Hi Tech Low Cost
RealiteQ
New Generation of SCADA & Telemetry Solution

Background:

Nirotek is a leading company in the Israeli market and one of the leaders worldwide in developing, producing & marketing solutions in 3 main areas: self- adhesive, lamination and coating.

Their plant, which operates in three shifts of 24/7/365 service, is recognized as a leading supplier in its field.

The plant managers want to implement a solution for collecting data from the production floor and processing it into an existing external BI system.

In contrast to conventional solutions, the management of the production floor, Nirotek's managers have decided to implement the most advanced, but in the same time, proven Cloud Technology to enables them to be connected to the plant 24/7, but most important, during the night shifts.

The factory engineers have tested various technologies and finally chose RealiteQ as their technological solution.

The implementation of the system was carried out by the technicians of the Nirotek plant and was accompanied by Reali's support engineers.
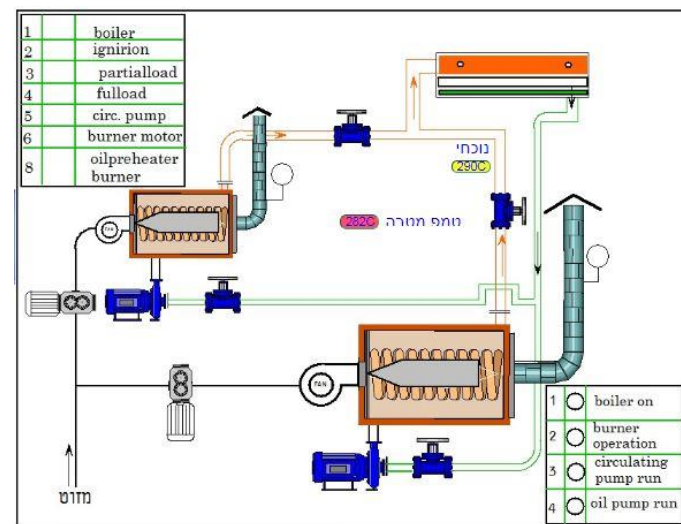
Solution description:

An iCex ICX-CMTM-B2.0U was installed in the factory, in which communication drivers were defined for the existing control and production networks.
For the main production line, a ProfiNet type of communication was defined for Siemens S7-400 controller, which handles thousands of I / O and main production machines.
9 controllers for auxiliary systems have been configured for separate network communication in the Modbus / TCP protocol. It is important to note that PLCs manufactured by different manufacturers are connected to this network and there is no uniformity in the equipment.
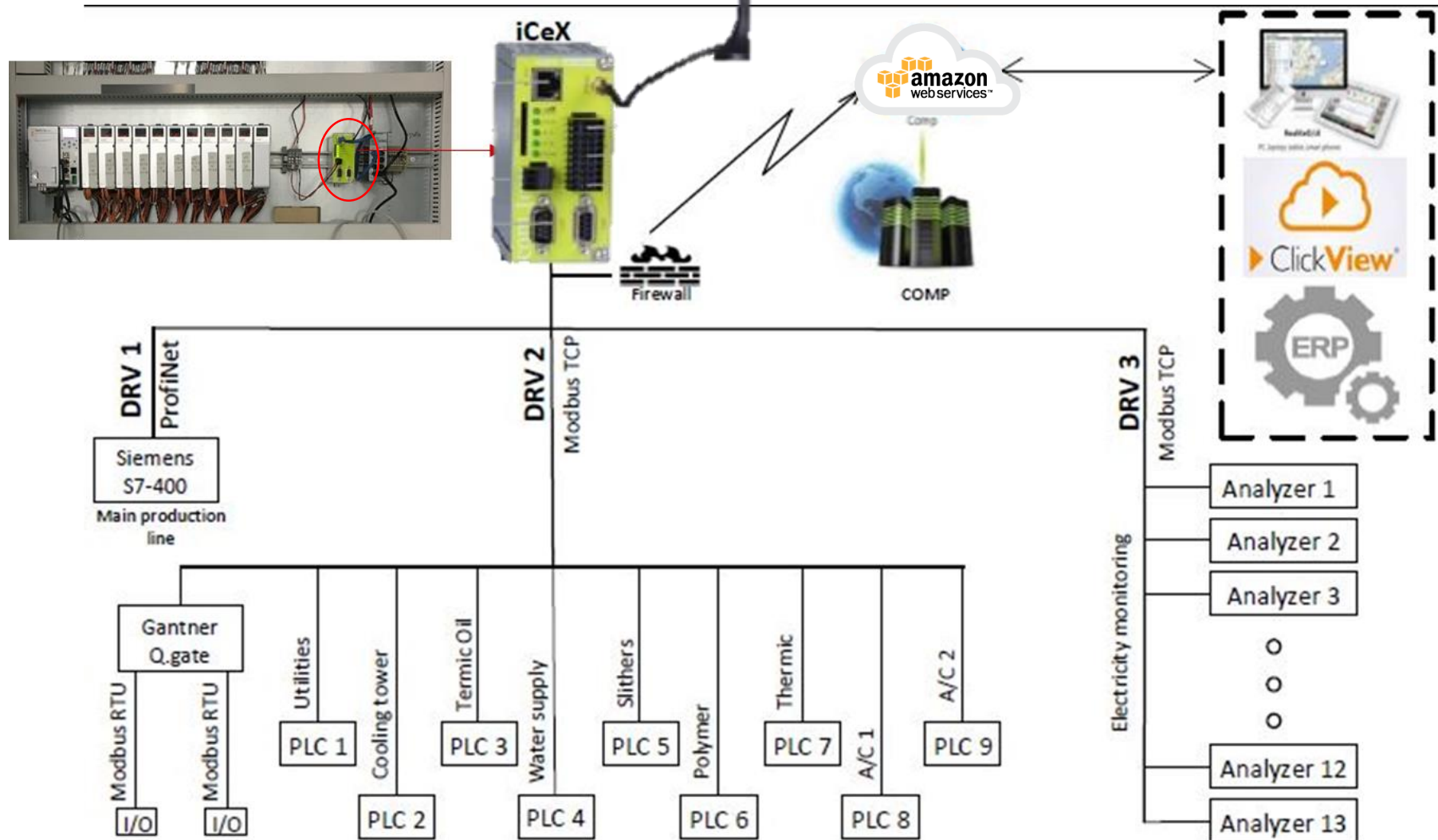
As part of this control network a Productivity 1000 controller manufactured by AutomationDirect.com was also connected as well as a Q.PAC dedicated controller from the Austrian Gantner Instruments, which itself manages an additional communications network of remote I / O units of various types in Modbus / RTU serial communications.
12 monitoring devices of the electricity grids in the various supply and consumption sectors are connected and defined in a third communications driver, and a monitoring of the electricity network data is performed.

Case Study 16 – Nirotek floor production remote control

Production floor remote control plan

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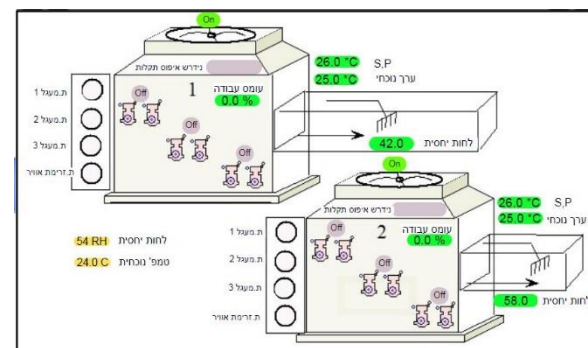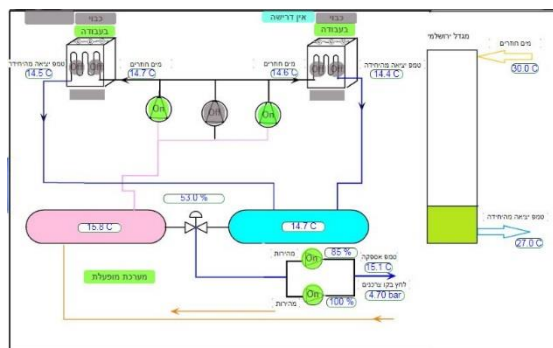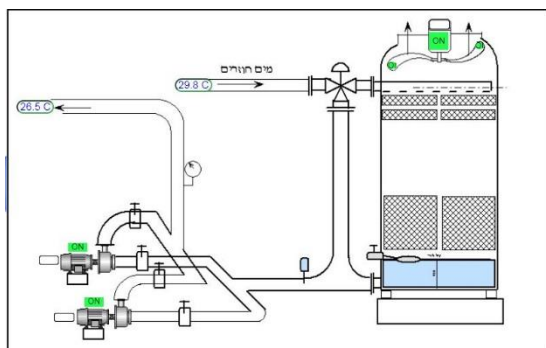New Generation of SCADA & Telemetry Solution

Solution description cont.:

The iCex unit consolidates all the necessary data and collects all the requested parameters. RealiteQ portal in the cloud (COMP – Central On Line Portal) handles the data and prepares them for transfer to the selected external BI system - ClickView system.

Using the RealiteQ system API, the data is drawn to the BI systems and to the ERP computers of the factory, and production reports and other analysis reports are produced (efficiency of machines, shifts, etc.).

In addition, the operation and maintenance personnel in the factory are accessible to the data of the various systems using mobile phone browsers or computers in the factory or in their home and are capable of handling events and malfunctions at any time and from any place.
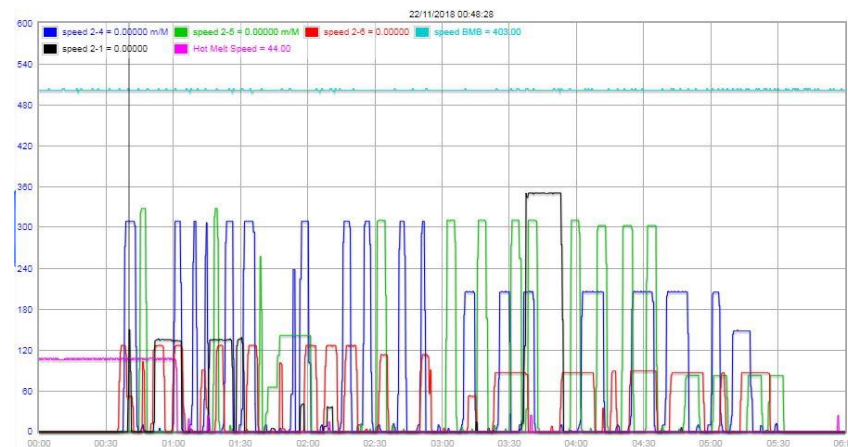
In the event of faults in the production system or in the auxiliary systems, malfunction messages are sent to the parties handling the type of fault. Approval of a malfunction and examination of its causes are carried out in the event that the caregiver is outside the plant.

Results.:

With RealiteQ today the managers, engineers and technical staff can see and get alerts in real-time 24/7 of the entire system from any were, any time, using any device they have connected to the internet. They can see the operation screens, trends in graphs, reports such as active alerts and more…

value: Quality: **Unknown** Stamp: 05/03/2018 14:03:18
Current alarms : 2 active alarm

Path	Tagname	Description	State	Start	End
/nirotek02/alarms/alarm2012	התרעת לחץ מים קרים 15 למכונות	לחץ נמוך 15 מעלות למכונות	unacknowledged	02/11/2018 18:44:25	17/11/2018 19:00:06
/nirotek02/alarms/low prs 30 micron	לחץ מים 30 מיקרון	התרעת לחץ נמוך 30מיקרון	active	13/11/2018 14:54:05	