



33, Hristo Botev Str., 8000, Burgas, Bulgaria
tel./fax: +359(0)56 811512; tel.: +359 (0)56 811484, 850596
e-mail: office@startengbs.com
www.startengbs.com



START ENGINEERING JSCo.

BURGAS BRANCH OFFICE

Complete solutions in the field of:

- **process automation**
- **producing and distributing of electricity**
- **air conditioning and ventilation**



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INTRODUCTION

„Start Engineering“ JS Co was founded in 1990 as successor of „Puskovo naladachno upravlenie“ (*Commissioning Work Department*), a former branch of the government-owned holding company SO „Montazhi“ (*Assembly Works*). The company is 100% private. The Burgas branch is one of the largest and fast-developing branches of the company.

The modern manufacturing and storage facilities are built in a total area of more than 3000m² in the southern industrial zone of the city of Burgas.



More than 80 permanent employees work in our branch, 25% of them diplomoaed engineers, and the rest graduated from professional technical schools.

The workforce is organized in functional departments, managed by one operations department- called Quality Assurance Team- that includes the departments managers.

The head office is situated in the downtown of Burgas. The 270m² area is workplace for the administrative and operative management, Offers and Quotes Office, Marketing and Sales Department and includes also specialized store for electrical equipment and components.

The two data servers in the head office and the production division are interconnected via VPN.

Visual control of the production lines is provided through IP cameras, accessible and controlled via internet.

The company has introduced a quality control system ISO 9001 2008 for all the main fields of its business.

Today we can say with confidence that we have both material and human capacity to perform various manufacturing tasks in the company's sphere of activity.



MANUFACTURING

The company provides engineering services in the following fields:

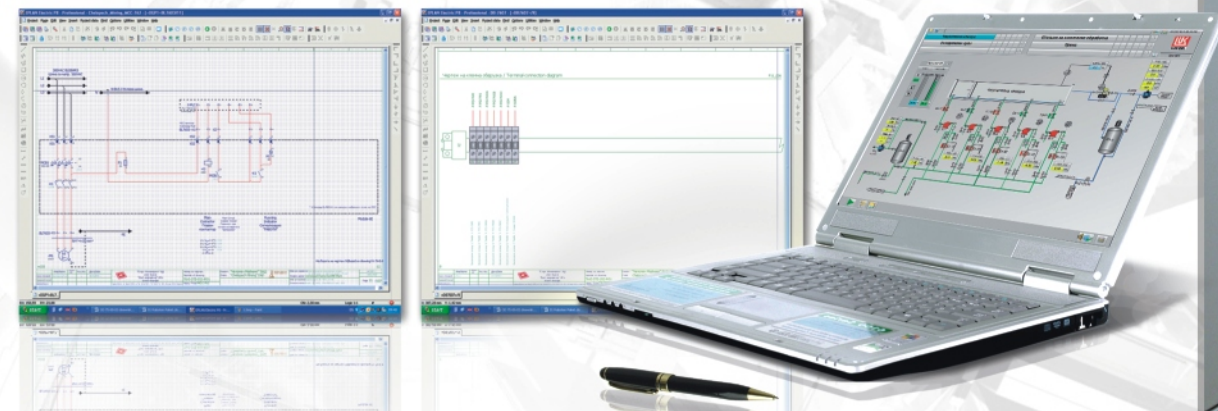
- Power generation and distribution low, medium and high voltage
- Automatic Process Control Systems for different industrial fields - chemistry, metallurgy, power engineering, processing industry, building automation
- Air-conditioning

Our purpose is to offer "to the key" service design, delivery and production of equipment, assembly and installation.

The main areas of our engineering servises are:

1. Design

A team of high qualified engineers develops designs in the fields of Electrical and Automation of Production, based on licensed specialized software for CAD/CAE design E Plan Electric P8, AUTOCAD, SOLIDWORKS.



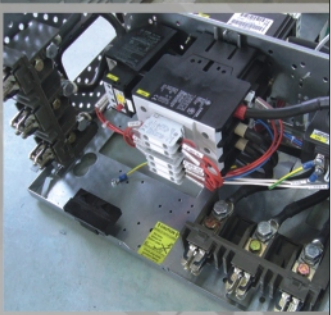
1. Production of low voltage electrical panels:

The company offers a wide variety of these products type tested electric switchboards and MCC, relay panels, automation and control boards, front panels etc.

a) Production of type tested switchboards, Motor Control Centers (MCC) 0,4 kV to 6300A with separation form 2,3,4 and protection class IP30-54.

In the last years "Start Engineering" was recognized as one of the most broadly licensed manufacturers on the Bulgarian market for **type tested switchboards** (Power Control Center-PCC) and Motor Control Centers (MCC), mainly from General Electric's SEN Plus product series.

We started with Switchboards **fully withdrawable modules**. They are applicable in continuous cycle industrial plants, where the replacement or repair of modules has to be done without turning the switchgear off.





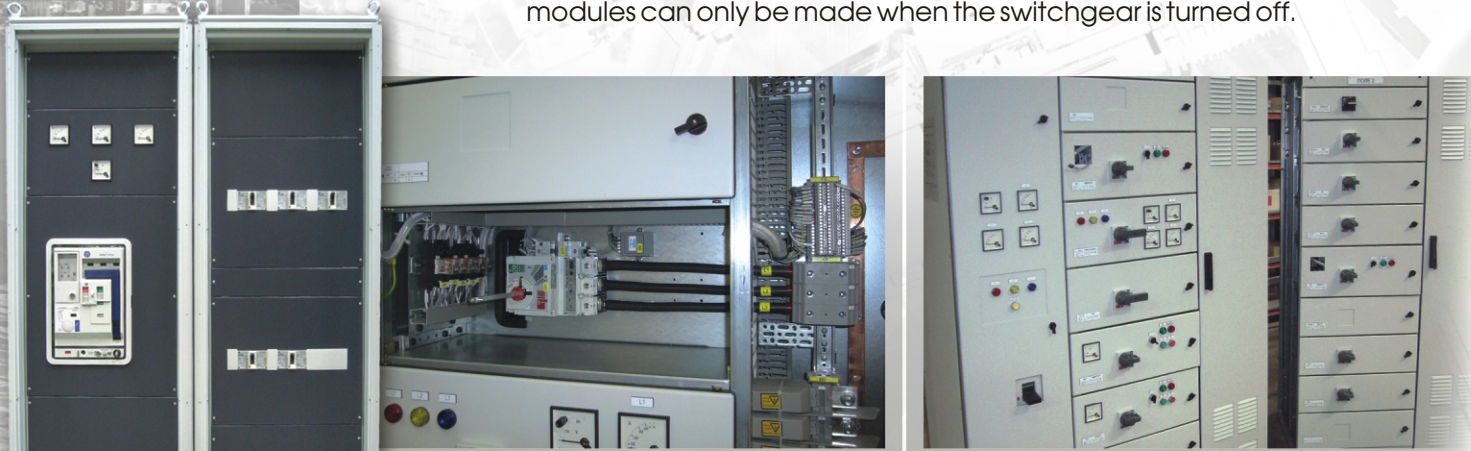
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We produce panels with **partially withdrawable modules, which are „plug ins”** for feeder busbars (power bus). They find application in continuous productions, where the time for replacement or repair of the modules can be longer and „control (check) state” is not needed to test the circuits.



For manufactures where the technological process can be interrupted, we offer **panels with fixed modules**. In this case replacement or repair of modules can only be made when the switchgear is turned off.



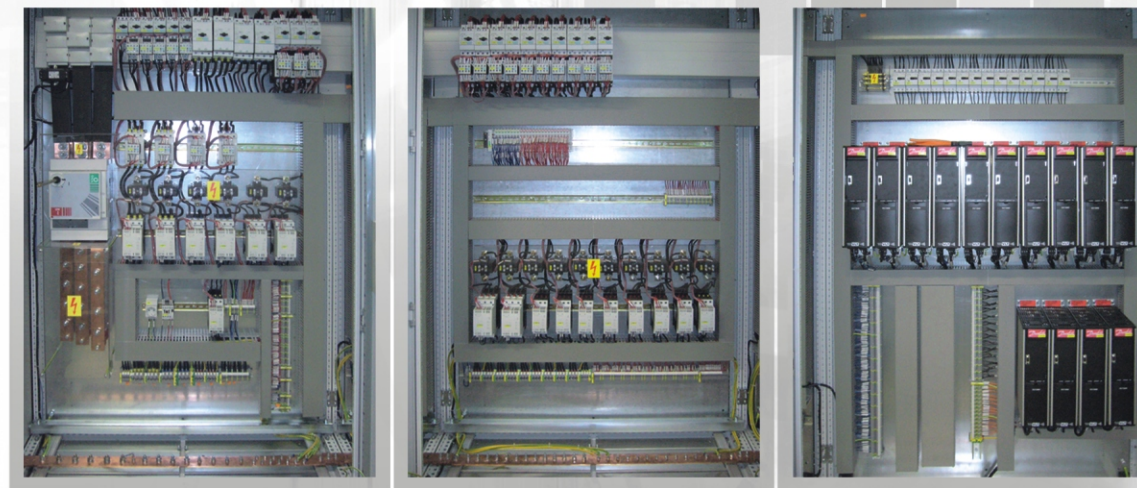
We also produce „intelligent” MCCs with communication control or programmable operator panel.



b) Production of **relay panels**
For the needs of the power engineering we offer developed relay cabinet with 19" modules of different sizes (U), fixed on an adjustable frame with handy access to the elements. The cabinet has a transparent front door and two solid back doors.

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c) manufacture of wide variety of **front panels, controlling and automation panels**



3. Retrofitting of medium-voltage systems:

Production of new relay sections (LV compartment) and modification of withdrawable power units by changing old medium-voltage circuit breakers with new vacuum circuit breakers. In the last years „Start Engineering” has become a reliable partner on the medium-voltage market of the leading manufacturers of such equipment. We have successfully finished retrofit projects with appliances of Siemens, Schneider, ABB and other well-known companies in Bulgaria.

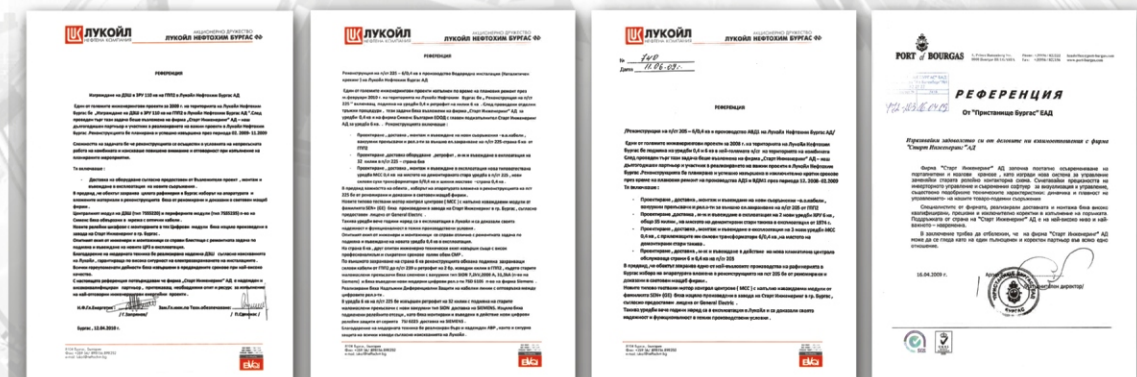


4. Assembly and commissioning works

The company has traditions and wealth of experience in constructing and commissioning industrial sites.

The assembly and commissioning teams, which are managed by very experienced specialists, are able to meet the highest requirements of our clients for quality and promptness of execution of orders. The mobility and the up-to-date equipment of our teams in addition to their high competence are a reliable guaranty for professional execution of the contracted obligations with our clients.

This is supported by numerous positive reviews and references for the completed projects.





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5. Trading with electrical equipment from leading companies

Apart from the engineering projects, we deliver electrical equipment from leading companies such as: GE, SCHNEIDER ELECTRIC, RITTAL, PHOENIX CONTACT, KLAUKE, LAPP CABLE, CIRCUTOR, ETA etc.

In our 500m² store we offer more than 1500 products that are on stock.



6. Shipment and Supply

The company has 20 new vehicles, manufactured after 2002. Five of them are vans (1.5t), 10 minibuses, 3 cars, 1 pick-up truck and 1 truck (6t).

A GPS system is installed in each of the vehicles, controlling their momentary position, which contributes to the on-time delivery of the goods and services to our customers.



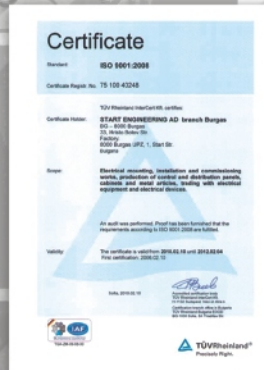
CERTIFICATES FOR OUR ACTIVITIES

The company is certified by:

- **TUV Rheinland** for introduced and maintained quality control system ISO 9001:2008
- **BSA** control agency type „C“ for all the range of electrical measurements, relevant to our activities
- **BKR** repair of shipboard electrical equipment and production of electrical panels for vessels
- **The Bulgarian State Inspectorate for Engineering Supervision** for maintenance and repair of increased danger facilities steam generators and water heaters, pressure vessels, pipelines, crane installations etc.

- **The Bulgarian Construction Chamber** - for participation in construction sites for the electric power infrastructure, high-rise construction and the adjacent infrastructure, road infrastructure and public, water and environmental protection utilities.

- **General Electric** for assembly of type tested systems SEN Plus from GE
- **Schneider Electric** for assembly of type tested panels PRIZMA P, G



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INTERNATIONAL PARTNERSHIP

The company maintains good international contacts with many foreign manufacturing companies engaged in the fields of power engineering, automation, environmental protection, etc. Every year our specialists take part in organized courses and seminars to increase their qualification and to learn about the latest technical products on the market. We have several years of experience in joint manufacture of control panels for the Swiss company "Schaltag" AG.

MOST SIGNIFICANT PROJECTS COMPLETED IN THE LAST YEARS:

- Reconstruction of substation 205 6/0,4kV for „AVD“ (Atmospheric Vacuum Distillation) production in „LukOil Neftochim“ Burgas;
- Reconstruction of substation 225 6/0,4 kV for „Catalytic Cracking“ production in „LukOil Neftochim“ Burgas;
- Reconstruction of substation 239 6/0,4 kV for „VIK“ (Plumbing) in „LukOil Neftochim“ Burgas;
- Reconstruction of substation 224 0,4 kV for „Catalytic Cracking“ production in „LukOil Neftochim“ Burgas;
- Erection of substation 006 0,4 kV for „SKA“ (Sulphuric Acid Alkylation) production in „LukOil Neftochim“ Burgas;
- Delivery of type tested switchboard 4000A for „Chelopech Mining“;
- Delivery of type tested MCC 762 for „Chelopech Mining“;
- Construction and connection of 6 pcs. cogenerators to the National Electrical Company (NEC) in the heating plant in Burgas;
- Repair and modernization of 25 t crane in Port of Burgas;
- Delivery of a MCC for a mill in Sliven;
- Delivery of a MCC for a mill in Tserkovski village;
- Delivery of a MCC for a Biofuel Plant in Gorna Malina village;
- Production and delivery of relay cabinets with digital relay protection for NEC substation „Sofia West“;
- Production and delivery of relay cabinets with digital relay protection for NEC substation „Sofia South“;
- Production and delivery of relay cabinets with digital relay protection for NEC Substation „Metallurgy“;
- Delivery and commissioning of control invertors for roller beds for Metallurgical Plant in Debelt;
- Delivery and commissioning of SKADA system for control of water block 9 in „LukOil Neftochim“ Burgas;
- Retrofit of substation 401- 6kV in „LukOil Neftochim“ Burgas;
- Delivery and commissioning of electrical switchboards for „Sunset Resort“ Pomorie;
- Delivery, assembly and commissioning of air-conditioning system in substation 205 in „LukOil Neftochim“ Burgas;
- Delivery, assembly and commissioning of transformer station, switchboard and electrical installations in business center „Kondosko“;
- Delivery, assembly and commissioning of electrical installations in holiday resort Diniov Giol, Tsarevo;
- Retrofit of cells, 20kV in substation „Vasiliko“ in Tsarevo;
- Commissioning (parts Electrical and Automation) of a newly built production base SKA (Sulphuric Acid Alkylation) and ROK (Acid Regeneration) in „LukOil Neftochim“ Burgas;
- Commissioning (parts Electrical and Automation) of a newly built MDA production in „LukOil Neftochim“ Burgas;
- Commissioning (parts Electrical and Automation) of a newly built „New Gas Sulphur“ production in „LukOil Neftochim“ Burgas;
- Commissioning (parts Electrical and Automation) of retrofitted installations in the following productions: Catalytic Cracking, AD5, AD4, VD2, XO2, XO3, XO4, oil-tank farm „Rosenets“, thermal power station in „LukOil Neftochim“ Burgas;
- Erection of electrical installations, production of MCC, commissioning (parts Electrical and Automation) of dumping-ground facilities near the city of Sozopol, built on ISPA program;
- Delivery of MCC for new dumping-ground near by the city of Russe and Silistra, built on ISPA program;
- Construction of the electrical installations of site: "A retractable-roof of the summer theatre Burgas";
- Erection of 7 new stations for cathodic protection of 5 product pipelines from "LukOil Neftochim Burgas" to the oil-tank farm in Rosenets.

TERM OBJECTIVES OF THE COMPANY

Short-term objectives (1-3 years) of the Company:

1. To achieve and strengthen the leading position in the Bulgarian market for engineering services by increasing our competitive advantage in services and products.
2. To increasing our employees motivation.

Long-term objectives (3-5 years):

1. Establish an international partnership with leading European companies for execution of engineering projects to third parties.
2. Joint manufacturing of specialized products as type tested panels for the needs of the European market, etc with leading European companies.