment through increased performance and service life.

Please contact [info.ams@jbt.com](mailto:info.ams@jbt.com) for more information or to request a quote.

All JBT kits are subject to software/system compatibility and may change without previous notice.

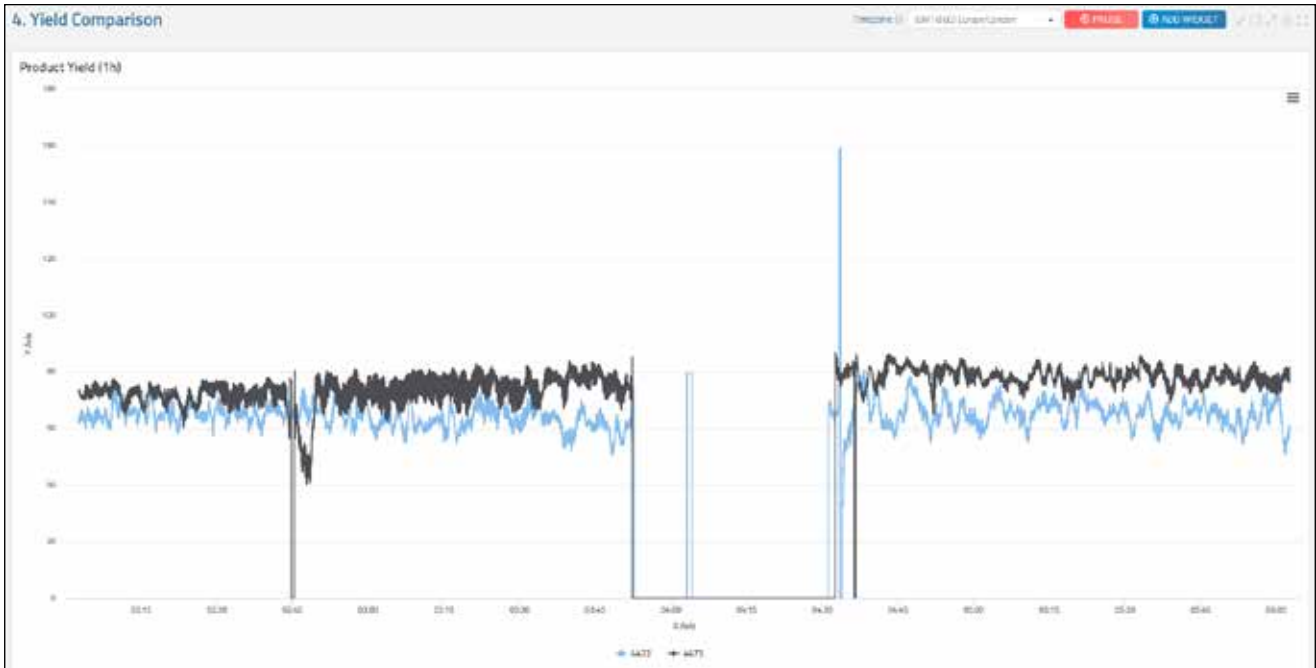
Dashboard overview multiple running machines



Detailed production summary



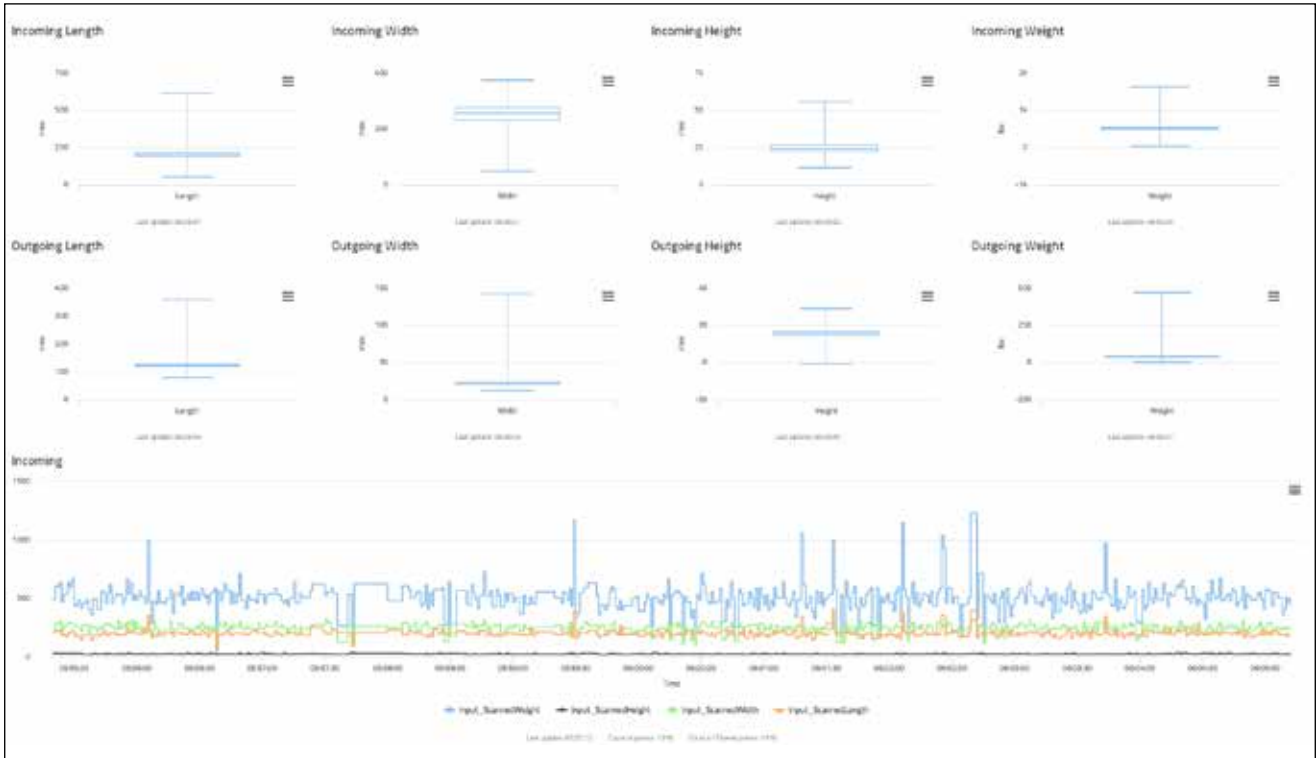
Detailed production yield in minutes



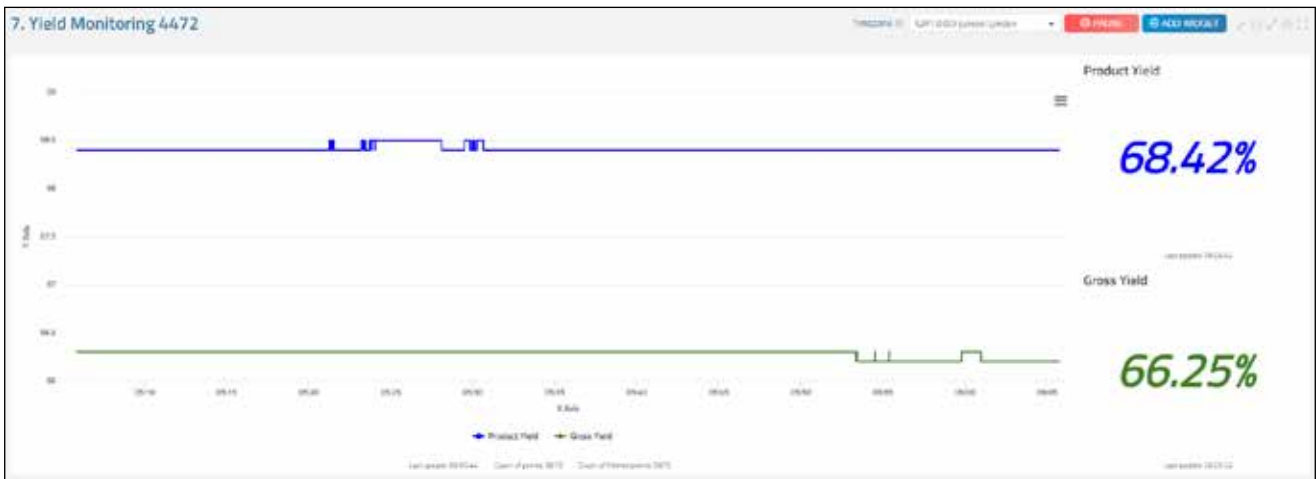
Actual machine status



Detailed 3d scan vision results



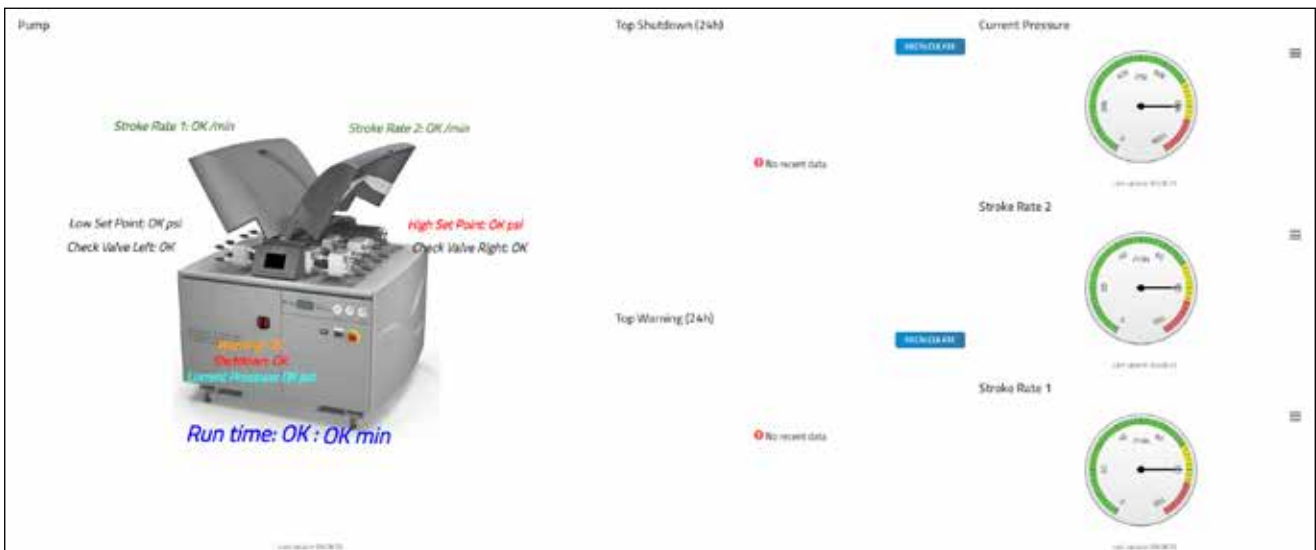
Production yield per minute



Detailed overview multiple sensors



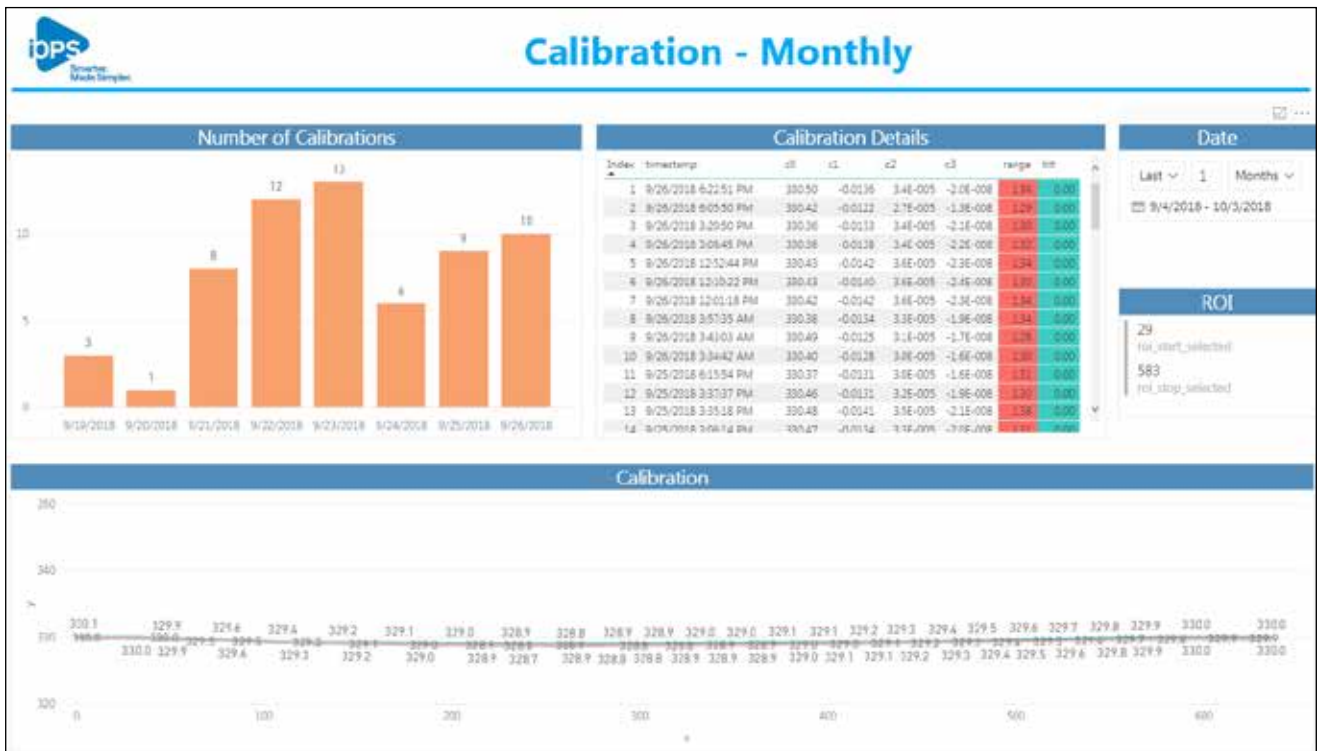
Current status machine



Server HW and performance monitoring



Calibration report



Active mobile vehicles location monitoring with GEO fencing

### Ranger Fleet

0 items selected FILTER BY DESCRIPTORS

Device	CDM	Engine On	Active Fault	Fuel Level (%)	Operate Mode	Location
R718021		0	0	36	0	Vegas
R716007		1	0	100	0	SEA-TAC
R715002		0	0	55	0	JBTtesttrack

Last update: 27/09/18 Count of points: 18

ALARMS ENGINE DATA INPUTS OUTPUTS TIMERS **COUNTERS** CUSTOM

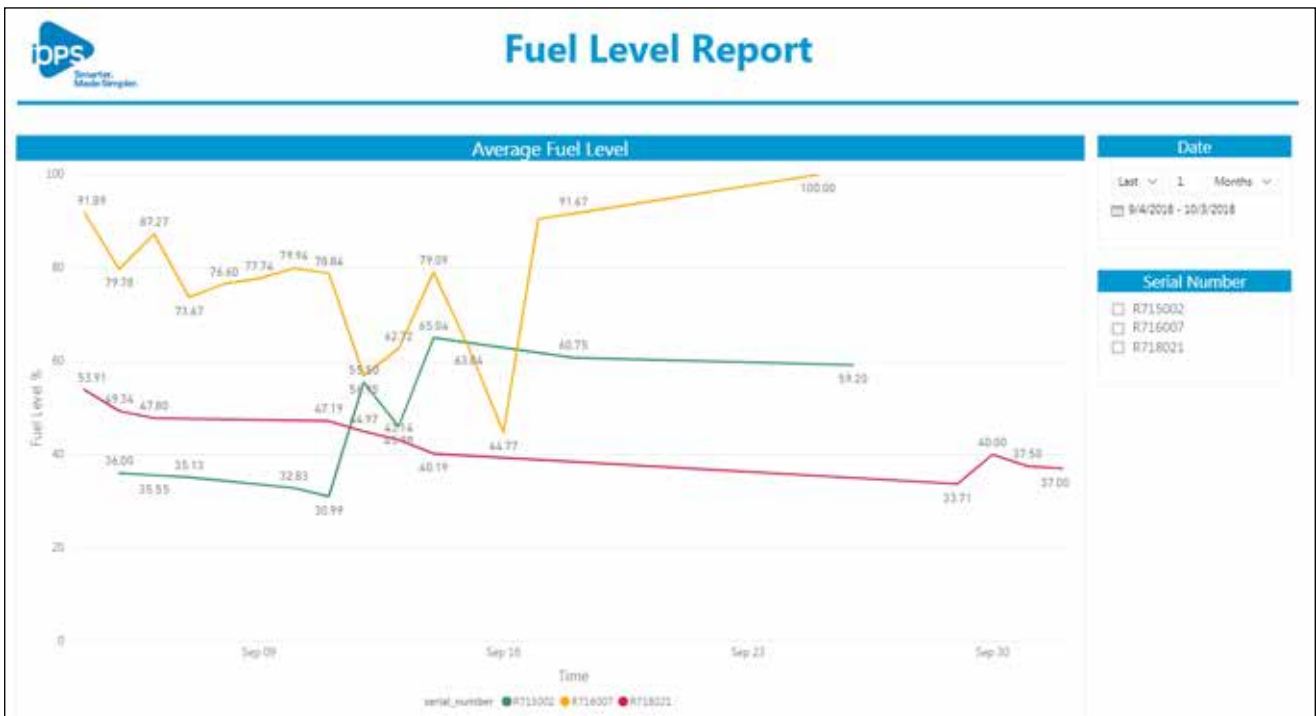
Search FILTER BY DESCRIPTORS

Tag	Value	Date
TR53_HydroOverTemp_analog_input_4-20mA	509	25/9/2018 17:27:43
MC0N4_EmergPumpOn_counter	5	25/9/2018 17:27:22
MCRO3_EnableActive_counter	512	25/9/2018 17:27:12
ES1_EngineStart_counter	246	25/9/2018 17:35:9
MS0L58_RightGuide_Monitor_counter	2885	25/9/2018 17:27:32
MCRO0_Alternator_counter	590	25/9/2018 17:34:39
PR3_ESTOP_Monitor_CAB_counter	802	25/9/2018 17:28:51
PR1_ESTOP_Monitor_MP_counter	811	25/9/2018 17:34:57
MS0L57_RearGuide_Monitor_counter	3607	25/9/2018 17:34:47

### Location (Last 24 Hours)

0 items selected FILTER BY DESCRIPTORS GEO FENCING LIVE MONITOR

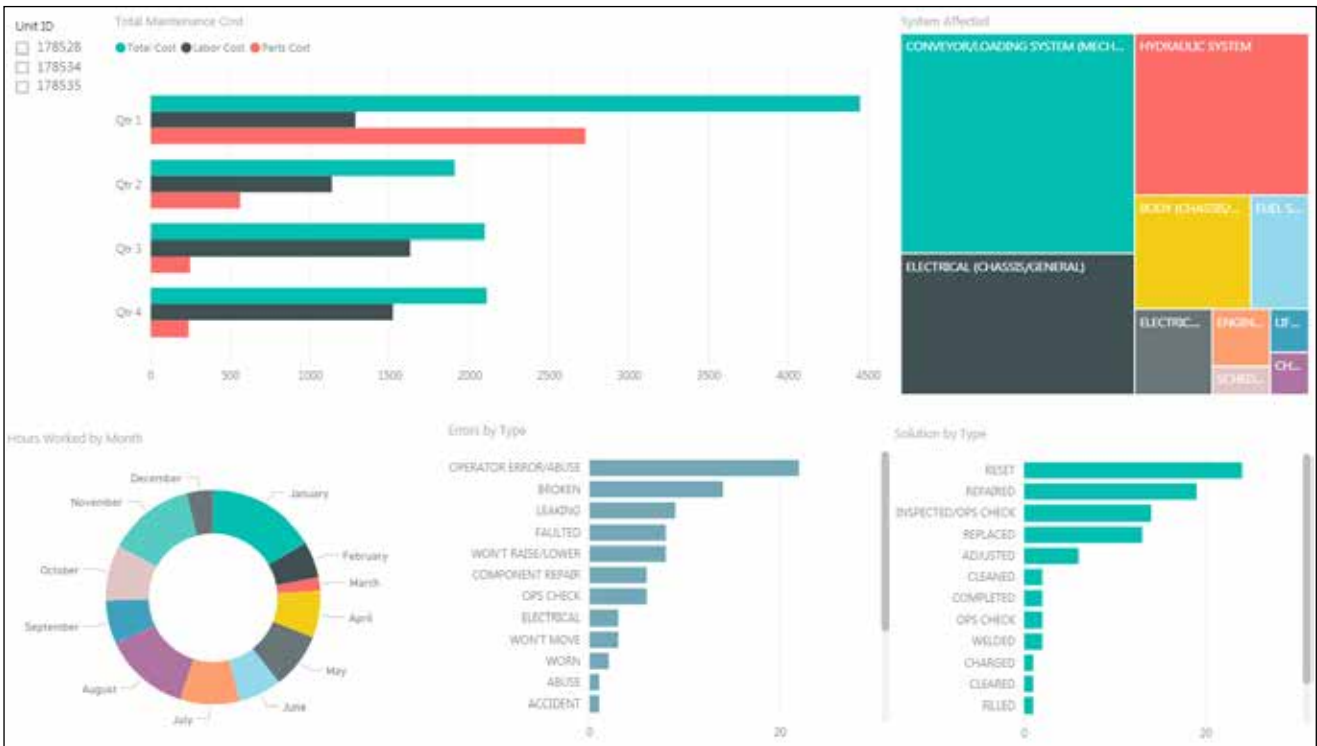
Machine Fuel Level Analysis



Most recent alarm overview

Start Relay Interlocks			Bridge Interlocks			Platform Interlocks		
START RELAY			CONVEY FORWARD			CONVEY AFT RAISE LOWER FORWARD STOP		
Tag ↓	Value ↓	Date ↓	Tag ↓	Value ↓	Date ↓	Tag ↓	Value ↓	Date ↓
CR13_EngineStop	1	26/9/2018 15:53:31	Engine On	0	26/9/2018 15:53:28	Engine On	0	26/9/2018 15:53:28
CR03_Enable	1	26/9/2018 15:19:8	PS3_StabsExtended	0	26/9/2018 15:19:9	PS3_StabsExtended	0	26/9/2018 15:19:9
TGS02_EngineStop	1	26/9/2018 15:53:29	TGS28_PropelReverse	0	26/9/2018 15:53:23	F075-PRS16 Plat Under 30°	0	26/9/2018 15:19:10
F133 TASS Hydraulic Oil Undr	0	26/9/2018 15:19:10	TGS28_PropelForward	0	26/9/2018 15:50:11	TGS28_PropelReverse	0	26/9/2018 15:53:23
TGS28_PropelReverse	0	26/9/2018 15:53:23	TGS30_DriveMode	1	26/9/2018 15:19:8	TGS28_PropelForward	0	26/9/2018 15:50:11
Last update: 15:53:31			Last update: 15:53:28			Last update: 15:53:28		
Propel Interlocks			Chassis Interlocks			Stabilizer Interlocks		
FORWARD REVERSE FAST SPEED PARK BRAKE			CHASSIS RAISE CHASSIS LOWER			EXTEND RETRACT		
Tag ↓	Value ↓	Date ↓	Tag ↓	Value ↓	Date ↓	Tag ↓	Value ↓	Date ↓
Engine On	0	26/9/2018 15:53:28	PRS15_PlatUnder24	1	26/9/2018 15:19:9	Engine On	0	26/9/2018 15:53:28
Drive Mode	0	26/9/2018 15:53:28	Engine On	0	26/9/2018 15:53:28	TGS28_PropelReverse	0	26/9/2018 15:53:23
F048 PRS1 Stab Input Disagr	0	28/2/2018 19:32:2	PRS11_CabRetracted	1	26/9/2018 15:19:8	TGS28_PropelForward	0	26/9/2018 15:50:11
F132 TASS Hydraulic Oil Undr	0	28/2/2018 19:31:53	TGS30_DriveMode	1	26/9/2018 15:19:8	TGS30_DriveMode	1	26/9/2018 15:19:8
TGS28_PropelForward	0	26/9/2018 15:50:11	Last update: 15:53:28			Last update: 15:53:28		

Full year analysis





Overall current OEE values

Machine: N.00765.01
?

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**Planned Production (non idle)**

All Time	Selected Time Period
95%	95%

**Overall Equipment Effectiveness**

All Time	Selected Time Period
83.8%	83.8%
<small>Doelt: 74.1%, 83.7%</small>	<small>Doelt: 74.1%, 83.7%</small>

**Availability Rate**

All Time	Selected Time Period
90%	90%
<small>Doelt: 84%, 89%</small>	<small>Doelt: 84%, 89%</small>

**Performance Rate**

All Time	Selected Time Period
94%	94%
<small>Doelt: 90%, 95%</small>	<small>Doelt: 90%, 95%</small>

**Quality Rate**

All Time	Selected Time Period
99.1%	99.1%
<small>Doelt: 98%, 99%</small>	<small>Doelt: 98%, 99%</small>

**Mean Time Between Failures (min)**

All Time	Selected Time Period
12.0	12.0
<small>Doelt: 10.5, 14.2</small>	<small>Doelt: 10.5, 14.2</small>

**Mean Downtime (min)**

All Time	Selected Time Period
3.0	3.0
<small>Doelt: 3.8, 5.6</small>	<small>Doelt: 3.8, 5.6</small>

**Distribution of machine capacity**

**Maintenance**

Next 100 SIP expected at:

Feb 01 2019  
Order SIP kit within 12 days

<b>Pick &amp; Place counter</b>	<b>Prod. hours counter</b>
38K	109

**Critical Control Parameters**

Sterilisation		
Sensor	Average deviation of setpoint (last 10 runs)	Critical value expected
Tira 91.01	+2.2	No
Production		
Sensor	Average deviation of setpoint (last 10 runs)	Critical value expected
TIRA 114.18	+10.7	No

Failure rates in sections of the machine

OEE > QR > Row-Lane analysis

N.00765.01

Approved % by Lane/Row			
Lane/Row	1	2	Total
1	99.29 %	99.06 %	99.50 %
2	99.17 %	98.67 %	99.51 %
3	99.23 %	99.59 %	99.45 %
4	99.28 %	98.54 %	99.40 %
5	99.41 %	99.72 %	99.55 %
6	99.53 %	98.23 %	99.86 %
7	99.15 %	99.66 %	99.49 %
8	99.28 %	98.21 %	99.20 %
9	99.26 %	99.48 %	99.36 %
10	99.21 %	99.56 %	99.37 %
11	99.71 %	99.51 %	99.41 %
12	99.15 %	99.57 %	99.46 %
13	99.19 %	99.84 %	99.49 %
14	99.15 %	99.61 %	99.47 %
15	99.27 %	99.66 %	99.51 %
16	99.09 %	99.29 %	99.40 %
<b>Total</b>	<b>99.29 %</b>	<b>99.52 %</b>	<b>99.40 %</b>

Row 1							
Lane	Total Loaded	Approved (%)	Reject (%)	Loaded Not Detected (%)	Detected Not Filled (%)	Fill Level Error (%)	Cap Error (%)
1	37,224	99.99 %	0.64 %	0.52 %	0.12 %	0.00 %	0.80 %
2	37,226	99.97 %	0.63 %	0.51 %	0.12 %	0.00 %	0.80 %
3	29,241	99.93 %	0.67 %	0.55 %	0.12 %	0.00 %	0.80 %
4	27,782	99.28 %	0.72 %	0.56 %	0.11 %	0.00 %	0.85 %
5	51,464	99.41 %	0.59 %	0.41 %	0.17 %	0.00 %	0.86 %
6	24,755	99.53 %	1.47 %	0.56 %	0.13 %	0.00 %	0.86 %
7	29,167	99.95 %	0.65 %	0.46 %	0.11 %	0.00 %	0.80 %
8	33,066	99.18 %	0.82 %	0.51 %	0.19 %	0.00 %	0.83 %
9	37,224	99.26 %	0.74 %	0.52 %	0.12 %	0.00 %	0.81 %
10	37,028	99.28 %	0.74 %	0.52 %	0.12 %	0.00 %	0.81 %
11	37,224	99.91 %	0.69 %	0.52 %	0.12 %	0.00 %	0.86 %
12	37,228	99.98 %	0.64 %	0.48 %	0.13 %	0.00 %	0.87 %
13	37,222	99.98 %	0.64 %	0.52 %	0.13 %	0.00 %	0.81 %
14	37,221	99.93 %	0.65 %	0.51 %	0.12 %	0.00 %	0.82 %
15	37,222	99.97 %	0.63 %	0.51 %	0.12 %	0.00 %	0.80 %
16	37,224	99.96 %	0.64 %	0.51 %	0.12 %	0.00 %	0.81 %
<b>Total</b>	<b>148,395</b>	<b>99.29 %</b>	<b>0.71 %</b>	<b>0.51 %</b>	<b>0.17 %</b>	<b>0.00 %</b>	<b>0.88 %</b>

Row 2							
Lane	Total Loaded	Approved (%)	Reject (%)	Loaded Not Detected (%)	Detected Not Filled (%)	Fill Level Error (%)	Cap Error (%)
1	33,989	99.66 %	0.54 %	0.20 %	0.23 %	0.00 %	0.81 %
2	32,888	99.67 %	0.53 %	0.20 %	0.23 %	0.00 %	0.80 %
3	25,115	99.95 %	0.41 %	0.26 %	0.13 %	0.00 %	0.82 %
4	23,084	99.54 %	0.46 %	0.27 %	0.13 %	0.00 %	0.86 %
5	22,841	99.72 %	0.28 %	0.10 %	0.19 %	0.00 %	0.85 %
6	22,222	99.22 %	0.77 %	0.26 %	0.25 %	0.00 %	0.47 %
7	26,240	99.68 %	0.34 %	0.11 %	0.12 %	0.00 %	0.81 %
8	25,893	99.23 %	0.77 %	0.31 %	0.26 %	0.00 %	0.80 %
9	33,001	99.48 %	0.52 %	0.22 %	0.23 %	0.00 %	0.83 %
10	32,792	99.50 %	0.59 %	0.21 %	0.23 %	0.00 %	0.86 %
11	32,996	99.91 %	0.49 %	0.22 %	0.13 %	0.00 %	0.81 %
12	32,997	99.92 %	0.43 %	0.13 %	0.04 %	0.00 %	0.87 %
13	32,997	99.64 %	0.36 %	0.21 %	0.13 %	0.00 %	0.82 %
14	32,803	99.62 %	0.39 %	0.21 %	0.13 %	0.00 %	0.85 %
15	32,997	99.68 %	0.34 %	0.20 %	0.13 %	0.00 %	0.81 %
16	28,525	99.96 %	1.04 %	0.23 %	0.14 %	0.00 %	0.86 %
<b>Total</b>	<b>475,484</b>	<b>99.52 %</b>	<b>0.68 %</b>	<b>0.20 %</b>	<b>0.24 %</b>	<b>0.00 %</b>	<b>0.84 %</b>

Active machines running with active status

