



SEDGMAN

Linking real-time plant
monitoring with expert support:
Sedgman SMART Platform

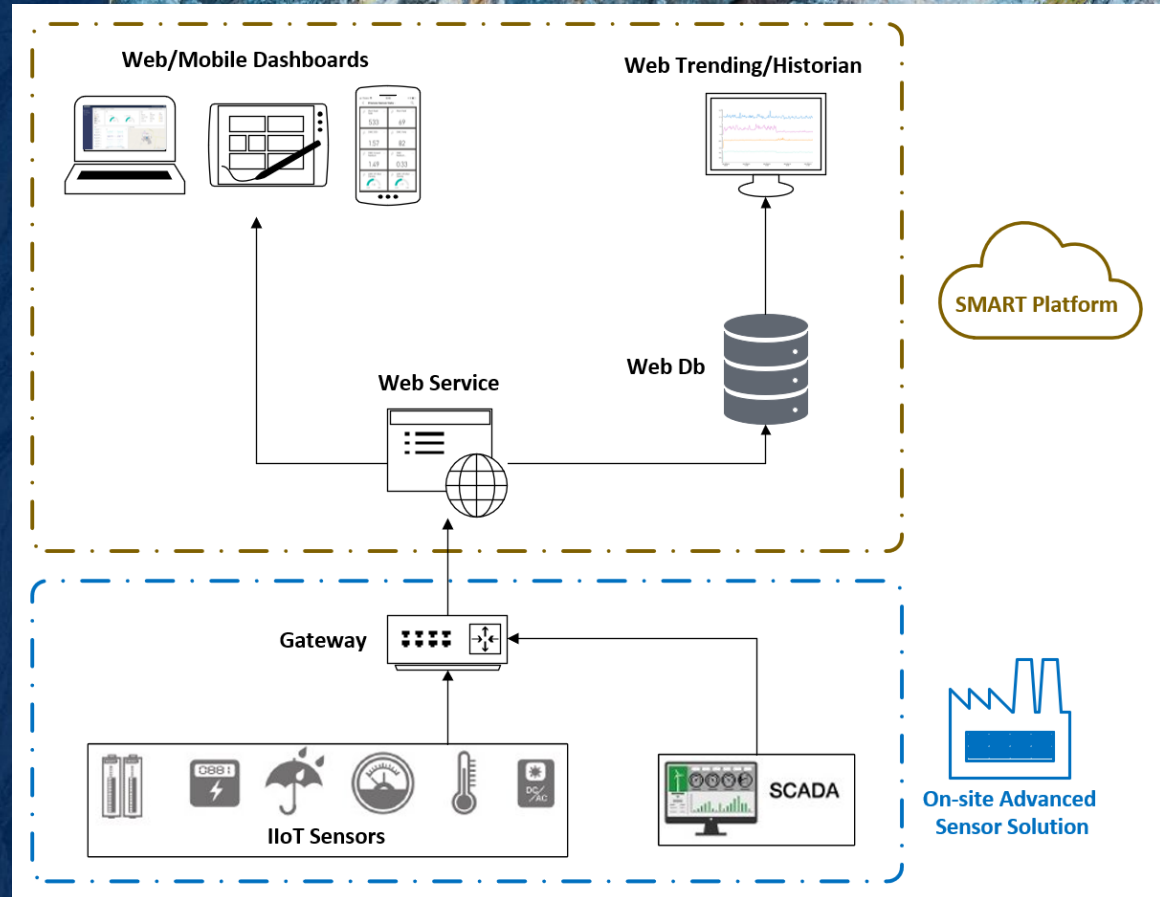
Chris Nethercott

March 2021



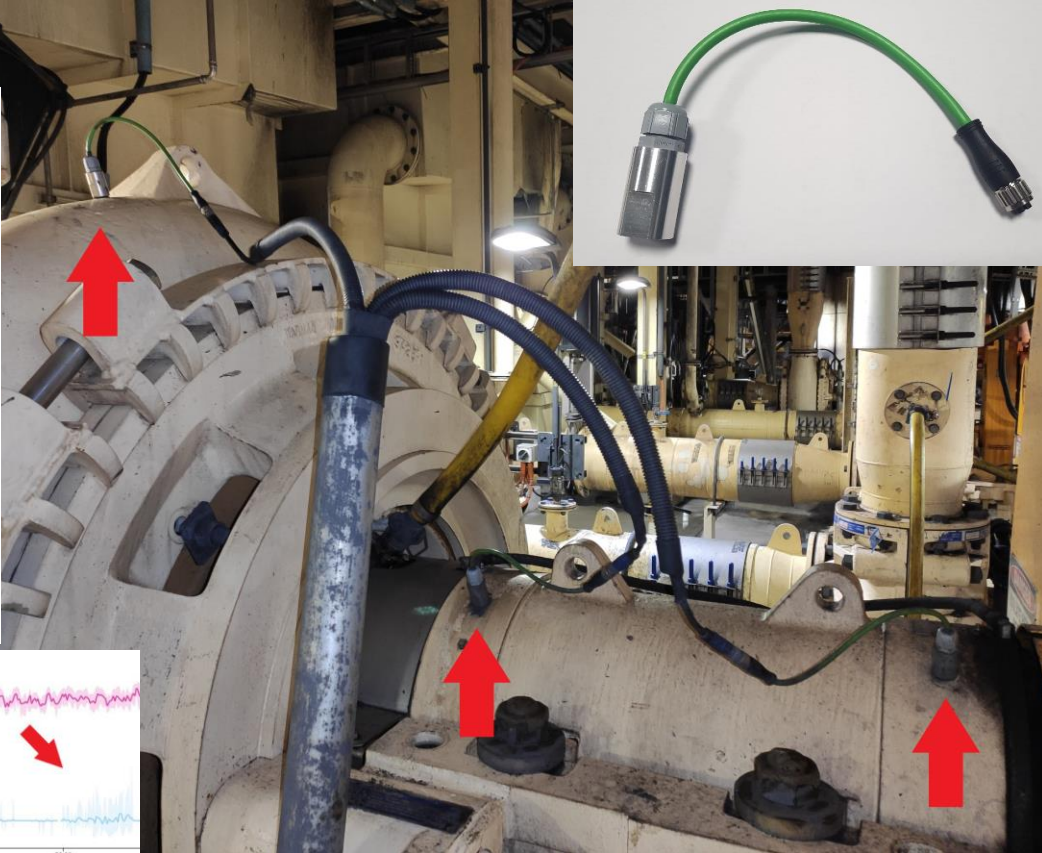
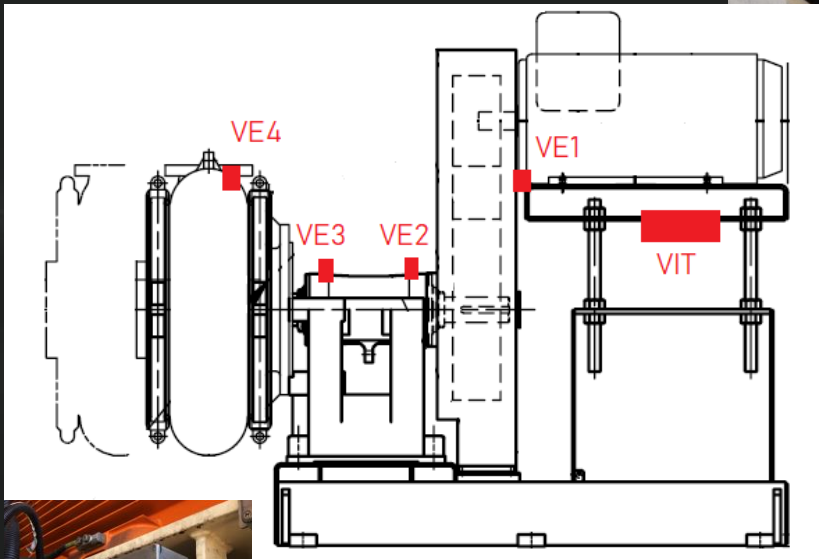
SMART Platform System

- Installation of sensors/data on critical process and equipment
- Connectivity solution, allowing access to data remotely
- User-friendly dashboards and alerts
- Historical data storage and analytics
- Machine learning/predictive failure modelling/Digital Twin





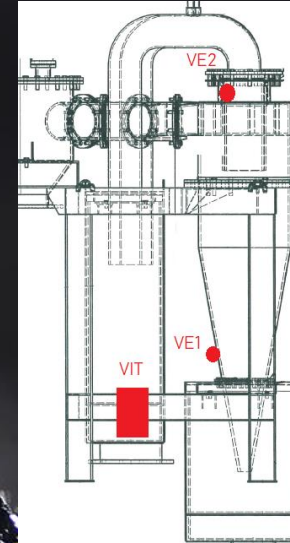
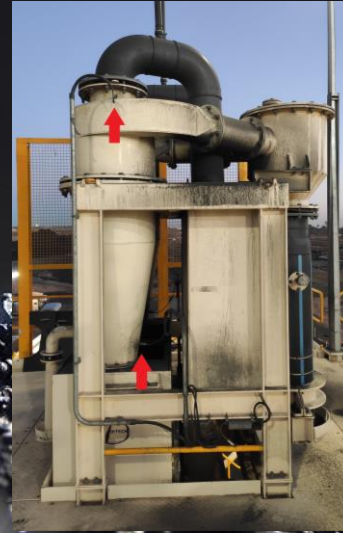
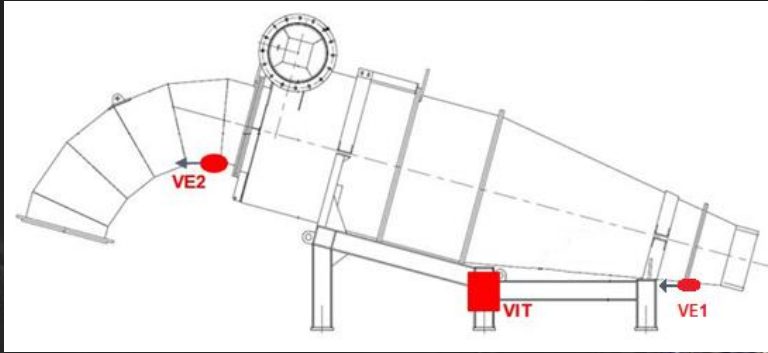
Pump Sensors



SEDGMAN

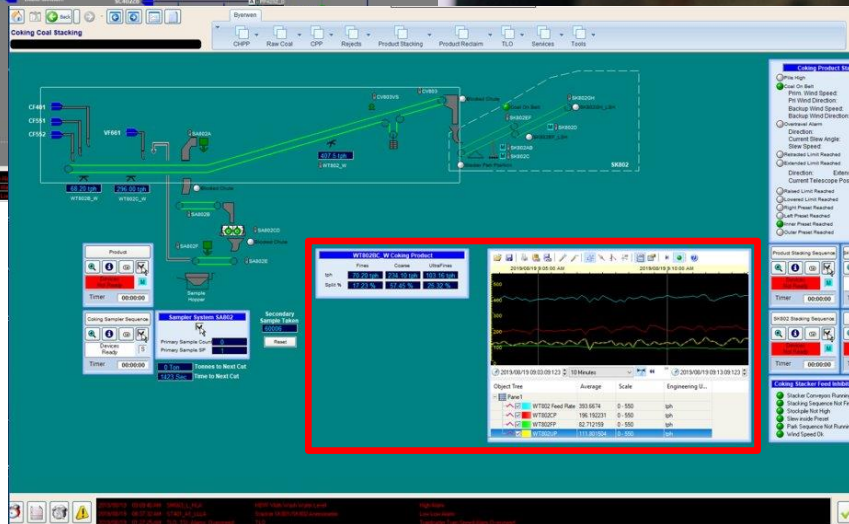
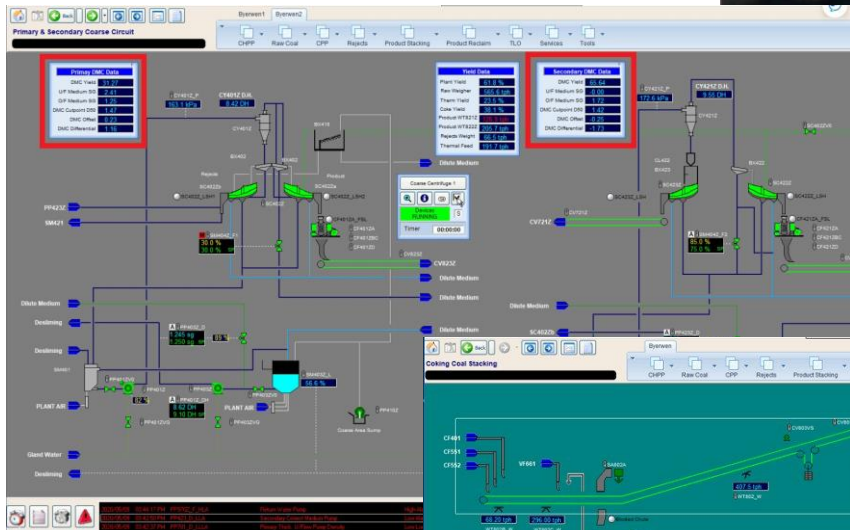


Process Sensors

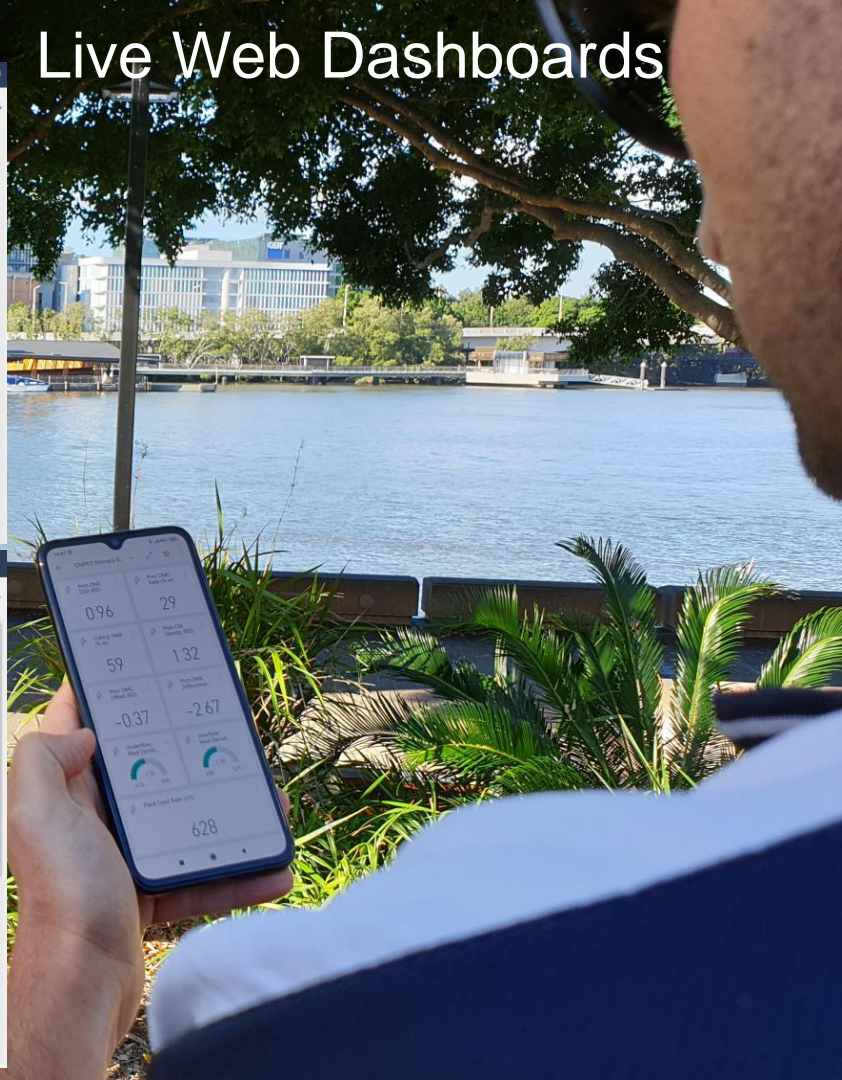
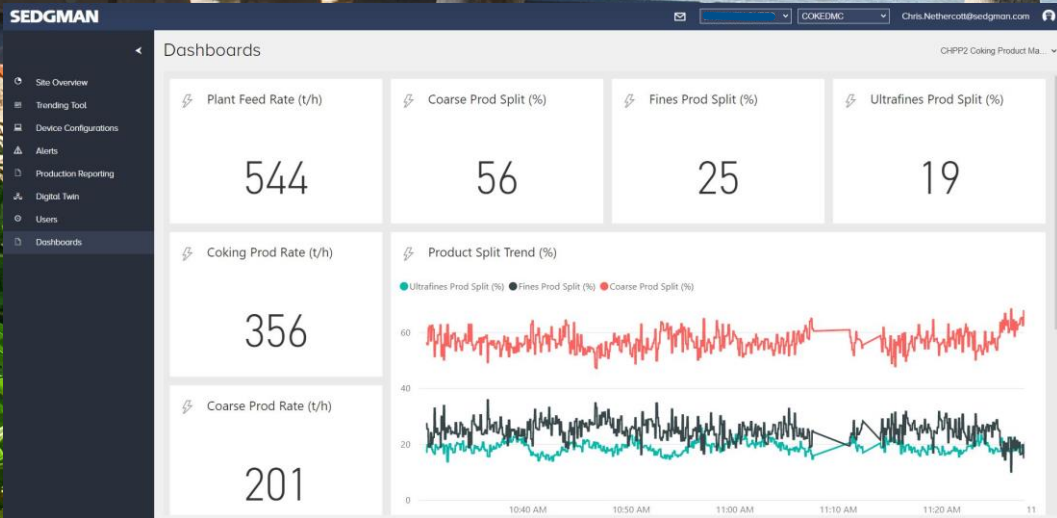


SEDGMAN

Citect Integrated



Live Web Dashboards



Automated Monitoring/Alerting

Alerts

Alert ID	Severity	Alert ID	Alert Type	Trap Name	Operator	Value	Event
501ZA_VITL_OFZ_MAXG	Critical	501ZA_VITL_OFZ_MAXG	Greater Than	0.7	1		
501ZA_VITL_OFZ_MAXG	Critical	501ZA_VITL_OFZ_MAXG	Greater Than	0.3	5		
501ZA_VITL_OFZ_MAXG	Severe	501ZA_VITL_OFZ_MAXG	Greater Than	0.4	3		
501ZA_VITL_OFZ_MAXG	Severe	501ZA_VITL_OFZ_MAXG	Greater Than	0.3	4		
501ZA_VITL_OFZ_MAXG	Severe	501ZA_VITL_OFZ_MAXG	Greater Than	0.25	5		
501ZA_VITL_OFZ_MAXG	Warning	501ZA_VITL_OFZ_MAXG	Greater Than	0.25	32		
501ZA_VITL_OFZ_MAXG	Warning	501ZA_VITL_OFZ_MAXG	Greater Than	0.25	4		
501ZA_VITL_OFZ_MAXG	Warning	501ZA_VITL_OFZ_MAXG	Greater Than	0.96	5		
501ZA_VITL_OFZ_MAXG	Warning	501ZA_VITL_OFZ_MAXG	Greater Than	0.62	2393		
501ZA_VITL_OFZ_MAXG	Warning	501ZA_VITL_OFZ_MAXG	Greater Than	0.97	1790		
501ZA_VITL_OFZ_MAXG	Warning	501ZA_VITL_OFZ_MAXG	Less Than	8.5	18576		
501ZA_VITL_OFZ_MAXG	Warning	501ZA_VITL_OFZ_MAXG	Greater Than	10.9	4		
501ZA_VITL_OFZ_MAXG	Warning	501ZA_VITL_OFZ_MAXG	Less Than	190	18538		
501ZA_VITL_OFZ_MAXG	Warning	501ZA_VITL_OFZ_MAXG	Less Than	120	18713		
501ZA_VITL_OFZ_MAXG	Warning	501ZA_VITL_OFZ_MAXG	Greater Than	0.25	2		
501ZA_VITL_OFZ_MAXG	Warning	501ZA_VITL_OFZ_MAXG	Greater Than	6	3		

Alert Details: 501ZA_VITL_OFZ_MAXG

Trap Name: 501ZA_VITL_OFZ_MAXG
Alert Type: HRELY
Value: Greater Than 0.3

Send Notification

Alert

Teams | Email

* Recipients

Search contacts...

Andrew Hanrahan

* Content

Hi Andrew (Site Engineer),
Think you should have a look at this.
Cheers,
Chris (Remote Support)

Confirm | Cancel

Alert Details: 501ZA_VITL_OFZ_MAXG

Event

Time	Value
2:00:55 PM	0.6509
1:58:09 PM	0.6472
1:57:35 PM	0.6505
1:55:59 PM	0.6504





Benefits of Remote monitoring platforms:

- Real-time visibility for Owner/Operator, improving transparency
- Expert support from anywhere
- Earlier identification of abnormal process and equipment conditions, supporting:
 - Reduced down-time
 - Improved process efficiency



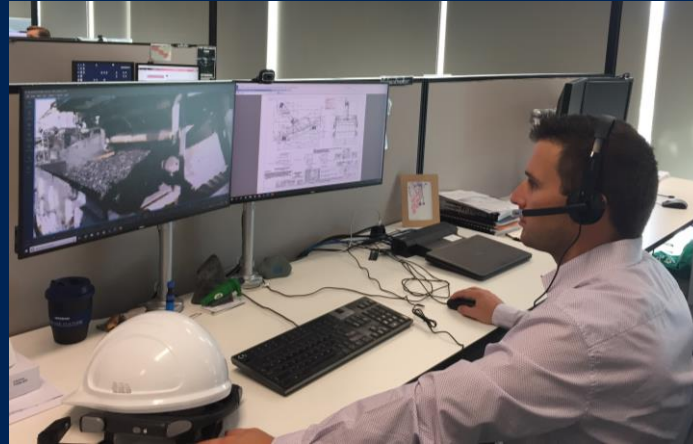


SMART Platform Next Steps:

- Plant Digital Twin
- Full plant automation



Wearable Technology



Remote communications technology to reduce site travel and allow remote expert support to site teams. Enabled through 3G or WiFi plant network.

Drone imaging



- Regular drone flyover during project construction
- Conveyor inspections during operation
- Dam inspections during operation

Thank you!

SEDGMAN

