

Client : Chemical & Mining Industries CO. LTD

Project: Automation of All Major Processes

The Chemical & Mining Industries Co. is a locale manufacturer of explosives for the mining industry. Plant is located about 120 Km south of the Capitol Amman and in close vicinity of his major clients.

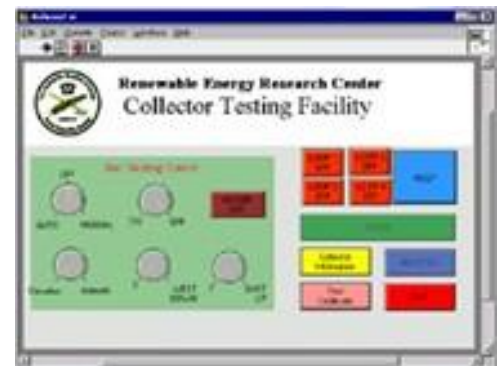
The plant is highly secure facility; with it own security system, and representatives of the Police and Civil Defense permanently stationed inside the facility. The Civil Defense liaison at the plant receives copies of daily production plans and receives end of day status reports on all the stages of production including delivery reports.

In terms of process automation, Technology Integration designed and implemented systems for the following stages of the process :-

- Water treatment; control TDS for water going into production.
- Complete automation of the two stage batch mixing procedure.
- Created a three point fill by weight system for final product.
- A very elaborate reporting system on all stages of the process, with exact measurement of raw materials going in, and amount of in-process material pumped between stages. This system also served as a reference for the civil defense representatives.

Key Features of the system :-

- While maintaining individual process control, the system integrates all the different processes.
- Extensive monitoring of specific process variables related to the safety of the process at each stage including stages that are part of the system.
- Elaborate reporting on production per stage and a comparison with production plans.
- Special report for used by the onsite liaison from the Police and Civil Defense.
- Integrates with the a 3rd party security system, alarms on intrusion, area permissions, etc...



Because of the nature of these processes and nature of the final product (explosives), all implemented systems had confirm to industrial standards applicable on the stage of the process, such as Intrinsically Safe, Explosion Proof, etc...