



**Arad Control Industrial Group**



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## Our Capabilities



- Designing and execution of all kinds of industrial networks.
- Designing and production of all types of ordered softwares.
- Designing and execution of all kinds of monitoring systems.
- Promotion and amendment of all types of industrial control systems.
- Designing and manufacturing of all kinds of control panels.
- Designing and execution of all types of remote control systems.



## Why Arad Control ?

Our method for being the best is our commitment, specialty, precision, discipline and finally clients satisfaction.

With the aim of activity in the field of industrial automation projects, Arad Control Industrial Group was established in 2006 and by using of industrial automation experienced experts in designing, programming, execution, installation and commissioning.

Due to development of vehicle manufacturing industry, the concentration of company in early years of activity was on the projects of vehicles industries and by the use of potential of its experts, noticeable achievements were resulted.

In 2008, regarding the growth of industrial automation in different industries, this complex by entrusting some projects in transport industry (such as shipping and railing) in the field of dispatching and telemetric and tele-control systems continued its activity which led to satisfaction of employers in this sector.

Due to acquisition of experience in different domains, petroleum, gas and petrochemical industries and also mine industries and power station were the other parts that this complex could draw the attention of employers in the said parts and was able to perform the projects which some of them were for the first time that designed and executed while designing and software production for control and monitoring and also the execution of these projects were done by Arad Control Industrial Group.

This complex is working for more prosperity in the field of producing the intelligent softwares with superior technology, so by offering the quality services to employers and its clients and by using of technical local knowledge of specialists of this complex, could lead to their satisfaction.

# Why US ?



### Project Execution

Regarding the progressive increase of investment in different industries including petroleum, gas and petrochemical industries, mine industries, software industry and also the requirement for the improvement of production and mine procedures, this complex has put centrally all of its industries. So, all technical and engineering services, designing, production of specialized softwares by the order of customer, installation and kick off the control and monitoring systems and precise tools and execution of specialized quality industrial networks and at the international completion level are presented to the customers of this complex.

### Technical and Engineering Department

This part work in connections of electrical engineering and automation services, designing and programming control systems under following softwares:

- Designing hardware by Eplan, Visio, Orcad, and Auto Cad.
- Designing HMI systems by Citect, WinCC, and Lab view, Zenon, Protocol softwares.
- Programming various control systems including Schneider, SIEMENS, Allen Bradley, Omron, PLC's by Twidosoft, SIMATIC, RS Logic, CX programmer, PL7 softwares.
- Designing, Fail safe, Warm Redundancy (soft Redundancy), Hot redundancy systems.
- Designing Wireless, Telemetry network and SCADA systems.
- Designing PDCS, DCS and PMS systems.
- Designing various industrial networks with various Protocols including: RS 232 , RS 485 , industrial Ethernet , ProfiBus (FDL,DP,PA) , DNP3 , MODBus.



## Programming and production of software

In order to produce and presenting of softwares specified for control systems and by the order of customers, Arad Control Industrial Group by emphasizing on its past vocational experiences and by the use of Extreme Programming Method, produces softwares for control and monitoring systems in different industries. Some of these softwares are as follows:

- Programming and production of software for a variety of control systems including PLC & PC based systems.
- Programming and production of software for PAC systems.
- Programming and production of software for a variety of HMI systems by Zenon, Citect, Wincc, Labview, softwares, etc.

## Manufacture and and assembly

In order to aggregate the offering of services to its clients as well as presenting the engineering services and production of software, Arad Control Industrial Group is active remarkably in the field of manufacture and assembly of electrical and control boards. So, while observing the valid world standards and by the awakening of related sciences in this field, there have been performed a remarkable activities and it is ready to present the better services to its clients.

Some activities of this group are introduced as follows:

- Manufacture and assembly of a variety of PLC & control panels.
- Manufacture and assembly of a variety of drive control panels (AC, DC, Servo, etc.).
- Manufacture and assembly of a variety of remote control panels (SCADA & Telemetry).



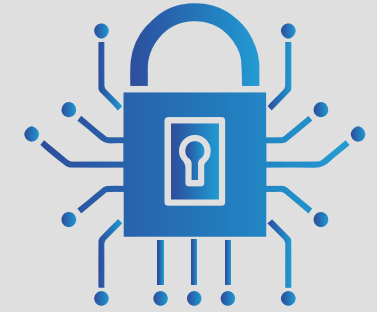
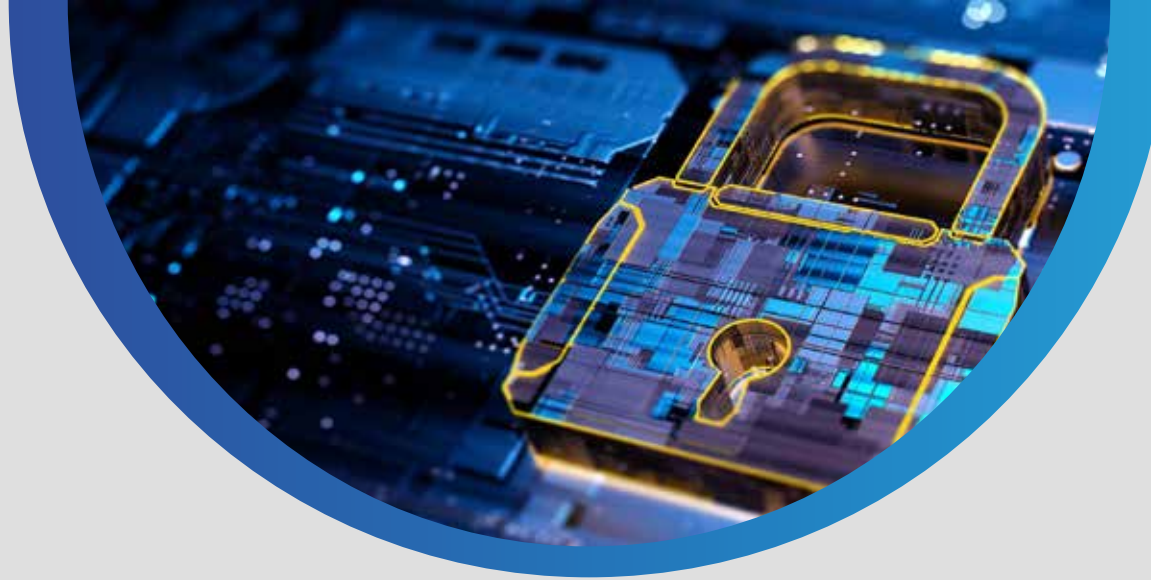
## Supply of equipment

Arad Control Company with long experience in implementing various projects and by benefiting from the knowledge and expertise of its experts has been able to gain a good name in consulting and providing equipment needed for industrial projects. One of the important points that Arad Control emphasizes, and it can be considered as the distinguishing feature of this company from others, is the technical history of this group and the precision and speed of action in preparing and presenting quality and original products, in accordance with the technical specifications requested by customers. **We believe that this is a proper way to provide service and our customers have the right to choose the most appropriate one among the best qualities.** For this purpose, this company refrains from introducing products that do not have quality or technical specifications that do not meet the needs, and provides the necessary technical and expert advice to its customers. Years of effort and practice in providing specialized and unique services in the field of industrial automation equipment, has made the name of Arad Control to be raised as an implementer and also a reliable supplier in the industry of the country.



# Automation





2

## Remote Control System

Due to performed extensive research and activities in the field of remote control projects, this complex has the ability to present best applied and economic solutions in the field of execution of remote control projects. The projects which there is no possibility to perform the electrical and light networks on to them and the only possible communication way between systems, is among wireless methods. Due to the past experiences and exclusive stratagems of this company, they are performable with the high certainty and suitable economic feasibility.

## Network Security

1

Since the security and safety in a project are considered most fundamental and most important parts of that project, so, this complex forever considers security and safety in all steps of performing a project at all levels and through this way always results convenience and certainty for its customers. These security and safety are considered at different levels such as system operation, transfer of information, display of information, and saving of information and in each part they are delivered to the clients with a defined level of access.



### Structure and Network

3

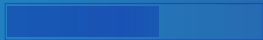
Arad Control Industrial Group by dependence on the technical knowledge of its specialist and experienced human sources and by using of experiences resulted from performed projects and also familiarity with the up to date technology, has possibility to present its clients the best structure of networks. Offering the solutions which lead to establish the certain and economically feasible networks is a part of our specialty.



### Promotion of Control Systems

4

Arad Control Industrial Group, while having experiences in the field of performing a variety of industrial automation projects in different industries and also by using the experienced and specialist human resources and familiarity with the up to date world technology, has the ability to substitute the new systems instead of present old and out of date systems in different industries.





2021

# PROJECT 21



## Shahid Beheshti PDCS Project

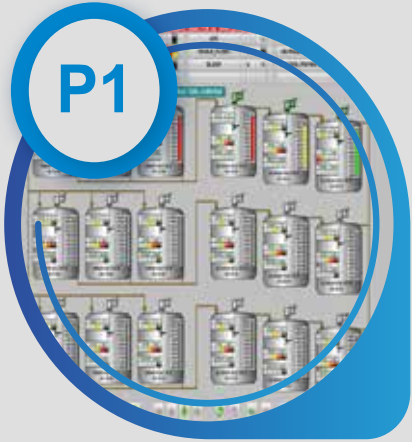


This project was carried out in order to control the electrification operations of the MV substations of Shahid Beheshti Chabahar Port and to supply power to all operational sections of the port. The experience of implementation and cooperation in the country's ports made us use the most advanced equipment and capabilities in the world in this project. Creating a high-speed and secure network, using local controllers in different areas, creating development capabilities in the control and operation sectors, and creating a reliable infrastructure for the implementation of modern smart port systems, is an example of the capabilities of this project.





### DCS system of copper cathode production factory in Shahr-e-Babak



This project was carried out for the first time in the copper industry in the world in order to process copper concentrate and produce copper cathode by BIOLEACHING method. The implementation of this plan is considered one of the successful achievements of this company. Designing the configuration of the communication network, adjusting and preparing the function logic, programming and producing DCS software, preparing control loops, and perfect production of export products, and other exclusive capabilities of this implemented project, it is a successful example of combining expertise and experience in Arad Group.



2018

# PROJECT 20



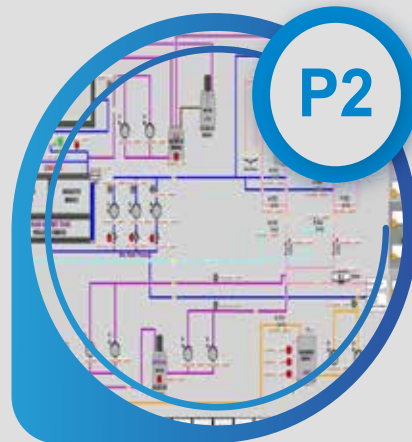


2017

# PROJECT 19



## DCS of Chadormaluo's power plant



This project was implemented in order to control and monitor the WTP section of Chadormaluo's power plant. The implementation of the desired DCS plan in order to control the water treatment part of the power plant using the Siemens S-400-7 control system, as well as the preparation of the logic and operational processes in the project was completely done by the experts of this company. The production of functional and communication software of the system as well as the production of special control blocks to increase efficiency, special design and programming led to the perfect implementation of one of the complex parts in the power plant.





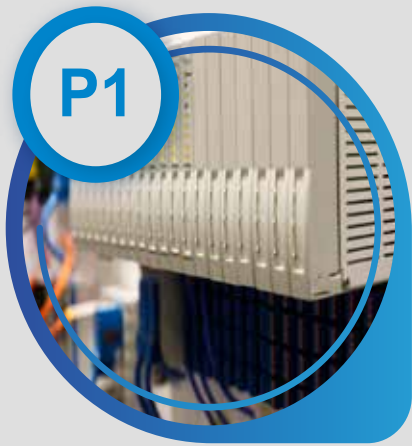
2013

# PROJECT

# 18



## Intelligent emergency water system of Khaton Abad Copper Smelting Factory



This project was implemented in order to make the Demin water system of the anode furnaces of Khaton Abad copper smelter more intelligent. The scope of activities in this project includes designing and supplying equipment, making control panels, programming and producing control and monitoring system software, installing and starting up precision and mechanical equipment.





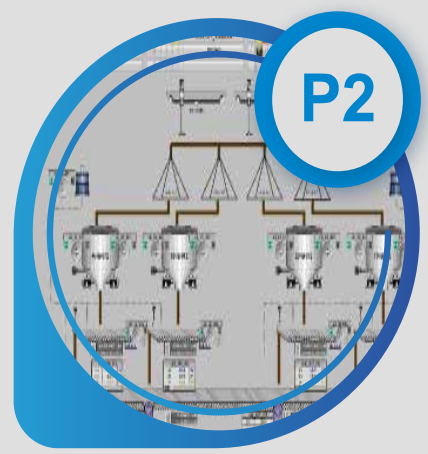


2013

# PROJECT 17



## DCS of Pabdanas' plant



This project was for the purpose of controlling and monitoring all site equipment and motor control centers and showing the production process of Pabadana Coal Washing Plant. In this project, a Siemens S400-7 series system with redundancy capabilities was used for equipment. This project has been designed and planned in 3 monitoring levels as server and client. The scope of Arad's activities in this project included designing, providing equipment, Panels fabrication, commissioning and supervising the implementation.





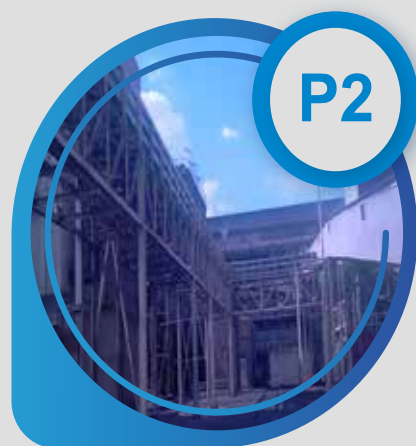


2012

# PROJECT 16



## Modification of power transmission and control systems of Khaton Abad copper smelter



This project was carried out in order to improve the operational operations related to the electrical substations of the Khaton Abad Copper Smelter Factory. In order to prevent multiple production stoppages, all electrical facilities were reviewed and needed corrections were made in many parts such as mechanical and electrical defective equipment.



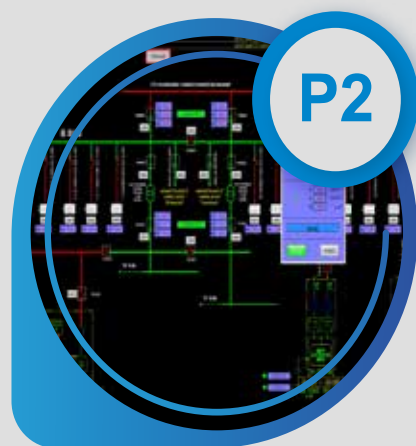


2012

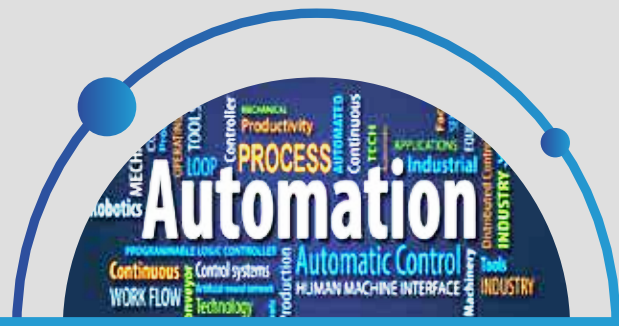
# PROJECT 15



## PDCS system of Sarvestan oil refinery



This project was designed and implemented in order to control and monitor all status and command to the LV and MV panels and the pumping station of Sarvestan Oil Refinery. The design and implementation of the PDCS plan, the production of the DCS software and the implementation of the optical fiber network for the communication of different area and packages, as well as the implementation and commissioning of the control and monitoring room with the ability to connect with the main SCADA center are part of the scope of this project's activities.



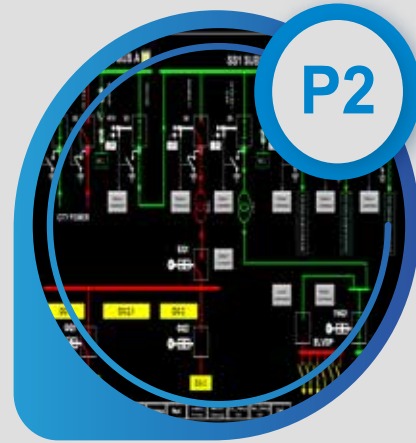


2011

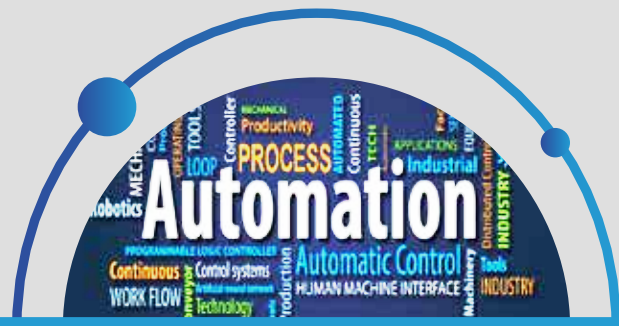
# PROJECT 14



## SCADA system of central depot of Shiraz metro



This project was defined in order to control and monitor the central station of the Shiraz metro. In this project, all the equipment in the central station is controlled and monitored. One of the capabilities of this system is to monitor all existing situations in the central station and repairs and side services shops. The design and implementation of all related parts, including local and central control systems, the complete implementation of the SCADA system on the fiber optic network, the creation of the ability to control situations and send commands, and the production of the required software are the practical achievements of this project.





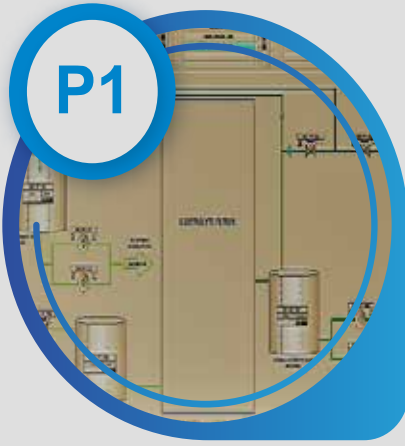


2010

# PROJECT 13



## Monitoring the water supply system of Khaton Abad Copper Smelting Factory



This project has been implemented in order to control and monitor the transmission lines and water reservoirs of Khaton Abad Copper Smelting Factory. In this project, the design, construction of control panels and programming of the control and monitoring system and the operation of the optical fiber network with a length of more than 4 kilometers have been part of the scope of this company's activities. The implementation of this project led to the control of the amount of water consumption as well as the accurate control of the level of the copper company's water tanks.







2009

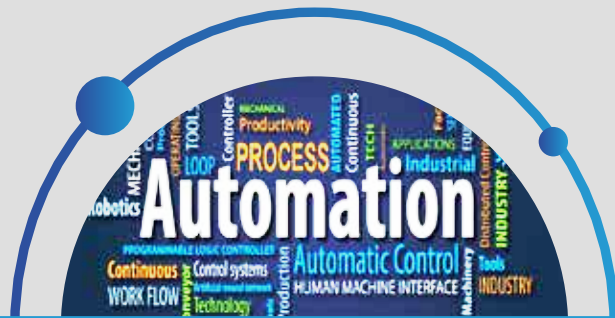
# PROJECT 12



## Electrical installation of Sites 15 and 16 of South Pars



In this project, the scope of work included the implementation of electrical, telecommunication and lighting facilities for non-industrial buildings on the 16&15 Pars South sites. Executive activities include earthing system, Cable tray installation, cabling, lighting systems, TELECOM system and facilities of buildings with an area of approximately 8000 square meters.





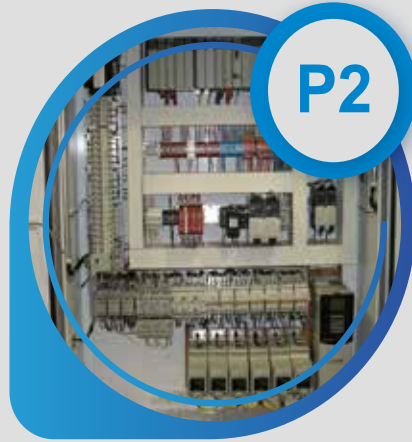
2009

# PROJECT

11



## Traverse mechanized production line



This project was carried out to optimize and increase the capacity of the traverse production line of the Karaj factory. The scope of work included design, construction, installation and commissioning in the mechanical, electrical and control departments. The implementation of this project is considered as the first mechanized production line of traverse in the country, one of the capabilities of this system is to increase the production speed up to 3 times the nominal value. Also, the mentioned line is designed in a modular way in the mechanical part and has the ability to be replaced and increased in the shortest time with the lowest cost. This line has the most advanced control equipment for line control and automation and has the ability to display and archive all errors and events.



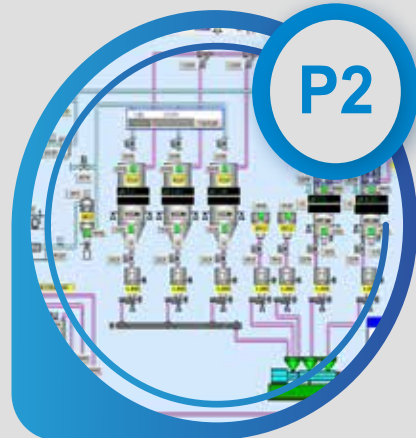


2008

# PROJECT 10



## Material handling conveyors of hematite factory - Gol Gohar Iron and Steel Company



This project included the design, supply, installation and commissioning of conveyors for transferring materials from the hematite factory to the old Gol Gohar factory, with a length of more than 1000 meters, and its implementation was carried out in partnership with Tahghighat-e-Sanat Company. This company has been responsible for the design, supply, and installation and commissioning of electrical equipment, instruments and control. The design and implementation of earth systems, power supply from substations to MV and LV electric motors, design and fabrication of control panels, were other activities of this project.











2007

# PROJECT

08



## Imam Khomeini Port Dispatching



This project was defined in order to control the electric substations in the Imam Khomeini port area. In order to implement this process and considering the distribution of electrical substations in the port area and the impossibility of implementing cable networks, the SCADA system was planned and implemented on the basis of a telemetry network. The implementation of this system by creating innovation in the software and using the world's hardware technology led to the creation of the first SCADA project in the port industry of the country. The creation and production of the first core of the combined data transmission network to cover the requirements and reduce the costs is considered one of the successful achievements of this group. The successful launch of this project due to the scope and complexity of the project was the result of the expertise and local knowledge of this company.





2006

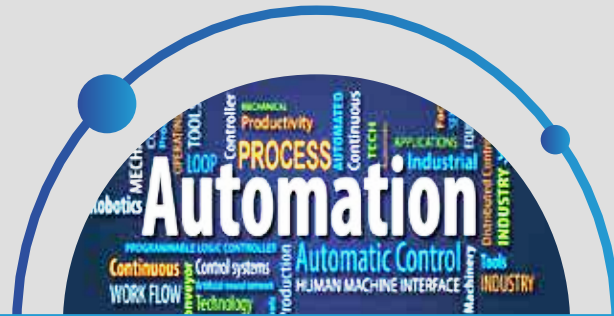
# PROJECT 07



## WAX line of Iran Khodro company



This project was defined in order to inject foam into the bodies of the L90 car and as the final part of the body shop. In order to implement this process, a control system of type S300-7 was planned. This system includes a central controller and 26 data node as well as operator stations, which at the same time are connected to other networks through an interface network and exchange the required information. All commands, error signals and equipment status are managed through the control network. All stages of design, implementation and production of required software were done by this company.







2006

# PROJECT 06



## Karoon IV Power Plant



This project was defined in order to control all the main and utility parts and units of the Karun 4 power plant. The scope of work in this project included the supply, design and fabrication of all the control panels needed to control and monitor various departments. In order to implement this process, S300-7 type control systems were considered for each of the sets. Each system is responsible for controlling the relevant department according to the determined process, as well as sending data and executing the commands of the control room and the monitoring system. The design and implementation of the network and the required software were all produced and implemented by this company.







2006

# PROJECT 05



## Khavaran Gas Station PMS System



This project was defined in order to control the power system of Khavaran gas station. The design and implementation of the PMS plan carried out in this project is completely native and is considered as one of the most complete functional systems in its time. The control and monitoring of all parts of the energy distribution system and the control capabilities of emergency power generators in a fully intelligent and automatic way, the production of software for the intelligitization of the control system without defects is one of the successful achievements of this company.





2006

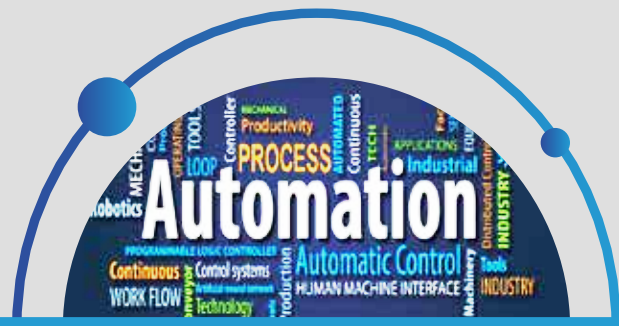
# PROJECT 04



## Transfer machines of Kashan steel



This project was defined in order to transfer galvanized coils between different halls of Kashan Steel Factory. In order to carry out this process, Siemens S300-7 type control systems were considered along with local monitoring system and special industrial networks to connect with motor control drives and other parts of the hall. All designs and programming with special features were designed and implemented by this group.





2005

# PROJECT

## 03



### Development of Iran Khodro's No. 2 body shop



This project was defined in order to transfer the bodies to Iran Khodro Company's No. 1 paint shop. And in order to implement this process, two S300-7 type control systems were planned and implemented to control two complete lines of P&F conveyors and eleven sets of stoppers and rail switches.







2004

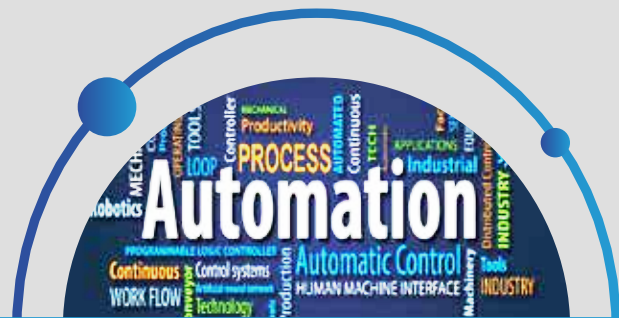
# PROJECT 02



## Peugeot 206 second phase project



This project was defined in order to transfer the body from the body shop to the white body stock (WBS). In order to implement this process, a Siemens S300-7 type control system was planned and designed along with two local monitoring systems. The set of control system is controlled in three modes, one of the most important features of this system is the bidirectionality of the line, which will be possible only by changing the state of a switch.





2003

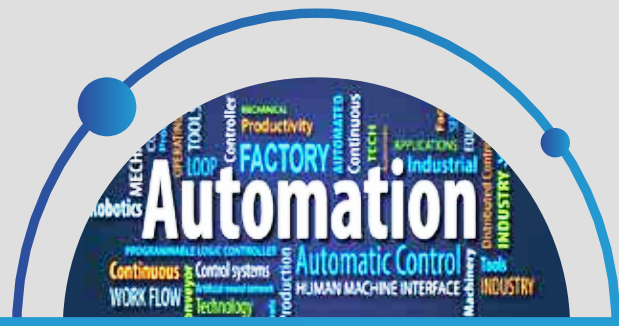
# PROJECT 01




## IKCo's Body shop No.2 Load/Unload project



This project was defined for the purpose of entering and exiting some bodies from the Body shop No. 2 of Iran Khodro Company in order to transfer the bodies to the paint hall or other shops. In order to implement this process, the Siemens S300-7 type control system with the ability of local control and monitoring of equipment and machines was considered. All the stages of designing the performance process and programming and setting up the system were completely done by this company.




Engineering team



Hosein Khallash  
Designer & Engineer




Peyman Shah Esmaili  
Designer & Engineer




Robabeh Davoodi  
Designer & Engineer


Software development team




Jafar Poorghafari  
Professional Programmer




Hosein Noshad  
Professional Programmer




Saeed Mohampoor  
Programmer

Afshin Ataroodi  
Commercial Manager



Hosein Raeis Danaei  
Member of Board



Sasan Raeis Danaei  
Managing Director







Certificates and testimonial





Certificates and testimonial









## Contact us



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