

Monitoring online Desalination Plant, Thermoelectric E-CL - Mejillones



Objective:

Monitor the evolution of relevant operational variables in the operation of the desalination plant in Mejillone MCV 500 of E-CL company. It should be noted that monitoring of operational variables of this plant was carried out personally.

Subject to monitoring variables:

Id	Código Señal	Descripción	Unidad	Tipo
1	FIT-12	Flujo salida producto	m3/h	4 -20 mA
2	VT-10	Vibraciones compresor	mm/seg	4 -20 mA
3	TIS-14	Temperatura de recirculación	°C	4 -20 mA
4	LIT-10	Nivel producto	%	4 -20 mA
5	LIT-12	Nivel salmuera	%	4 -20 mA
6	FCV-11	Pos. VV reguladora caudal alimentación	%	4 -20 mA
7	TCV-10	Pos. VV reguladora temperatura	%	4 -20 mA
8	TE-26	Temperatura aceite lubricación	°C	4 -20 mA
9	CIS-10	Conductividad de producto	µS/cm	4 -20 mA

Solution Architecture:

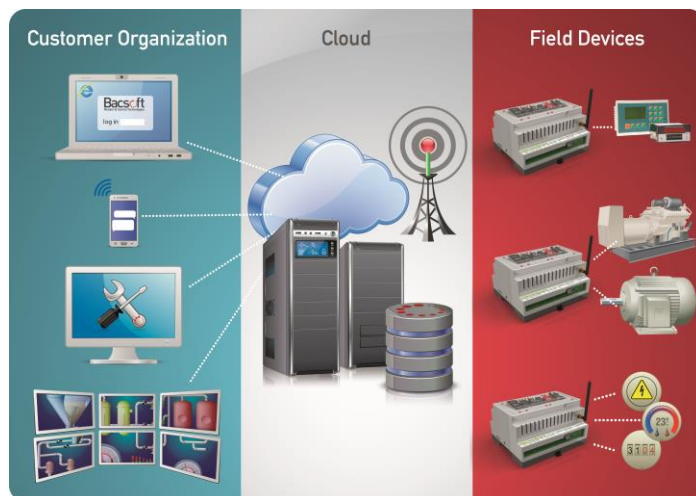
The solution embodied in this project is a on-line monitoring system for Desalination Plant CTM and can take actions critical and decisive as soon as necessary.

The system offers the following features:

1. Alarm: Alarm generation in real time, every time one or more variables out of the safety parameters. These alarms can be formatted email and / or text message (SMS) to designated recipients.

2. Web Platform and App: Access web monitoring platform, where you can know the status of all variables in modalities trend graphs, deployment SCADA / HMI, etc. Access to this platform can be from any computer or mobile device (Smartphone, Tablet, etc.) with Internet access.

3. Databases: Access to all records generated by sensors and can export this data to different formats such as .xls, .txt. and .csv.



Installation Details:

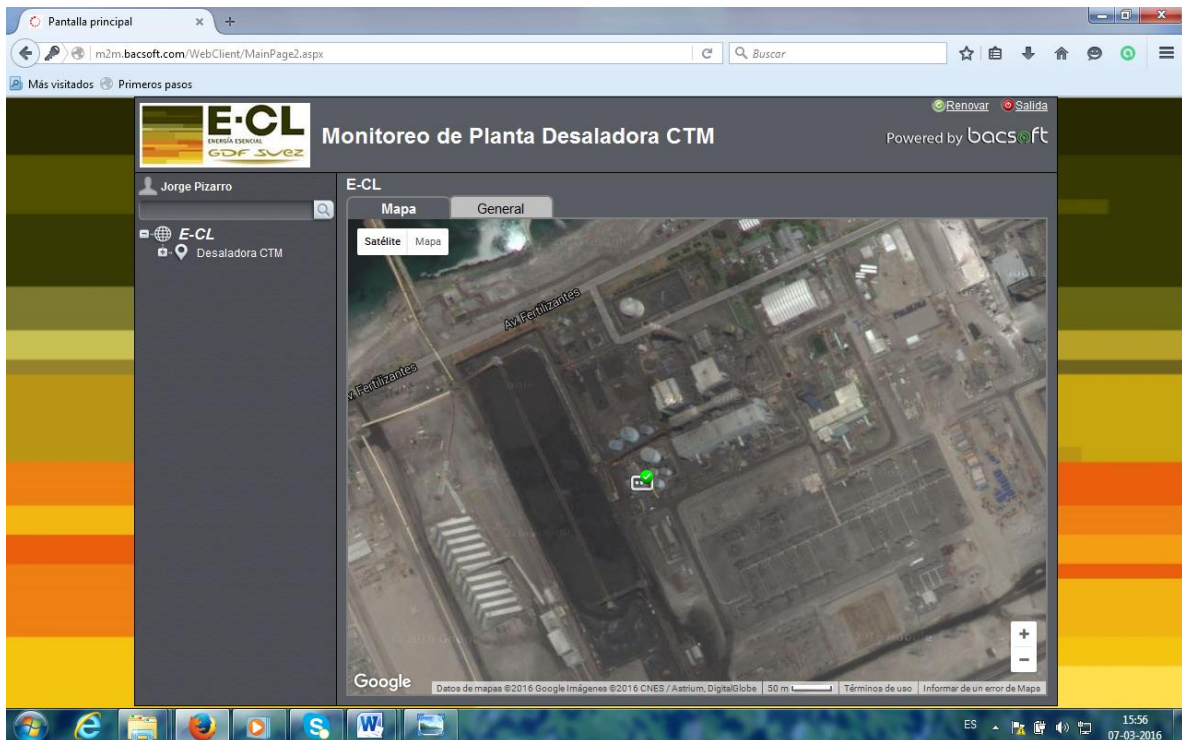


Desalination Plant MCV 500

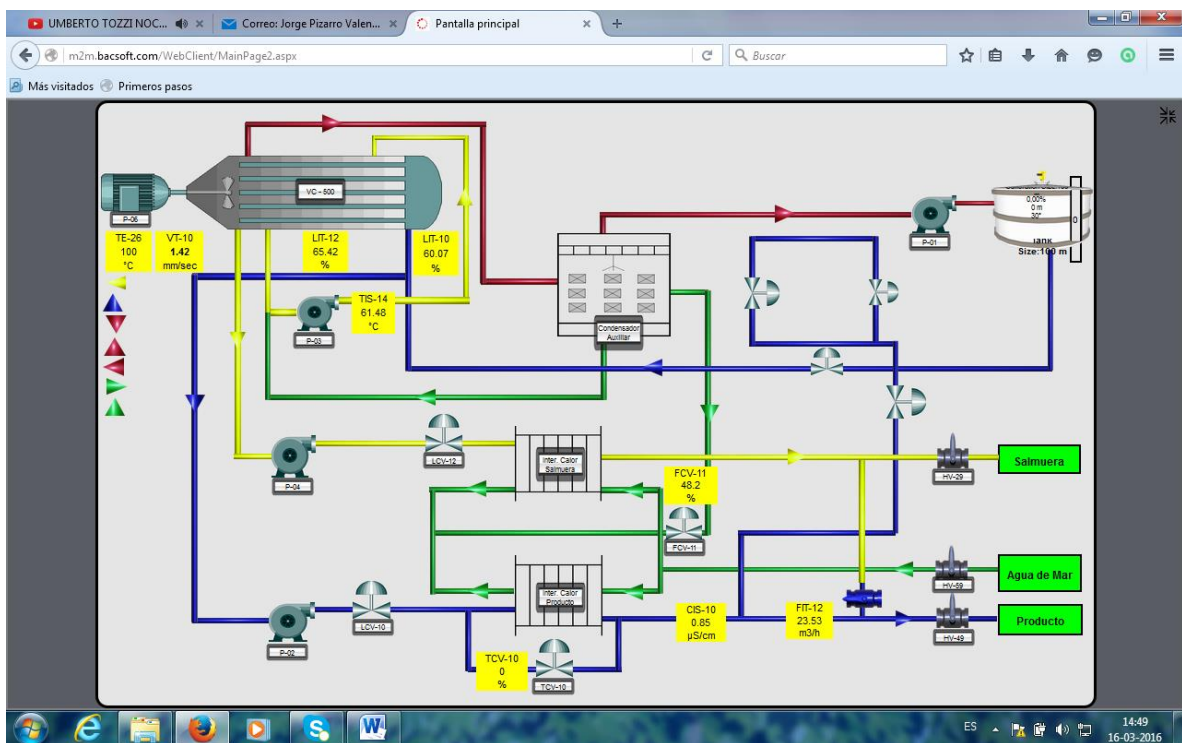


Hardware plant / platform interface

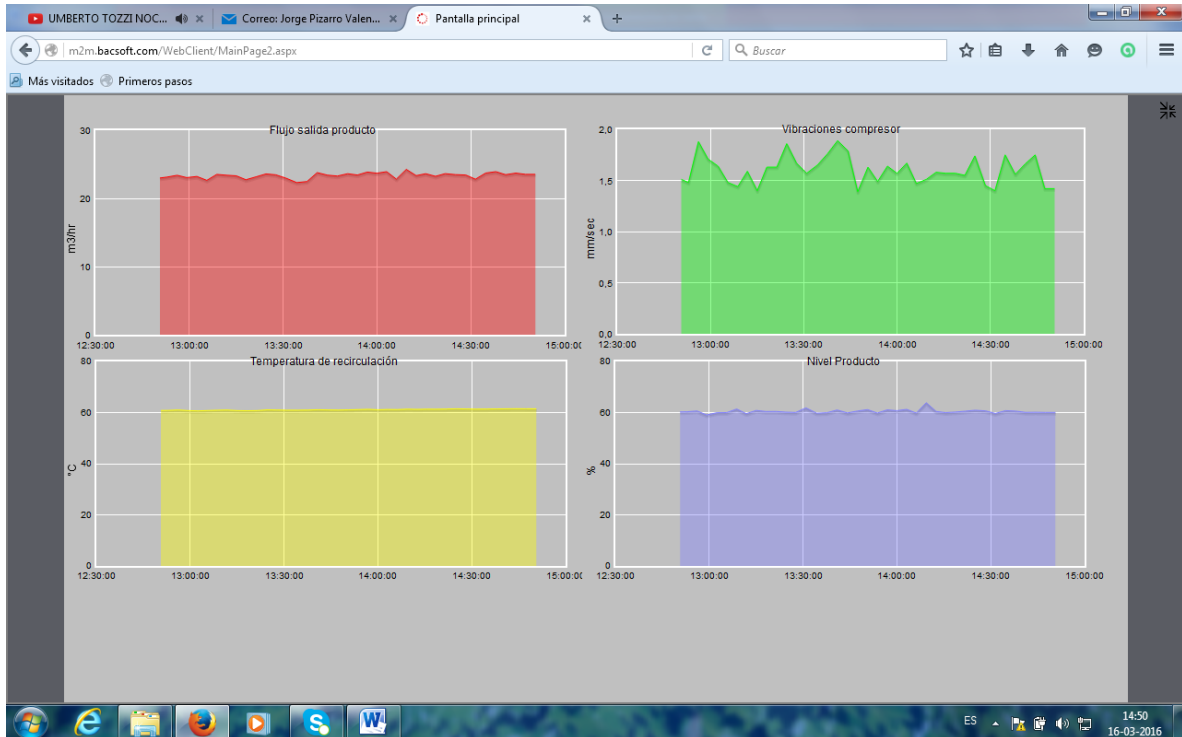
Vistas de plataforma Web y App:



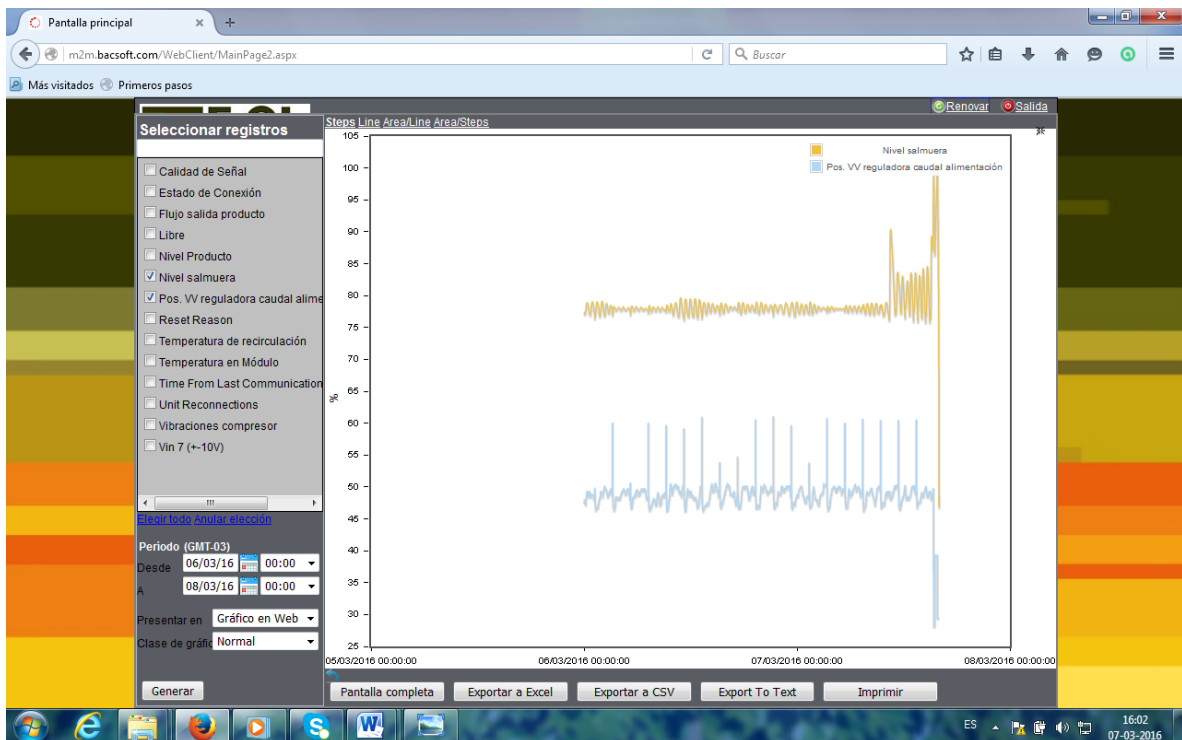
Unit location.



Scada/HMI



Variable evolution graphs.



Trend graphs and data recovery.



Overview from App.

Benefits of the solution:

- Real-time alarms, making it possible to take action in a timely manner.
- Avoid failures, delays in the process, non-operating times, etc. with consequent savings in operational costs.
- Availability of real time critical variable.
- Availability of historical data to perform statistical analysis.
- Optimization of HH dedicated to monitoring.