

Year	Category	Sub-Category	Job description	Client's Name	End User	Industry	Country	Duration (Months)	Remarks
1994	System Integration	ESD	ESD control system upgrading in SALAM CORE PLANT. Target Engineering had conducted detailed engineering in 1993.	KHALDA	KHALDA	Oil & Gas	Egypt	2	Assembly of a new panel with new backup PLC System.
1997	System Integration	PCS	PLC-based control system for water injection project.	KHALDA	KHALDA	Oil & Gas	Egypt	2	Assembly of redundant GE-Fanuc 90-30 PLC's with 60 I/O's.
2003	System Integration	PCS	Upgrading the process control system for oil processing plants using PLC, SCADA systems.	KHALDA	KHALDA	Oil & Gas	Egypt	3	Assembly of PLC/ SCADA system, 2 GE 90-30 PLC, redundant CPUs, Redundant fiber optics network, redundant HMI server, 350 graphics, and 1,250 I/Os
2003	System Integration	F&G	Fire detection system for safe areas and buildings. Fire detection system for safe areas and buildings.	SUMED	SUMED	Oil& Gas	Egypt	6	Install new fire detection system for control room, sub-stations, warehouse, and administration buildings. Train end user staff.
2003	System Integration	ESD	Detailed engineering to upgrade the control system and wireless& leased line communication system for 3 Oil plants.	GE-Fanuc	TPS	Oil & Gas	Tunisia	4	Assembly of the PLC and SCADA systems and conduct the FAT in Target Engineering facilities, before shipping the system to Tunisia. Upgraded three 90-70 PLC's to be redundant (200AI, 70AO, 700DI, 800DO). The data had been transferred via RF communication to the SCADA system in a central plant.
2004	System Integration	F&G	A/G gas detection system for oil process and gas plants.	GUPCO	GUPCO	Oil & Gas	Egypt	1	Assembly of the new system using Det-Tronics EQP logic solver and HMI.
2004	System Integration	F&G	Gas detection system for RAZZAQ gas plant.	GUPCO	GUPCO	Oil & Gas	Egypt	1	Assembly of the new system using Det-Tronics EQP logic solver and HMI.
2005	System Integration	PCS/ESD/F&G	Process control systems, SIL- 3 ESD system and SIL-3 F&G system for 4 sites, QASR project.	KHALDA	KHALDA	Oil& Gas	Egypt	6	Assembly of the 3 systems, conduct FAT. PCS used 90-30 (1,868 I/Os, 168 closed loops). ESD, F&G systems used 90-70 GMR (I/Os for ESD is 871, I/Os for F&G 545). The graphics screens for these systems are 565.
2006	System Integration	PCS	Upgrading control system of two propane compressors.	GPC	GPC	Oil& Gas	Egypt	3	Assembly of the new system and conduct FAT. The system is 90-30 redundant PLC with 16AI, 8AO, 64DI, and 24DO. The system has a quick panel as HMI.
2006	System Integration	F&G	Fire & gas system for gas compressor in Happy gas plant.	MORGANTI	Water treatment Authority	Utilities	Egypt	0.5	Assembly of the new Det-Tronics EQP with the power supply and power supply monitor units.
2006	System Integration	F&G	SIL-3 PLC- based fire fighting system at Obayied site.	PETROJET	KHALDA	Oil& Gas	Egypt	4	Assembly of the new system, conduct FAT.

2006	System Integration	F&G	PLC-based system for oil tanks firefighting system.	KHALDA	KHALDA	Oil& Gas	Egypt	2	Assembly of a small wall mound panel, including 90-30 PLC.
2007	System Integration	F&G	Fire and gas system for 2 gas compressors.	AGIBA	AGIBA	Oil& Gas	Egypt	2	Assembly of the new Det-Tronics EQP control system, and conduct FAT.
2007	System Integration	PCS	Process control systems for three platforms and one central plant, in addition to SCADA and wireless communication.	PIRECO	El-BIBANE	Oil& Gas	Tunisia	4	Assembly of the control system and conduct FAT.
2007	System Integration	ESD	Upgrade PLC and SCADA system at ZAAFRANA platform and FPSO.	GEMSA	GEMSA	Oil& Gas	Egypt	3	Assembly of the system and develop the application program and SCADA graphics. The existing 90-70 PLC's are upgraded to be redundant (48AI, 24AO, 564DI, 282DO), RF communication is used fro data transfer between the platform and FPSO.
2007	System Integration	ESD	SIL-2 Emergency shutdown system for RAS BADRAN platform.	ENPPI	SUCO	Oil& Gas	Egypt	3	Assembly of the new system and develop the application program.
2007	System Integration	PCS	PLC-based control system and SCADA.	JUTON	JUTON	Chemical	Egypt	4	Assembly of the system, conduct FAT.
2008	System Integration	PCS/ESD/F&G	Process control system, SIL-3 ESD system and SIL-3 F&G system for & SCADA system for Northern Pipeline Compressors.	Apache	KHALDA	Oil& Gas	Egypt	6	Assembly of the new systems, develop the application programs, and create SCADA graphics. Used 90-30 redundant PLC for PCS (112AI, 40AO, 144DO, 160DO), and 90-70 GMR for ESD (42AI, 224DI, 144DO), AND 90-70 GMR for F&G (136AI, 288DI, 160DO).
2008	System Integration	PCS/ESD/F&G	QASR phase II process control system, SIL-3, ESD, SIL-3 F&G systems for QASR site extension.	PETROJET	KHALDA	Oil& Gas	Egypt	6	Assembly of new remote I/O's marshalling cabinets, and modify the application programs.
2009	System Integration	PCS/ESD/F&G	Re-location of AKIK Gas Plant. Process control system and SIL3 ESD / FGS system.	EMC	KHALDA	Oil& Gas	Egypt	5	Assembly of the new systems, and conduct FAT. Used RX3i redundant PLC for PCS (128AI, 64AO, 32DI, 8DO), and 90-70 GMR for ESD/ F&G (48AI, 32DI, 48DO).
2010	System Integration	F&G	SIL-2 F&G system for KALABSHA oil facilities.	ENPPI	KHALDA	Oil& Gas	Egypt	4	Assembly and program the new system, Matrix and Mimic panels. Create the graphics displays.
2010	System Integration	F&G	SIL-2 F&G system for ZETICO	ZETICO	ZETICO	Oil& Gas	Egypt	2	Assembly of the new system, configure the Det-Tronics logic solver (MTL Safetynet), and conduct FAT. The system include 16 point watch gas detectors, 24 AI / 8 DI / 8 DO.
2011	System Integration	F&G	Fire Alarm System for different buildings, control room, warehouse at DAHSHOUR gas plant.	GUPCO	GUPCO	Oil& Gas	Egypt	4	Configur 16 NOTIFIER addressable panels, and create HMI displays. The new system includes 330 smoke detectors, 25 heat detectors, 30 Horns, 30 MCP, 30 Strobe

2012	System integration	PCS	Integrate full system of one PLC panel C/W HMI and one MCC panel C/W all V/A/Watt monitoring and 9 Level/ flow transmitters to achieve efficient oily water treatment for "Upgrading RAS BAKR Skimmovex treatment station" project.	GPC	GPC	Oil& Gas	Egypt	3	Using one IP65 PLC cabinet and one IP 54 MCC panel painted with anti corrosive painting. GE-IP Rx3i PLC and Cimplicity SCADA are used for this project.
2012	System Integration	PLC & SCADA	Kurdistan Gas & Crude Oil Pipeline communication & SCADA system.	GE-IP	KAR for Construction & Engineering	Oil& Gas	IRAQ	5	Engineering and program 11 RTU's using GE-IP SafetyNet and the SCADA system. The system used a high tech. fiber optic network to monitor and control all the RTU's from the main control room at the end of the pipeline.
2012	System Integration	PCS	Alameen Shipping Pumps control system, PLC-based system.	KHALDA	KHALDA	Oil& Gas	Egypt	2	Assembly of the new system. Use 90-30 redundant PLC's (15AI, 12AO, 24DI, 40DO).
2012	System Integration	PLC & SCADA	Kalabsha(Pico) Gas Facility Upgrade	KHALDA	KHALDA	Oil& Gas	Egypt	4	Assembly of an ICSS (PCS, ESD, and fire and gas system) to control the Existing and new facilities for PICO & SIGMA facilities. Used GE-IP SafetyNet and Cimplicity SCADA.
2012	System Integration	F&G	H2S Detection System for offshore platforms (P-A,P-PP/B,P-C) plus solar system at platforms (P-A and P-C)	SUCO	SUCO	Oil& Gas	Egypt	4	1- The H2S detection system has been built for three offshore platforms including three control panels and with total No of IOs "67" (AI=26, AO=9, DI=13, DO=19). 2- The solar system is to power the control panels at platforms (P-A, P-C) and continue supplying the power to the panel when the sunlight absence for four days. Wireless RF communication was used to monitor the platfors.
2013	System integration	F&G	Integrate full system of "1" PLC panel for "ONSHORE F&G EXPANDING AMER-8 STORAGE AREA PROJECT" project.	ENPPI	GPC	Oil& Gas	Egypt	1	Using IP54 PLC cabinet accommodate 2 expanding I/O racks communication with the existing PLC over control net redundant network
2013	System integration	PCS	PCS system for potable water lifting station.	GEDAC	SEC	Electromechanical	K.S.A.	2	Engineering, Programming and Supervision on the assembly. Perform FAT for the assempled system.
2013	System Integration	Detailed Engineering	Ras Bakr Fire Alarm Control Panel	GUPCO	GUPCO	Oil& Gas	Egypt	4	Issue documents to replace the existing panel by upgraded one. The panel is networking with about 1,000 devices. Issue As-Built loop diagrams and wiring diagrams.
2013	System Integration	F&G	Ras Bakr Fire Alarm Control Panel	GUPCO	GUPCO	Oil& Gas	Egypt	2	Assemble the new system in the existing cabinets.

2013	System Integration	PLC & SCADA	PLC Units Installed for D.F.F. Pumps & E.D.G'S At Sinai Fields (Offshore Platforms)	Petrobel	Petrobel	Oil & Gas	Egypt	2	Assembly of the new PLC systems that control two Diesel Fire Pumps and one Generator for two offshore platforms.
2013	System Integration	PCS	Razak Control System Upgrading for RAZAK field.	KHALDA	KHALDA	Oil & Gas	Egypt	3	Extend the existing PLC and develop the new application program. Create 11 HMI screens.
2013	System Integration	PCS/ESD/F&G	Build an ICSS for a new grassroots gas plant at HYDRA	Apache	KHALDA	Oil & Gas	Egypt	4	Assembly of an ICSS (PCS, ESD, and fire and gas system) to control the new HYDRA gas plant using GE-IP SafetyNet and Cimplicity SCADA. The system was built with total No. of IOs as follows: PCS: 197 (AI= 49, AO= 16, DI=88, DO= 44) ESD: 96 (AI= 47, DI=9, DO= 40) F&G: 28 (AI= 16, DI=4, DO= 8)
2013	System Integration	ESD and F&G	Upgrading the ESD and F&G systems of the salam base	KHALDA	KHALDA	Oil & Gas	Egypt	2	1- Design & Supply of PLC & Matrix Panels. 2- Supply of Gas Detectors & Manual Call Points. 3- Installation & testing of field gas detectors & manual call points 4-Connecting the new PLC system to the existing PAGA. 5-Connecting the new PLC system to Notifier Fire system.
2013	System Integration	PCS	System Integration for Sewage Plant - STEP is one of the largest Pumping station in the world it is designed to be able to push 30m ³ /S of sewage. The Scope include Main PLC to control the plant, Remote I/O stations, Packages PLCs (Chiller, Ventilation, Potable Water, Treated sewage Effluent and power monitor). Main SCADA system, Historian server and Local display panels.	GE-IP	Abu Dhabi Sewerage Services Company	Infra-Structure	U.A.E	In Progress	It contain EGD, Profinet communication with the I/O stations and Modbus TCP communication with 3rd parties. A Dual Fiber optic synchronization link between each redundant CPU's. All CPU's, Power supplies, SCADA and Historian Servers are redundant. More than 4300 Physical I/O signals to our PLC's Plus the Modbus Data.
2013	System Integration	PCS	Upgrade the Existing N2 Panel controlling Nitrogen package with a new PAC8000 SafetyNet SIL II controller	AL-Taysear Trading & Contracting	QP (Qatar Petroleum)	Oil & Gas	Qatar	In Progress	SIL II safety system, Redundant CPUs, Redundant Power supplies, Redundant I/O. About 80 Physical I/O all are I.S signals.

2014	System integration	PCS/ESD/F&G	Process control system, SIL-3 ESD system and SIL-3 F&G system & SCADA system for Qasr Compression Project.	ENPPI	KHALDA	Oil & Gas	Egypt	7	<p>Assembly of the new systems, develop the application programs, and create SCADA graphics as follows:</p> <p>7 Panels for the PCS to accommodate PLC, remote I/O racks and HART interface modules, using RX3i PLC (176AI, 80AO, 464DI, 240DO, 41 PID), created 150 graphic displays and established communication protocol (ModBus TCP/IP) with Allen Bradlly PLC and Honeywell DCS.</p> <p>6 Panels for the ESD to accommodate PLC, redundant I/O Genuis modules and HART interface modules, using GMR 90-70 PLC (180AI, 1054DI, 240DO), created 200 graphic screens. Built 1 ESD Matrix Panel.</p> <p>6 Panels for the F&G to accommodate PLC, redundant I/O Genuis modules and HART interface modules, using GMR 90-70 PLC (75AI, 150DI, 144DO).</p>
2014	System integration	PCS/ESD	Build ICSS system for TPS new wells at GUEBIBA cluster.	Thyna Petroleum Services	Thyna Petroleum Services	Oil & Gas	Tunisia	in progress	<p>Develop application program using Pack 8000 Safety Net Controller SII2 Redundant System ESD I/O: 24AI, 32DI, 48DO PCS I/O: (16AI, 48DI, 24DO)</p>