



# PROJECT REFERENCE LIST

# **ACT AUTOMATION**

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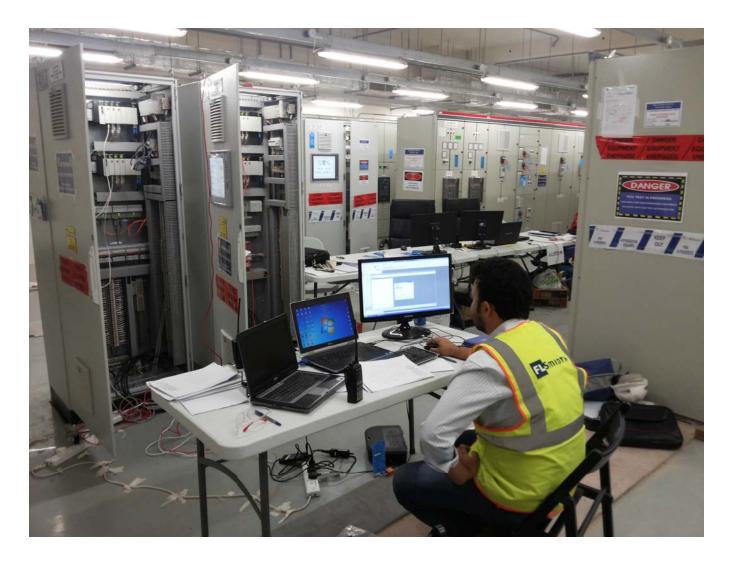




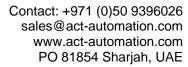


# 1. Commissioning for World Biggest Alumina Pot Filling System in EMAL

Control System	Client	End User
Rockwell Automation	FLSMIDTH	الإمارات للألمنيوم Emirates Aluminium









Project Status Completed

Control System 4 Number of Allen Bradley Redundant Control Logix PLC's

Multiple Remote IO's Over Controlnet and Fiber Optic RSViewME HMI's for local control for all the stations Central SCADA system with Allen Bradley RSViewSE

ABB drives and Allen Bradley E3 Plus relays over Devicenet

Communication

E & H Field Instrumentation

#### Project Details Processes Covered

- 1) Two number of Truck Unloading Stations.
- 2) Four number of 900ton Fresh Alumina Silo's.
- 3) Two Blower Rooms for Pot Feed System of 444 pots.
- 4) Two number of Pressure Vessels and Dense phase conveying systems from Carbon to Reduction Area
- 5) Six Number of ACRM Silo's for PTM crane filling.

Emal is establishing the phase 2 of its plant. The new phase is the world biggest potline with 444 pots. Once the system is commissioned EMAL will become the world biggest single place smelter in the world. Our scope of work was complete programming and commissioning of the above mentioned areas





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FLSmidth Hamburg GmbH

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17 April 2014

#### APPRECIATION LETTER

Project:

Emal Phase II - Direct Pot Feeding System

Emal Phase II - Dense Phase Conveying System

FLSmidth Hamburg GmbH would like to appreciate the excellent work done by ACT-Automation and its Engineering Team during the execution of our Project in Emai Phase 2. We found them very professional and well versed with all tasks required to manage. They have plenty of experience in handling Allen Bradley based complex control systems as well as MCC components and field instrumentation. They have been involved in this project for PLC Logic Development, HMI & SCADA development, Commissioning, Pre-operational verification and handling over to EMAL. In close cooperation with FLSmidth Hamburg they commissioned the following areas during the execution of this project:

- 1) Truck Unloading Stations
- 2) Reacted Alumina Silos and Direct Pot feed System
- 3) Dense Phase and Pneumatic Conveying Systems
- ACRM Silos & PTM Filling Stations
- Interfacing with Third party systems

We thank ACT-Automation for their reliability and professionalism and looking forward to cooperate again in the near future.

FLSmidth Hamburg GmbH

i.A. Andreas Schittig

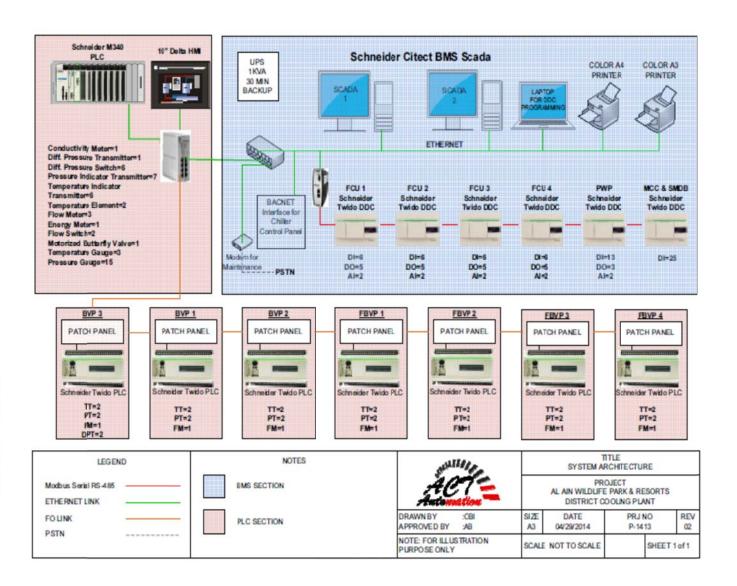
Project Engineer (Electrical/I&C Automation)



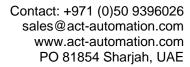


#### 2. District Cooling Plant for Alain Wild Life Park & Resorts

Control System	Client	End User
Schneider Electric	TO DARWING TO	متنزه العين للحياة البرية AL AIN WILDLIFE PARK © RESORT









Project Status On Going

Scope of Supply Supply & Commissioning of Schneider M340 PLC

Supply & Commissioning of Schneider Citect BMS Scada.

Supply & Commissioning of Schneider Twido DDC Controllers.

Supply & Commissioning of Delta HMI.

Supply, Laying & Splicing of Fiber Optic Cables & Switches.

Supply, Installation & Commissioning of Field Instruments Including Flow Meters, Energy Meters, Temperature Transmitters, Pressure Transmitters, Differential Pressure Transmitters, Conductivity Meters, Control Valves, Pressure Gauges & Temperature Gauges

#### **Project Details**

The project consists of turnkey solution of control system for the district cooling plant in Alain. The plant is installed for Alain Wild Life Park & Resorts. The purpose of the district cooling plant is to supply chilled water to its buildings for the cooling purposes.

The Project Areas are below

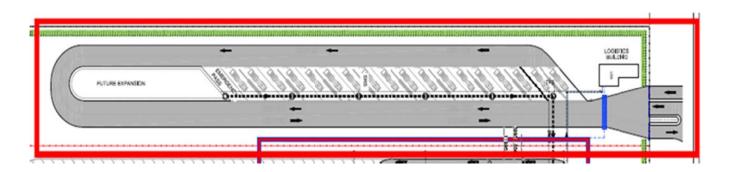
- 1) District Cooling Plant
- 2) 4 number of Building Valve Pits
- 3) 3 Number of Future Valve Pits
- 4) 4 number of DDC controllers for FCU units
- 5) DDC controller for fire alarm system
- 6) DDC controller for portable water pumps
- 7) BMS Scada for DDC controllers





#### 3. Tanker Unloading Station & Traffic Management System for Ruwais STP

Control S	ystem	Client	End User
SIEMI	ENS	<b>BESIX Sano</b>	المرقة أبوظبي لخدمات الصرف الصحي Abu Dhabi Sewerage Services Company



**Project Status** On Going

Scope of Supply Supply, Installation & Commissioning of Siemens S7-1200 PLC & HMI

Supply, Installation & Commissioning of Schneider loop Detectors for

Truck Parking.

Supply, Installation & Commissioning of Traffic Lights.

Supply, Installation & Commissioning of Field Instruments.

Supply, Installation & Commissioning of Field Instruments.

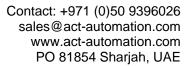
Supply, Installation & Commissioning of Variable Message Display.

Supply, Installation & Commissioning of Mosaic Mimic Panel.

Interfacing with Plant SCADA.

Laying & Installation of Power and Field Cables

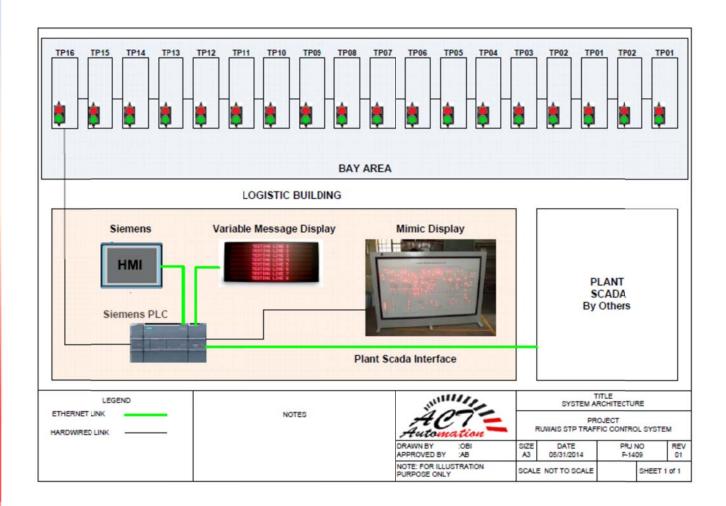






#### **Project Details**

The project consists of turnkey solution of control system for the Tanker Discharge Facility Control and Queue Management System for Ruwais STP. The project consists of a dedicated control system that manages and assigns the particular bay to each tanker. The operation of the bays is controlled based on equal usage of bays and minimum distance from the entrance. Our scope of work for this project is on turnkey basis starting from supply of equipment to installation, commissioning and successful handing over to client







## 4. Two number of Irrigation Pumping Stations for Nahil Farm

Control System	Client	End User
Rockwell Automation	STAR	ايليت اجــرومم ELITE AGRO

Project Status On Going

Control System Allen Bradley Compact Logix PLC with Allen Bradley Panel view plus and

Schneider VFD's of 400KW 5 numbers per station.

Project Details Supply of control system to control 5 number of 400KW motors using

Schneider VFD's for the irrigation pumping station in Alain for Nahil Farm. The scope also includes the design consultation to the main contractor and to finalize control philosophy for a smooth operation of the pumping station since it is a very prestigious client for

contractor and for us.







#### 5. 6 Number of ETS Stations for Jumeirah Lake Towers in Dubai

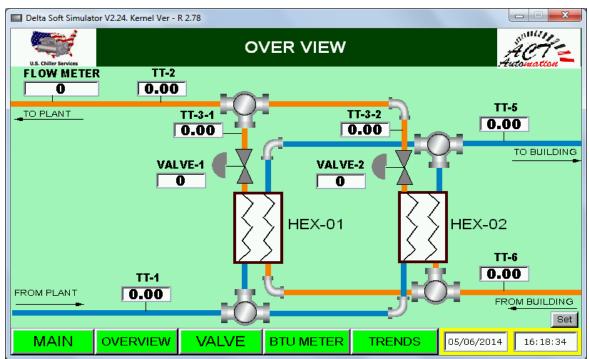
Control System	Client	End User
	U.S. Chiller Services	NAKHEEL

Project Status Completed

Control System Mitsubishi PLC, Delta HMI and E&H BTU Meter.

Project Details

Scope of work includes 6 number of PLC based control Panels with Delta HMIs controlling the valves of heat exchangers to maintain a constant temperature difference and flow by monitoring multiple field instruments. The scope also includes the configuration of BTU meter and displaying its values on the HMI. Field Termination and loop testing is also carried out by our company under this scope of work.







## 6. ETS Station for N3 Tower in Palm Jumeirah

Control System	Client	End User
FANUC	Asteco	NAKHEEL

Project Status Completed

Control System GE Fanuc Versamax PLC and GE Fanuc HMI

Project Details Supply of PLC based control panel to control the valves of heat

exchangers and to maintain a constant temperature difference and

flow by monitoring multiple field instruments.







# 7. Reverse Osmosis (RO) Plants for Khalifa Hospital in Umm Al Quwain & RAK

Control System	Client	End Client
SIEMENS	STAR	METITO

Project Status Completed

Control System Siemens 57-1200 PLC

Project Details Supply of Form 2 Control panel including power distribution and MCC

integrated into single panel for the control and operation of Reverse Osmosis Plant. The functionality of the plant is to convert the sea

water into sweet (Drinking) Water





# 8. Sewage Treatment Plant, Sharjah Municipality

Control System	Client	End User
Wonderware *	<b>BESIX Sanotec</b>	

Project Status Completed

Control System SLC 500, Wonderware Archestra SCADA and C-More HMI

Project Details The scope includes the Modification of Wonderware Archestra SCADA

alongwith Logic Modification in Inlet works for Rockwell SLC500 and

C-More HMI according to the Client Requirement.







#### 9. LPG Plant for Jamshoro Phase 2

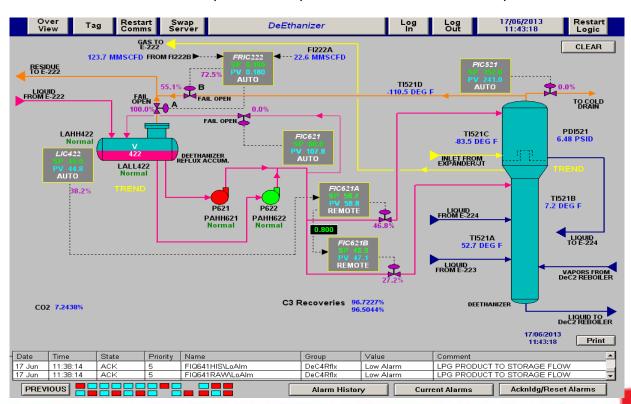
Control System	Client	End User
Wonderware	PETR#EN ENGINEERING	JJVL

Project Status Completed

Control System Wonderware SCADA System, Red. Allen Bradley Control Logix PLC

**Project Details** 

The scope includes the development of Wonderware SCADA System and RSlogix 5000 PLC programming for the Oil Plant in Jamshoro (Phase 2). The system consists of Redundant Control Logix System with 600 IO's. The System also consists of Modbus communication with multiple Flow computers and other Allen Bradley PLC's





#### 10. Irrigation Pumping Station for Rotana Hotel Alain

Control System	Client	End User
Schneider Electric	S TAR LINE	R@tana

Project Status Completed

Control System Schneider PLC & VFD's

Project Details Scope of work includes Schneider PLC based control Panel to control

the Duty / Assist / Standby irrigation pumps at Rottana Hotel Alain.

## 11. Two number of Irrigation Pumping Stations for Rawda Palace

Control System	Client	End User
Schneider Electric	S T A R	AL NAJMA CONTRACTING

Project Status Completed

Control System Schneider Twido PLC and Majelis HMI. Allen Bradley 75KW soft

starters.

**Project Details** Supply of control system to control 3 number of 75KW motors using

Allen Bradley soft starters for the irrigation pumping station in Alain

for Rawda Palace.

