PROMACON

The Art of Engineering

COMPANY PROFILE 2016

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Committed People
Our Strength

Promacon is a global engineering company for smart automation solutions that brings to the market an ambitious project based on technology, knowledge, innovation and advanced solutions, and provides top-quality competitive products that add value to the customer. To achieve our goal, we have complete faith in our main asset: our people, a strong team committed to our customers' strategies and their real needs.

We target our knowledge and experience on success and excellence in all of our projects, however difficult they may be, taking on the markets challenges and providing the means to move forward and make progress together with our customers.

Promacon's portfolio includes over 200 completed projects in Latin America (Colombia, Chile), USA, Europe (Spain, Italy, France, and Romania), Asia (Turkmenistan, Uzbekistan and India) and Middle East (Israel).

Our highly skilled engineers possess expertise in various disciplines including electrical and electronics systems, mechanics and industrial machinery, systems analysis, quality control, software testing and development, with various control platforms such as Siemens, Rockwell, Schneider, ABB and many others, with a complete capability in consulting services, high quality engineering documentation design, control applications development and maintenance.

Think Globally
Act Locally

We apply our expertise and technology to promote our customers, providing them with added value and the necessary competitive edge to advance in the global market, with a personalized service in the local language and focus on the main objective.

We develop turnkey solutions including:

- Planning and Design.
- Drawings, P&ID, Electrical Schemas.
- Field Commissioning and Instrumentation.
- Project Development and Deployment.
- Hardware & Software (PLCs, HMI, SCADA, MES, DCS, Vision, Analyzers, Robots, IT and more).
- Data Security and Encryption.
- Installation, Integration, Delivery, Long Term Support and Maintenance programs.

All for a fundamental component of the production process that respond to the day-to-day requirements of customers, resulting in new technologies for the production of solutions that deliver the highest competitiveness to our clients providing integral solutions that cover all technical needs in one contract.

WORLD WIDE
CUSTOMER SUPPORT

ON-SITE
SERVICES

PROJECT
MANAGEMENT

TRAINING

SPARE PARTS
AVAILABILITY

24 HOURS 365 DAYS
SUPPORT

Customer
Industries

We know that improving productivity involves far above than applying new technologies. Our automation-engineering team will assist you to enhance your existing processes or upgrade with a new technology for stronger business performance.

Promacon supplies a full range of software & hardware solutions for the management, optimization, automation, monitoring, control systems and maintenance programs for…

Packaging Industry

Industrial Plants and Manufacturing Facilities

Oil & Gas Industry

Water Desalination and Water Treatment Systems

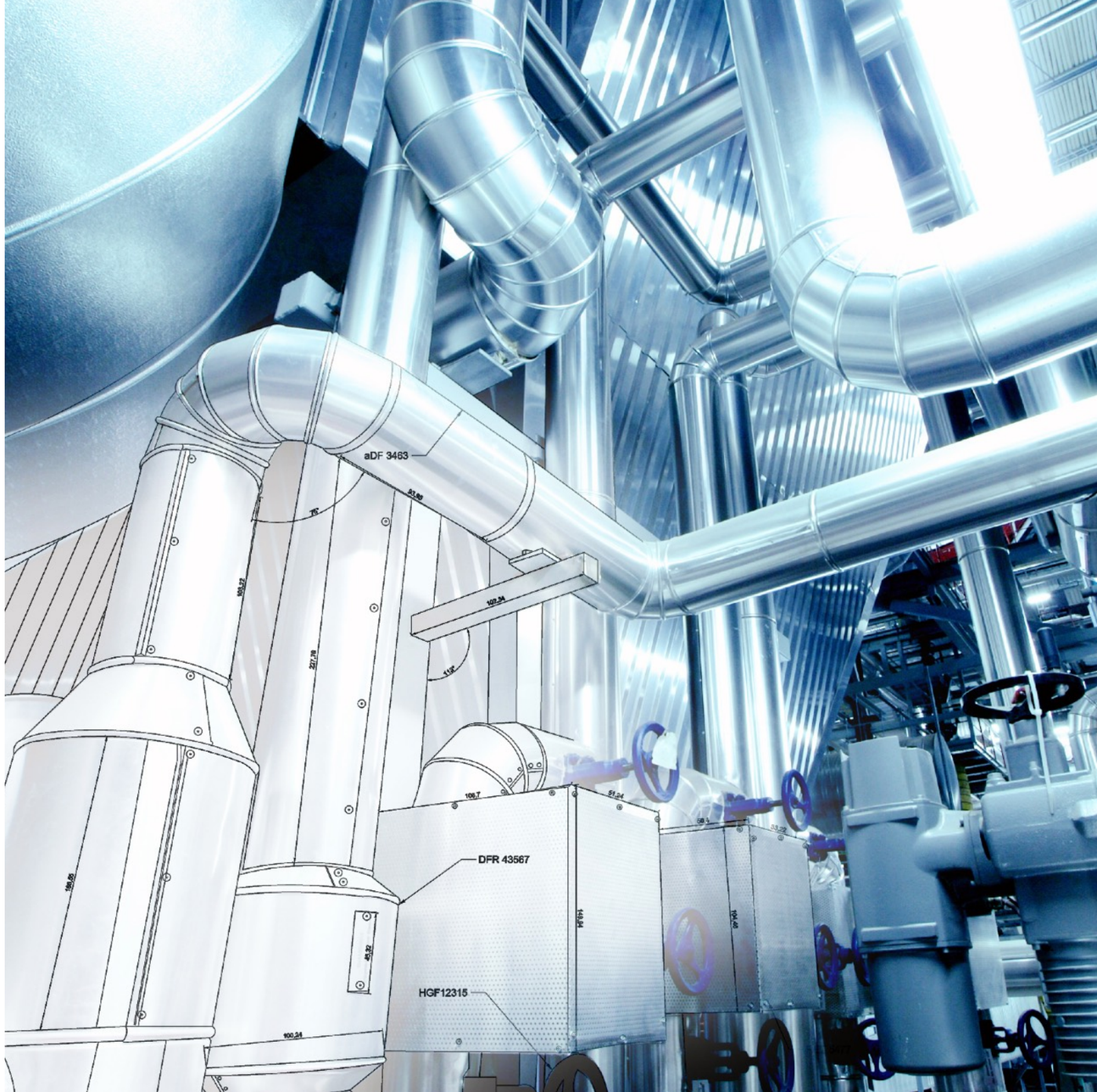
Power Generation Industry

Services

Industrial Automation Applications

Proved experience in systems integration in:

1. Machinery and robotics:
    - Medical equipment, mechanical and microelectronics assembly.
    - Printing machinery.
    - Filling and packaging lines.
    - Plastic extrusion and molding.
    - Analytical equipment for food and beverage.
    - Metal industry melting and bending lines.
2. Oil and Gas: SCADA projects for pipeline supervision and maintenance, covering the entire industry spectrum, including engineering in upstream, midstream and downstream sectors.
3. Food and beverage: dairy, soft drinks, bakery and others.
4. Energy: solar and conventional power generation.
5. Water desalination and treatment.
6. Vision.
    - Machine Vision.
    - CCTV



Services

Building Automation Applications

We offer to our customers an individual approach, self-tested and verified technology in development of optimal solutions of BAS for the following modules:

1. Occupancy – one of two or more operating modes for a building automation system. It is suitable for any kind of room's applications – hotels, offices, etc.

2. Lighting can be turned on, off, or dimmed with a building automation or lighting control system based on time of day, or on occupancy sensor, photo sensors and timers.

3. HVAC – Air temperature and humidity systems. Climate control for office, hospital, hotel, clean room and other purposes.

4. Air treatment – Cleaning, disinfection, decontamination and drying systems that usually treat air clean rooms.

5. Chilled water system – Chilled water is often used to cool a building's air and equipment.

6. Condenser water system – Cooling tower(s) and pumps are used to supply cool condenser water to the chillers.

7. Hot water system – The hot water system supplies heat to the building's air-handling unit or VAV box heating coils, along with the domestic hot water heating coils .

8. Alarms and security – All modern building automation systems have alarm capabilities.

9. Home automation is a subset of building automation and – with a similar purpose – it is the consolidation of one or more systems under centralized or distributed control.

10. Domotronics deals with the interdisciplinary interaction and intelligent networking of building, energy and communications technology in modern especially larger buildings with complex requirements.

Services

Instrumentation And Control (I&C) Engineering

Field instrumentation is the interface between the control system and the physical world. Field instruments are classified to SENSORS and ACTUATORS. Sensors provide information to the PLC and actuators perform actions by the PLC commands. Almost any physical value may be measured by sensors and translated into standardized electrical signals. Such a standard ensures easy integration between an instrument and any suitable control module, vendor independent. Actuators translate electrical signals into physical actions, like open or close, turn, heat, regulate etc.

There are two main principles of field data exchange: the wired connection and Fieldbus. In years, the information becomes increasingly compressed. Vendors attempt to squeeze as much as possible data into so-called “single channel”. Field instrumentation also has been affected by this trend. Some time ago, there were only hard wired connections over junction boxes to the control modules. Also, control modules could be located only on the main CPU rack. Then control systems got a possibility to be expanded to several racks using special data cables and special protocols exclusively by a vendor. It was first DCS! Now, field instruments become smart and also got their communication capabilities. So, the instrumentation level network got its name Fieldbus.

There are also standardized protocols such as ASI, Profibus PA, FF, CAN, DeviceNET and others. All of them – serial networks, usually RS-485 or RS-422. But field level doesn’t require more information capability. Apart from field instrumentation, more and more VFDs also get connected to control systems over ethernet or serial buses. Instrumentation engineering joins physical connection to the process and electrical connection to the control system. From the knowledge aspect, it is one of widest disciplines.

We offer our services in instrumentation engineering and commissioning. We also offer supervision services where instrumentation contractor makes installation and wiring. Our specialists are completely familiar with Emerson, Yokogawa, ABB, Siemens, Rockwell and others vendors.

Services

Digitization

The fully and correctly made digitization gives our clients the follow benefits:

1. Shortening downtime.
2. Generating documents according to standards.
3. Producing documents in more than 40 languages.
4. Smart PDF production
5. Proper and effective management of documents.
6. Saving versions.
7. Implementation and change management.
8. Instant access to existing information.
9. Saving drawings electronically with instant access – also tablet and smartphone!
10. Saving paper and printing.

Services

SCADA

Our experience will allow us to create a SCADA system strictly according to customer's requirement and deadlines, on the basis of the harmonization of design stages.

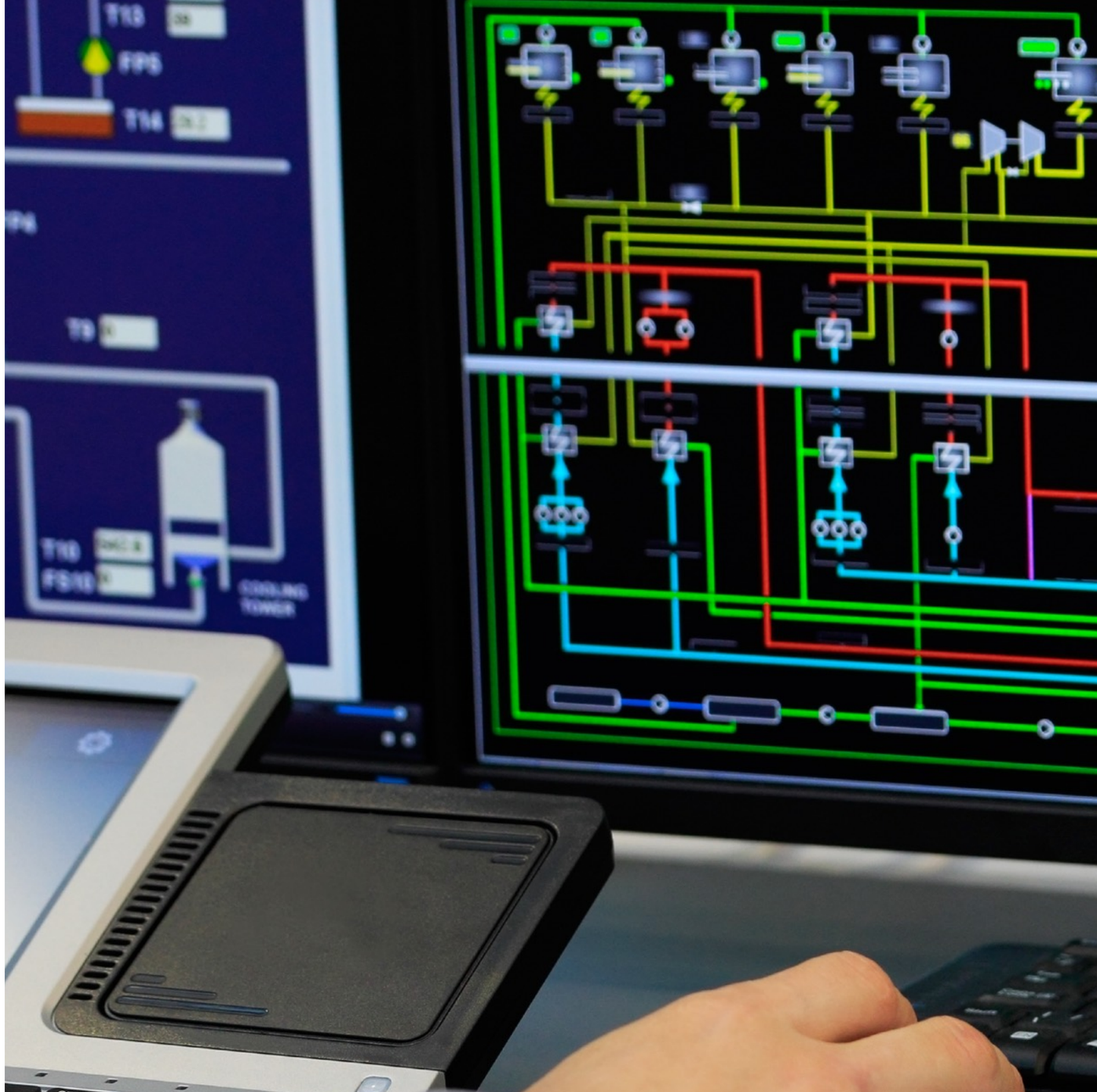
Depending on a complete set and selected software solutions, systems can have different functionality, limited or extended, generic or customized to perform specific tasks. Two major functions that are provided by the system regardless of the type are:

1. This is a collection of data on controlled technological process.

2. Managing the process. (including security and increase the efficiency of technology).

SCADA systems have a wide range of functionality. They collect information from sensors located on the lower level of the system, process it and pass the following stages. The visualized data is presented in a user-friendly table(HMI), chart or graph, they can be packed into the file to be stored in the system memory for a long time, or you can pass them via the Internet, so that the specialist-operator can get access to the right information remotely. One of the most important emerges in the future technological innovation is the ability to automate a software development kit, which allows the system to create a new "soft" without real programming. It is also important that the system is not only transmitting information to the operator information from sensors, but also that it is accepting feedback and executing user commands.

Signals given by the operator are transferred to the controllers and lower-level and executive mechanisms— this provides a high-quality implementation of the whole system, in accordance with the requirements of the customer.



Services

Control Applications Maintenance

We provide services of any complexity maintenance works to any kind of control and instrumentation systems using the most advanced diagnostics equipment to detect and repair breaks in the shortest term. If you need to make any upgrade, we can find the most optimal solution, supply equipment, change the application and update the engineering documentation. Time is money.

Industrial facilities and processes often change to keep themselves updated in accordance to market needs. As an inevitable consequence of process changes the requirement is to update a control system application.

Sometimes it is enough to make only software changes, but in some occasions it is necessary to change both – hardware and software. Those changes always should be provided in the shortest term to decrease the production line downtime. In most cases, it also requires engineering documentation updates.

Another case is any malfunction. In this case it is required immediate immersion into the problem to recognize all the involved components and find the root cause. Considering the fact, that usually it is completely unseen previously software or control circuit, the specialist has to be able to read the program code or electrical drawings to detect the key point. The main factor in resolving malfunctions is highly qualified diagnostic.

Services

Machine vision

Machine vision is the way to give eyes to the computerized devices. The ability to “see” brings manufacturing to a higher level of production quality. It also increases throughput and decrease costs.

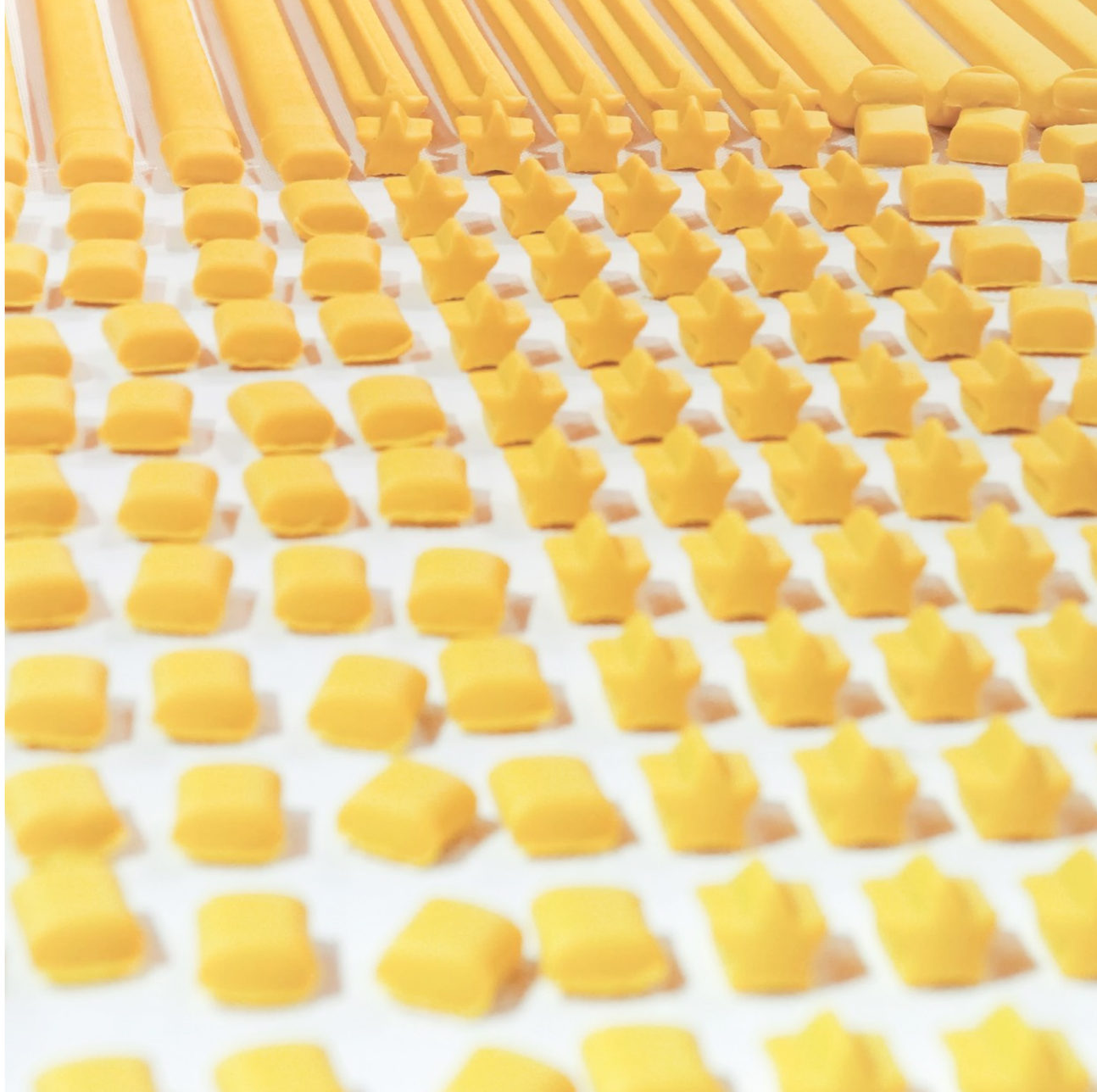
There are many kinds of vision systems – CCTV, Safety, Scanners, Smart cameras, etc. Smart cameras are digital input-output devices, designed to control production equipment, such as robot manipulators or devices for separating defective products. Machine vision is a subset of engineering, which unites computer engineering, optics, mechanical engineering and industrial automation. In robotics, smart cameras there are two main purposes: orientation and quality check.

Orientation is the method that allows robots and self-driven vehicles to “see” the surrounding world and orient themselves accordingly.

Quality Check is an inspection of manufactured goods such as semiconductor chips, automobiles, food and pharmaceuticals. Vision advantage reduces the risk to release a defective product. Smart cameras have the ability to locate the object, to examine size, shape or position, and give the controller information by IO or communication interface.

We provide services for the design, development, installation, commissioning, maintenance and updating of machine vision systems of any complexity level within the predefined term!

More info: www.ProQVision.com



Latest Projects

Working with the best enables us to be better

Projects

Latin America (Colombia, Chile)

ECOPETROL – SCADA CRUDOS (Colombia)

Complete EPC project of upgrade 39 pumping stations and central SCADA.

IDE – Desalination unit 600 m³/day control system (Chile)

I&C design, programming and commissioning.

North America (US)

NRG – Ivanpah 400 MW solar plant at California (US)

Post-commissioning DCS programming services.

Europe (Spain)

IDE (GRANADILLA) – Control system upgrade (Spain)

I&C design, programming and commissioning.

SOLEL – Thermosolar power plant (Spain)

Post-commissioning solar field improvements.

Asia (Turkmenistan and Uzbekistan)

TURKMENGAS (GS2) - Upgrade of gas treatment plant (Turkmenistan)

I&C upgrade (from pneumatics to electronics) based on Simatic PCS7 platform.

Asia (India)

RELIANCE - Desalination plant 180,000 m3/day at India/Gujarat

Automation system commissioning. Automation platform: Rockwell (Allen Bradley)

Middle East (Israel)

INTEL (FAB28) – LSS and HPM for Lachish Campus

Simatic PCS7 life safety system (above 15000 I/O) for leakage tests and shutdowns.

INGL (PRMS HAGIT) – Station control system and SCADA

Gas supply station for Hagit power plant.

IDE (SOREK) - Desalination plant 150M m3/y control system engineering

Complete I&C design, programming and commissioning (Rockwell platform).

INTEL (JER-8) - Building automation

Base-build systems design and programming.

MACHTESHIM – Lycoder, clean room control system

POLYRAM – Production floor MES and SCADA

Custom-made MES for extrusion plant.

SHEMESH AUTOMATION – Packaging lines for wet wipes

Complete line for MULTIPACK (US).

MEDITECH - Packing line upgrade

EPC (engineering, procurement, construction) of new control system for IMA packaging machine. Automation platform: Siemens TIA portal v13 (FDA standards included)

FLEXTRONICS - Robotic systems for Flextronics assembly lines

Programming and integration of robotic systems Automation platform: Beckhoff Twincat v.3 + motion control + vision systems.

VEOLIA (Ayalon) and Cities Conglomerate (Haifa)

I&C Supervision and maintenance. Automation platform: Siemens, Rockwell

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CERTIFIED ISO 9001:2015 COMPANY