



Company Profile

2023

- SCADA/PLC
- Data Loggers
- Smart Metering
- Pressure Management
- Leak Detection
- Substation Automation





Introduction

Spacia Systems is a distinguished leader in the field of industrial automation, specializing in leak detection, SCADA, PLC systems, smart metering, data loggers, and pressure management solutions.

With a legacy spanning over **18 years**, we have been at the forefront of addressing critical challenges in various industries. Since our inception in 2005 in **Jordan**, we have relentlessly worked to pioneer innovative automation solutions. In 2017, we expanded our footprint to the **United Arab Emirates**, where we continued to provide cutting-edge technology to meet the evolving demands of the industry. Two years later, in 2019, we extended our services to **Qatar**, solidifying our presence in the Middle East.

As the landscape of industrial automation undergoes a transformative shift towards Industry 4.0, we have remained agile in adapting to these changes. Starting in late 2016, we have been actively enhancing our expertise in Industrial IoT and digitalization solutions, ensuring that we remain at the forefront of technological advancements. In 2023, we proudly inaugurated a new branch in **Saudi Arabia**, a testament to our commitment to delivering comprehensive automation solutions across the region. Our dedication to excellence, technical proficiency, and collaborative approach with technology partners and clients sets us apart as a trusted, partnership-based solution provider. Together, we strive to deliver cost-efficient, time-efficient, and optimal solutions that harness the full potential of automation technology.



18+

Extensive Knowledge



120+

Success Stories



350+

Smart RTUs



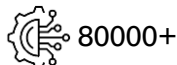
500+

Advanced DDCs



1000+

Real-Time Data Loggers



80000+

BMS IOs



15000+

Intelligent Field Components



60+

Private Residences



1000+

Luxurious Guest Rooms



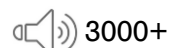
900+

Advanced Surveillance Cameras



2000+

Intelligent Control Panels and Sensors



3000+

Audio Speakers



Our Valued Clients

At **Spacia Systems**, we view our clients as partners in progress. Their feedback, insights, and trust in our capabilities drive us to continually innovate and improve our offerings. We are dedicated to providing unwavering support and value to our clients, ensuring their success in an ever-evolving industrial landscape.



Our Partners

At **Spacia Systems**, we acknowledge the vital role that our partners play in our journey and in delivering comprehensive automation solutions. Our strategic partnerships with leading technology providers and OEMs. These valued partnerships empower us to provide clients with cutting-edge technology and innovation. By collaborating closely with our partners, we ensure seamless integration of their solutions into our automation offerings, resulting in highly efficient and reliable systems.

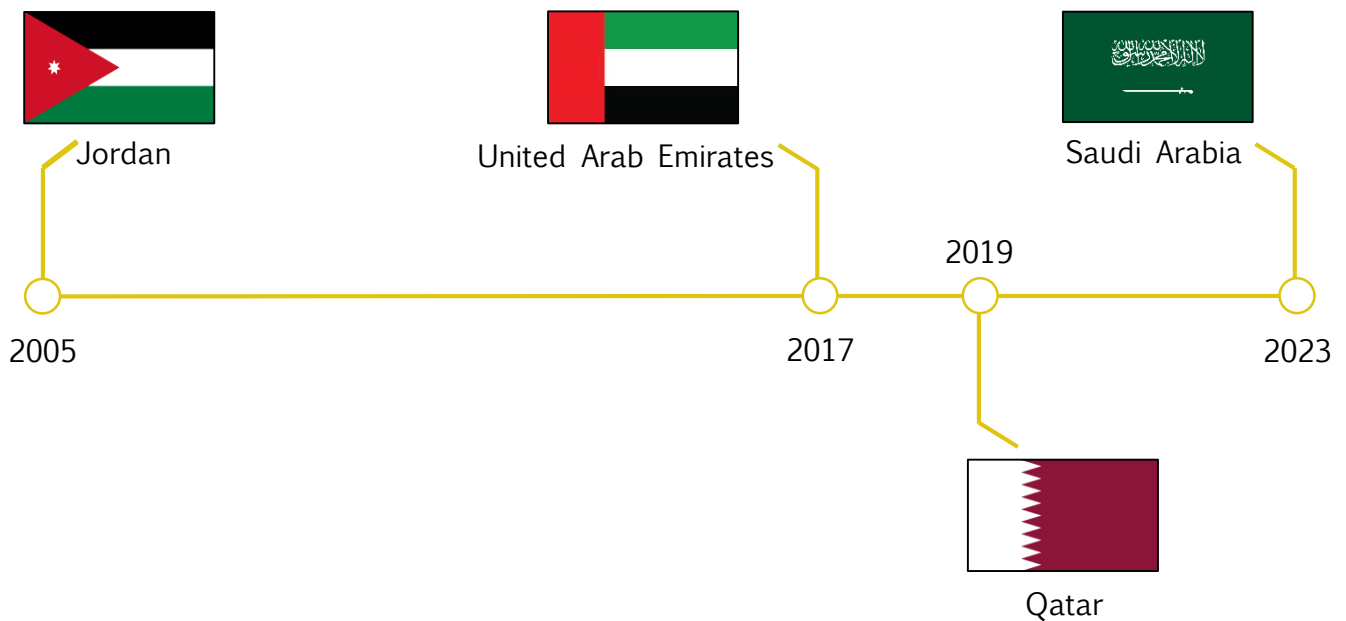




History

Spacia Systems had humble beginnings as a pioneering endeavor, founded by a dedicated team of engineers in 2005. Starting in a modest office in Jordan, our journey in the field of industrial automation began. Over the course of nearly two decades, we have evolved into a prominent global organization. Today, our company has presence in 4 regional offices across three countries in the Middle East, including Jordan, United Arab Emirates, Qatar, and Saudi Arabia.

Our growth story is characterized by our commitment to excellence and innovation in the areas of leak detection, SCADA, PLC systems, smart metering, data loggers, and pressure management. Our comprehensive automation products and solutions now encompass the entire lifecycle of critical industrial assets



We are proud of our diverse team, consisting of professionals from 5+ nationalities, each contributing their unique expertise and perspectives to our success.

As we continue to embrace technological advancements and adapt to the changing landscape of industrial automation, we remain dedicated to providing our clients with the highest quality solutions and services.



Project List

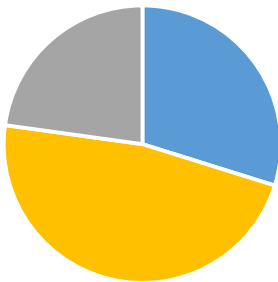
Spacia Systems has a proven track record of successful project implementations across a diverse spectrum of industries. In addition to our extensive experience in industrial projects, we have established a strong reputation for delivering comprehensive low-current systems solutions tailored to commercial applications.

Our offerings span a wide range of services, encompassing audio-video systems, CCTV, access control, building management systems, guest room management systems, lighting control, nurse call systems, and public address systems. Our project portfolio in this domain is a testament to our expertise and achievements.

Moreover, we bring extensive experience to the table when it comes to residential projects, specializing in cutting-edge home automation solutions.

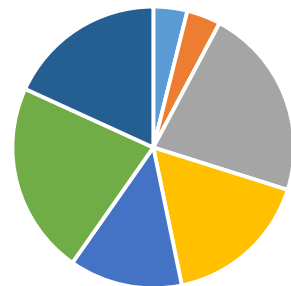
To further enhance our capabilities, we've extended our expertise to include leak detection, SCADA, PLC systems, smart metering solutions, data loggers, and pressure management systems as part of our industrial solutions suite.

Industrial Projects



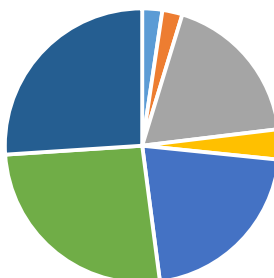
- LV Switchgears
- SCADA/PLC
- Telemetry

Commercial Projects



- LV Switchgears
- GRMS
- BMS
- CCTV
- Access Control
- Audio Visual
- Lighting Control

Residential Projects



- LV Switchgears
- SCADA/PLC
- CCTV
- Access Control
- Audio Visual
- Lighting Control
- Home Automation



Industrial Projects

Project	Year	Country	Status	LV Switchgears	SCADA/PLC	Telemetry	BMS	CCTV	Access Control
○ National Bulk Water Metering and Monitoring System	2023	Jordan	Ongoing		√				
○ Interfacing of RPSs With SCADA Kahramaa	2022	Qatar	Ongoing		√				
○ JOPETROL	2021	Jordan	Completed		√				
○ Water Network Restructuring and Pressure Management - MiyahunaFara11	2021	Jordan	Completed		√	√			
○ Communication System for Water Meter - Yarmouk Water Company	2020	Jordan	Completed		√				
○ Water Network Restructuring and Pressure Management - MiyahunaFara8	2018	Jordan	Completed		√	√			
○ Jordan Feed Company	2018	Jordan	Completed		√	√			
○ Kufranja Dam	2017	Jordan	Completed	√	√	√			
○ Jordan Poultry Processing & Marketing - ACS	2017	Jordan	Completed						√
○ Al-Basateen Pump Station	2015	Jordan	Completed	√	√	√			
○ Al-Ghabawi Pump Station	2014	Jordan	Completed	√	√	√		√	
○ Six Deep Wells (Al Sheediah Phosphate)	2013	Jordan	Completed	√	√	√			
○ Lajjoun Waste water Treatment Plant	2012	Jordan	Completed		√				
○ Central Control Station at Queen Alia Airport	2012	Jordan	Completed		√	√	√		
○ Zwara Water Tanks and Pump Stations	2011	Libya	Completed		√	√			
○ Karak Water Loss Reduction (KWLRP)	2011	Jordan	Completed	√	√	√			
○ Motta Factory New Extension	2010	Jordan	Completed	√					



Industrial Projects

Project	Year	Country	Status	LV Switchgears	SCADA/PLC	Telemetry	BMS	CCTV	Access Control
○ Jordan Grain New expansion	2010	Jordan	Completed		√				
○ Russ Group Asphalt Factory	2010	Iraq	Completed		√				
○ Bushra Pump Station	2010	Jordan	Completed	√	√				
○ Karak WWTP	2010	Jordan	Completed	√					
○ Paper Factory New Expansion (Nuqul Group)	2009	Jordan	Completed	√					
○ Plastic Factory New Expansion	2009	Jordan	Completed	√					
○ Three new Schools at Aqaba	2009	Jordan	Completed	√					
○ Pump Stations (Tulkarem Authority)	2009	Palestine	Completed	√	√	√			
○ Filtration System (Jordan Phosphate)	2008	Jordan	Completed	√	√				
○ JPPC New Expansion	2008	Jordan	Completed	√	√				
○ Jerash Waste Water treatment Plant (WAJ)	2008	Jordan	Completed	√	√	√			
○ LV station Upgrade 2 (Queen Alia Airport)	2007	Jordan	Completed	√					
○ Water Wells At Queen Alia Airport	2007	Jordan	Completed		√	√			
○ Al Safi Salt Factory Upgrade	2007	Jordan	Completed		√				
○ LV station Upgrade 1 (Queen Alia Airport)	2006	Jordan	Completed	√					
○ National Hatchery Upgrade	2006	Jordan	Completed		√				
○ Vacuum Coating Machine (Hikma Pharmatecual)	2005	Jordan	Completed		√				
○ Automatic Dosing System	2005	Jordan	Completed		√				



Commercial Projects

Project	Year	Country	Status	LV Switchgears	GRMS	BMS	CCTV	Access Control	Audio Visual	Lighting Control
○ QAF Al Ruwais	2022	Qatar	Completed						√	√
○ QIG 5th Offices	2022	Qatar	Completed				√	√	√	√
○ Arab Potash	2022	Jordan	Completed						√	
○ Ministry of Public Health	2021	Qatar	Completed			√				
○ Shura Council	2021	Qatar	Completed	√					√	
○ Al-Wafi Clinic	2020	Jordan	Completed			√				√
○ Pharmatek Clinic	2020	Jordan	Completed			√				√
○ Al Basheer Hospital	2020	Jordan	Completed	√						
○ Al-Hikma Headquarters	2019	Jordan	Completed							√
○ ABC Bank Headquarters	2018	Jordan	Completed			√				
○ Hilton Garden Inn	2018	Qatar	Completed		√		√			
○ Msheireb Downtown Doha – Phase 2	2018	Qatar	Completed			√				
○ Ayass Hotel	2019	Jordan	Completed						√	√
○ Mercure Hotel (254 Rooms)	2017	UAE	Completed		√	√				√
○ IBIS Hotel (350 Rooms)	2017	UAE	Completed		√	√				√
○ Accor Apartments (154 Apartment)	2017	UAE	Completed			√				√
○ Axiom Telecom HQ	2017	UAE	Completed						√	
○ ASmawi SZR Buildings	2017	UAE	Completed				√	√		



Commercial Projects

Project	Year	Country	Status	LV Switchgears	GRMS	BMS	CCTV	Access Control	Audio Visual	Lighting Control
○ Asmawi Alaweer	2017	UAE	Completed				√	√		
○ Emirates hills palace	2017	UAE	Completed						√	
○ Bukash Building	2017	UAE	Completed				√	√	√	
○ Bank of Jordan	2017	Jordan	Completed				√			
○ Housing Bank ACS-DFRS Integration	2017	Jordan	Completed					√		
○ Four Seasons hotel staff accommodation	2016	UAE	Completed				√	√		
○ Al Sayyah Tower Palm	2016	UAE	Completed			√	√	√	√	√
○ Al Sayyah Villa	2016	UAE	Completed				√			
○ Smart Buy	2016	Jordan	Completed			√				√
○ Holiday Inn	2016	Jordan	Completed			√				
○ Gold Gym	2016	Jordan	Completed			√				
○ Quicksand Crossfit Gym	2016	Jordan	Completed				√	√	√	
○ Al Fanar Group	2015	UAE	Completed						√	
○ Meydan Hotel	2015	UAE	Completed							
○ Aqaba New Port	2015	Jordan	Completed			√				
○ Etihad Airlines	2014	UAE	Completed						√	
○ Kilani Healthcare Institute	2013	Jordan	Completed			√	√	√	√	
○ Etihad Towers	2013	UAE	Completed				√	√		



Commercial Projects

Project	Year	Country	Status	LV Switchgears	GRMS	BMS	CCTV	Access Control	Audio Visual	Lighting Control
○ Hilton Resort and Spa	2012	Jordan	Completed	√		√			√	√
○ Bank of Jordan	2011	Jordan	Completed						√	√
○ Grand Cinemas-Taj Mall	2011	Jordan	Completed			√			√	
○ Al Khalidi Hospital and Medical Center	2011	Jordan	Completed			√				



Residential Projects

Project	Year	Status	LV Switchgears	SCADA/PLC	CCTV	Access Control	Audio Visual	Lighting Control	Home Automation
○ Khalid Al Kaseeh	2022	Ongoing			√		√	√	√
○ Khalid Murad	2021	Completed			√			√	√
○ Dousari Residence	2021	Completed			√			√	√
○ Amer Sabha	2021	Completed			√		√	√	
○ Nofal Residence	2021	Completed			√	√		√	√
○ George Mansour	2021	Ongoing			√	√		√	√
○ Ali Anabtawi	2021	Completed			√	√		√	√
○ Shariff Hamoudeh Villa	2020	Completed			√			√	√
○ Saddam Office	2020	Completed			√	√	√	√	√
○ Zaid Hameed Villa	2020	Completed					√	√	√
○ Abd Al Kareem Al Soht Villa	2019	Completed						√	√
○ Sara Tabba'a Villa	2019	Completed					√	√	√
○ Jardaneh Villa	2019	Completed			√				
○ Nawar Al Jubouri Villa	2018	Completed			√		√	√	√
○ Al Kareem Villas	2018	Completed						√	√
○ Al Hummar Villas	2018	Completed			√				
○ Hassan Al Lami Villa	2017	Completed			√		√	√	√



Residential Projects

Project	Year	Status	LV Switchgears	SCADA/PLC	CCTV	Access Control	Audio Visual	Lighting Control	Home Automation
○ Jamal Lozi Villa	2017	Completed	√		√		√	√	√
○ Ziad Amoos Villa	2017	Completed					√		
○ Mohammad Khalid iVilla	2017	Ongoing						√	√
○ Sireen Al Masri Villa	2017	Completed							√
○ Martinon / Muna Sukhtian Villa	2016	Completed			√		√	√	√
○ Abdulkarim Al Dmisi Villa	2016	Completed					√	√	√
○ Saleem Al Sabbagh Villa	2016	Completed					√	√	√
○ Muhannad Jrab Villa	2016	Completed					√	√	√
○ Subhi Al Dahleh Villa	2016	Completed					√	√	√
○ Maher Hammoudeh Villa	2015	Completed	√		√		√	√	√
○ Aws Shalabi Villa	2015	Completed			√		√	√	√
○ Samer Fraihat Villa	2015	Completed					√	√	√
○ Fadi Imseeh Villa	2014	Completed		√	√		√	√	√
○ Ali Farouqi Villa	2014	Completed			√		√	√	√
○ Tareq Aggad Villa	2014	Completed			√	√	√	√	√
○ Majeda Al Jallad Villa	2014	Completed			√		√	√	√
○ Ihab Imseeh Villa	2014	Completed		√	√		√	√	√



Residential Projects

Project	Year	Status	LV Switchgears	SCADA/PLC	CCTV	Access Control	Audio Visual	Lighting Control	Home Automation
○ Rami Al Jayeh Villa	2013	Completed					√	√	√
○ Nabil Hammoudeh Villa	2012	Completed					√	√	√
○ Hani Salah Villa	2012	Completed			√		√	√	√
○ Sami Hammoudeh Villa	2012	Completed	√	√	√		√	√	√
○ Ayman Atyieh Villa	2012	Completed			√		√	√	√
○ Shaker Fakhouri Villa	2012	Completed			√		√	√	√
○ Mohammad Dahleh Villa	2012	Completed					√	√	√
○ Mughith Sukhtian Villa	2011	Completed			√		√	√	√
○ Shariff Hammoudeh Apartment	2011	Completed			√		√	√	√
○ Ammar Shawwa Villa	2011	Completed			√		√	√	√
○ Sami Nashwan Villa	2011	Completed			√		√	√	√
○ Imad Malhas Villa	2011	Completed	√	√			√	√	√



SCADA Solutions

SCADA, which stands for 'Supervisory Control and Data Acquisition,' serves a pivotal role in acquiring data from remote devices such as valves, pumps, transmitters, and more. Its primary function is to enable centralized control and monitoring from a SCADA Host software platform.

This empowers precise local process control, ensuring devices operate in accordance with your strategic needs while facilitating remote data capture and event monitoring, including alarms.

Within the SCADA Host platform, you'll find an array of essential features, including graphical displays, alarm management, data trending, and historical data storage. At Spacia Systems, we specialize in providing instrumentation and RTUs/PLCs designed for seamless integration with your assets or processes.

Our solutions extend beyond data control and retrieval; they encompass the entire lifecycle, from engineering and implementation to operation and maintenance, ensuring operational excellence.

Moreover, **Spacia Systems** places a strong emphasis on open standards, embracing best practices defined by industry groups rather than adhering to a single manufacturer's guidelines.

This approach not only enhances asset integration within your SCADA system but also contributes to reducing the overall ownership costs of your SCADA infrastructure.





Data Loggers

In the ever-evolving landscape of modern industries, **Spacia** has positioned itself as a pioneer in providing innovative solutions in the realm of **data loggers**. These compact electronic devices serve as invaluable tools for real-time monitoring and recording of environmental parameters, offering a versatile range of applications, from temperature and humidity tracking to voltage recording.

Equipped with advanced wireless capabilities, our data loggers facilitate remote monitoring, allowing users to access real-time data and receive alerts for timely intervention. Precision and accuracy are hallmarks of our data loggers, ensuring reliable data for critical decision-making processes. With an emphasis on efficiency, these devices feature extended battery life for uninterrupted data collection over extended periods.

The user-friendly interface makes setup, configuration, and data retrieval intuitive for both technical and non-technical users. A notable application includes optimizing cold chain management in the pharmaceutical industry, ensuring the integrity of sensitive products during transportation. Clients have realized benefits such as compliance assurance, cost-efficiency through precise monitoring, and data-driven decision-making.

Our commitment to innovation and excellence continues to drive advancements in data monitoring technology, empowering industries with reliable, user-friendly, and cutting-edge solutions that redefine the standards of environmental monitoring.





Leak Detection System

Our planet's vital water sources are under threat due to factors like population growth, urbanization, and climate change. To address this challenge, efficient **leak detection systems** are crucial. **Spacia** specializes in advanced leak detection solutions that combat water scarcity. These systems offer multifaceted benefits, reducing water losses, saving resources, and enhancing overall network efficiency.

Early leak identification leads to cost savings and ensures the longevity of water infrastructure. This proactive maintenance approach boosts network resilience, providing consistent and reliable water supply while contributing to environmental conservation.

Minimizing water losses not only preserves natural resources but also reduces energy consumption for water treatment and transportation, safeguarding water quality.

Our leak detection system designed to identify and locate leaks in water supply networks, preventing water loss and minimizing potential damages. It utilizes various sensors, data analysis, and monitoring tools to detect anomalies such as pressure variations, unusual flow rates, or acoustic signals associated with leaks.

Our range of leak noise loggers and correlators use some of the most advanced leak detection technology available, they use artificial intelligence and machine learning algorithms to analyse complex data patterns. This enables us to identify potential leak locations with remarkable accuracy.





Smart Metering System

In the era of digital transformation, **Spacia** stands as a trailblazer in the realm of smart metering solutions. With an unwavering commitment to efficiency and sustainability, our smart metering systems redefine the way industries manage and monitor energy consumption. These advanced devices leverage cutting-edge technology to provide real-time insights into energy usage, enabling businesses to optimize consumption patterns, reduce costs, and enhance overall energy efficiency. Equipped with IoT connectivity, our smart meters offer seamless integration with centralized monitoring systems, providing a holistic view of energy consumption across diverse sectors.

Our holistic smart water metering solution goes beyond delivering cutting-edge hardware. We provide dedicated support throughout the entire lifecycle, covering the planning, installation, and operation phases of remote reading systems.

Spacia Systems offers a stationary LoRaWAN® IoT radio system, ensuring adaptability and reliability for clients to meet their precise water metering requirements. Very long ranges and excellent building penetration can be successfully achieved.

The implementation of these meters has revolutionized utility management, offering not only accurate billing but also empowering consumers with actionable data to make informed decisions for sustainable energy practices. As we continue to spearhead innovation in smart metering technology, our aim is to empower businesses and communities with intelligent solutions that drive sustainability, cost-effectiveness, and a smarter approach to energy management.





Substation Automation System

A Substation Automation System (SAS) is an advanced computer-based solution that streamlines the monitoring, control, and protection of electrical substations.

This sophisticated system integrates intelligent electronic devices (IEDs), IEC 61850 communication networks, and automation software to enhance the efficiency and reliability of substation operations.

Key components include IEDs for data collection, robust IEC 61850 communication infrastructure, a user-friendly Human-Machine Interface (HMI), a central control center for remote monitoring, and automation logic for efficient responses to various scenarios. SAS improves power distribution reliability by enabling quick fault detection, isolation, and system restoration. It facilitates remote monitoring and control, efficient diagnostics, and proactive maintenance, minimizing downtime. Additionally, SAS can integrate with smart grid technologies, contributing to the modernization of power grids and ensuring robust cybersecurity measures for critical infrastructure protection. In essence, Substation Automation Systems play a crucial role in optimizing and modernizing electrical substations, fostering a more resilient, efficient, and intelligent power grid.

Spacia's SAS not only meets the client's immediate operational needs but also aligns with the broader goal of modernizing power grids. By integrating with smart grid technologies, the solution contributes to the overall advancement of the electrical infrastructure. Spacia shows a commitment to innovation, reliability, and cybersecurity, ensuring the protection of critical infrastructure.



Selected References

Water Network Restructuring and Pressure Management FARAS | 2018

The project involved deploying multiple RTUs across Amman to monitor remote locations from a central Miyahuna Command Center.

This comprehensive system streamlined data analysis, log management, and alarm handling to optimize water network operations. The challenge was connecting over 360 remote RTUs to a central SCADA system, ensuring reliable communication, especially in locations without power. Custom data parsing and handling programming were essential for third-party system integration.

The solution involved battery-operated RTUs with cellular modems transmitting data via TCP/IP over 4G. A locally hosted cloud API server received the data, with an independent OPC server converting it to OPC UA standard tags. The WinCC SCADA server managed data logging, alarms, and the graphical interface. A separate WinCC client enabled monitoring from a different location. In total, over 2100 monitoring tags tracked various parameters, including pressure, flow rate, noise level, and battery health.

SCADA Command Center

64 Pressure Regulating Valves RTUs

64 Critical Point Measurement RTUs

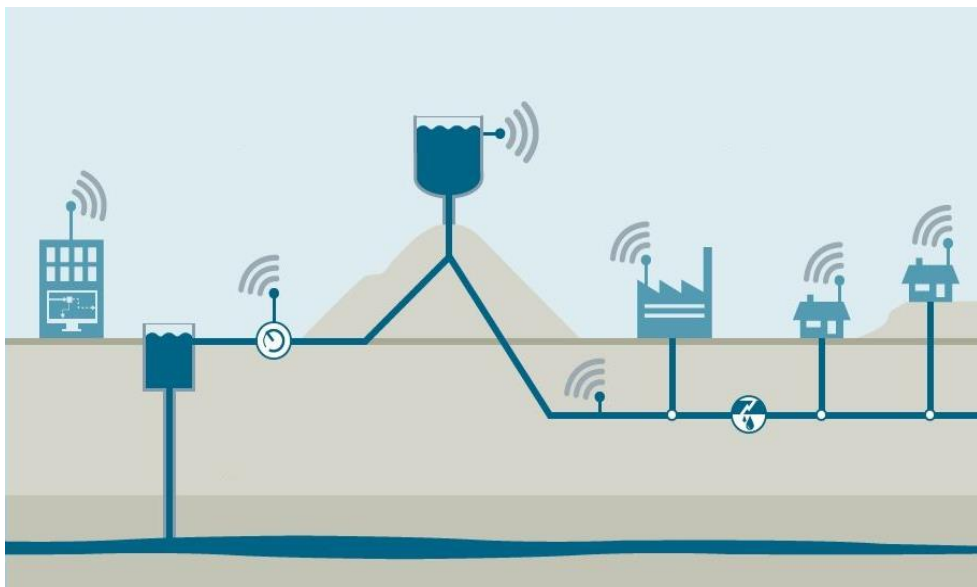
200 Leak Detection RTUs

15 Transient Pressure Logging RTUs

20 Flow Rate Monitoring RTUs

Cellular Communication

OPC Linking SCADA Server and API Server





Selected References

Jordan Feed Company | 2018

Jordan Feed Company decided to face the challenge of an outdated control system amidst a bustling production line, the decision was made to implement a new, more efficient control system with minimal production downtime.

The solution involved meticulous planning and the selection of Siemens Simatic PCS7 System. Detailed analysis of machines and existing system signals led to the creation of a precise IO list, outlining how to interface with machines, field devices, and sensors. Following hardware selection and procurement, the programming stage commenced with SCADA software on an industrial pre-assembled PC. Thorough testing, including process simulation, graphical interface evaluation, user permissions, reports, batches, and recipes, ensured that the new system operated flawlessly as intended. The hardware replacement process involved connecting around 1600 signals to the new panel with precision and meticulous attention. Once complete, the system underwent dry run tests and then ran with actual materials and recipes, achieving seamless results.

Continuous monitoring post-transition ensured smooth operation, and no contingencies arose. The client was highly satisfied with the transition, appreciating the benefits and features of the powerful Simatic PCS7 Batch system integrated into their facility.

100 Chain Conveyor | 9 storage Silos | 1600 Total IO Signals on SCADA | 40 Dosing Silos | 10 Bucket Elevator | Local and Remote Control via SCADA System





Selected References

Al Karak Water Loss Reduction Program | 2011

The project aimed to establish a water supply network for Karak governorate and nearby areas, catering to a 2030 population of 350,000. This included PLC-controlled pumping stations connected to a centralized SCADA system. The challenge involved rehabilitating and setting up remote pumping stations, with one station acting as a SCADA control hub. Motor starters were carefully chosen for efficiency, and Power Factor Correction Panels were used to reduce power consumption.

Five pumping stations were constructed, each with Motor Control Centers (MCCs) housing soft-starters for pump control and protection. Modular PLC controllers managed I/Os and communicated with motor protection devices via ModBus®.

One station hosted the central SCADA system, enabling remote control of all five stations. Wireless GPRS modems facilitated data transmission between stations, ensuring uninterrupted communication. Each MCC panel was equipped with a 3kVA UPS. This project upgraded the water network, accommodating future expansion and emerging technologies. It has operated reliably, meeting the region's water supply needs.

5 pump stations equipped with MCC and PLC panels | Soft-starters power rating varies from 90-550kW | Power Factor Correction Panels up to 500kVAR | UPS with 3kVA capacity and external battery banks | Manual control on MCC panel, remote panel or HMI | Remote control and monitor via SCADA over GPRS | Modular PLC with I/Os ranging from 100-380





Selected References

Jordan Grain Handling & Milling Co. | 2011

Jordan Grain Handling & Milling Co. was one of the first Jordanian businesses to respond to the demand of ready feed for poultry, and cattle farms.

It was launched in 1964 with technical assistance from the specialized well-known firm Provimi Holland.

With a very busy production line, and Manual control system, it was decided to replace the whole control system with a new, more effective and more efficient. However, this had to be done with minimal downtime in the production lines.

The old hardware had to be removed, and the new hardware installed, tested each signal and verifying the complete sequence in less than 5 Days.

*16 Chain Conveyor | 8 storage Silos | 1300 Total IO Signals on SCADA | 10 Bucket Elevator |
Local and Remote Control via SCADA System*





Selected References

Tulkarm Pump Stations, Wells and Reservoirs | 2009

In Tulkarm, wireless Ethernet bridges were used to connect various pump stations, wells, and reservoirs, enabling centralized control and monitoring from a single location. This network covered a wide area of nearly 20 kilometers.

The challenge was that installing fiber cables in the densely populated city was impractical. To address this, three pump stations with MCC panels, ATS panels for backup generators, and modular PLC panels were set up. These panels processed a significant number of signals, ensuring smooth automation and control.

To establish reliable communication between distant sites, long-range 2.4GHz wireless Ethernet bridges with Yagi antennas were deployed, offering a robust network with a line-of-sight distance of up to 10 kilometers. This allowed centralized monitoring through a SCADA-equipped station. Local HMIs were also installed at each station for emergency control and maintenance.

The project covered a 20-kilometer radius, processed 1600 IO signals in real-time, and improved the water infrastructure, extending water access to additional neighborhoods. The Tulkarm Municipality was satisfied with this cost-effective solution.

3 pump stations equipped with MCC panels | Soft-starter, YD and DOL Motor Starters | 6 Water Wells and Four Reservoirs | All Sites Utilizing 2.4GHz Wireless Bridge | Local and Remote Control via SCADA System | ATS System and Standby Generator | 1600 IO Signals on SCADA





Our Offices



Amman, Jordan

Mecca Street
Office No. 415
Building No. 145
Tel : +962 6 5527700
Fax: +962 6 5544247
Email: info@spacia.com.jo

Doha, Qatar

Al Aaliya Street
Transworld tower
Building No. 4
Tel : +974 4 4423033
Fax: +974 4 4424044
Email: info@spacia.com.jo

Riyadh, Saudi Arabia

Eastern Ring Branch
Al Rabweh District
Building No. 7162
Tel : +966 1 12255945
Email: info@spacia.com.jo