



February 1st, 2019

Dear Messe Visitor,

ABC ENSER, founded in 1977, has more than four decades of experience in automation and drives, fire safety and security and project engineering. We are active in a variety of industries like water, steel & iron, petrochemical, oil & gas, manufacturing, food, pulp/paper, mining and marine, and the military.

Over this period, ABC ENSER has achieved a documented competency to design lasting and compliant solutions and deliver the whole electrical package as an international contractor or sub-contractor, integrate software within the scope of compliance to IOT and Industry 4.0 standards, and design infrastructural electrical projects in a BIM environment.

Our company's target is to become a turn key supplier for the electrical scope of supply for low and medium voltage projects. With a database exceeding 10,000 customers, our references include clients from the Middle East, the former CIS countries of central Asia, Europe as well our home base in Turkey.

Attached to this cover letter is detailed information about our activities and selected references.

We welcome the opportunity to meet with you in our stand to explore how our services and solutions can best meet your technical and commercial needs.

Best regards,

Burak Cedetas

Chief Executive Officer

burak.cedetas@abcenser.com.tr

Istanbul/Türkiye

T : +90 (216) 311 30 69

M : +90 (532) 246 31 29

Attachment:

- (1) Industrial Automation*
- (2) Security*
- (3) Project Engineering & Consultancy*


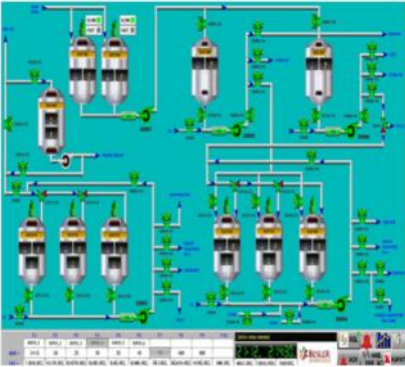

INDUSTRIAL AUTOMATION

www.abcenser.com.tr

ABC ENSER has been active in this field since 1989. Our core competence is of course drives and automation. Over the past years we have delivered many projects for different industries. As a company we have evolved to deliver a project's complete electrical package in compliance with new IOT and industry 4.0 expectations. For this reason, you can call us "technical subcontractor".

As per the customer needs, we have the ability to study and design the electrical solution with best price performance criteria in mind. We understand the performance expectation of the customer as well as the budget limitations. We are a multivendor supplier to match those needs.

Finally ABC ENSER has also vast experience in government projects for Turkey and the neighboring countries.

	<p>Arsenic Removal Plant for Drinking Water For City of zmir we designed erected and commissioned the complete electrical package for the world's largest arsenic removal plant for drinking water. The capacity of the plant is an impressive 3.000 liters per second. This represents almost %45 of zmir's drinking water capacity. Our scope of supply included power transformers, diesel generators, medium and low voltage cabinets, cabling, PLC and the SCADA system of the plant.</p>
	<p>SCADA Batch Process Revamping We completed the revamping of the complete SCADA system of the Besler Margarine Factory in Kurtköy, Istanbul. They were forced to replace their old US Data-based system when the manufacturer announced the product's "end-of-life". As the plant was working we replaced the existing system with new and modern system (including the servers). The project had 206 pages, 65 recipes with 36.000 data tags. The production line has 500 valves, 600 pumps/dosing units, 400 tank/vessels.</p>
	<p>Raw Water Supply for the Industries We supplied the complete electrical package for a raw water investment in Iraq. The system is comprised of water sources from different locations such as the intake, the water treatment, the booster pump station, the water reservoir, and 5 measuring points. The total pipe line exceeds 25 kilometers. Within our supply, we erected and commissioned the whole medium voltage package including the medium voltage motor soft starters and the central control system (PLC and SCADA), which communicated with other stations via fiber optic and/or GSM network.</p>



Airport Runway Lighting Control

We supplied the control system for airport runway lighting applications. This is a mission critical application as it aids the planes to land. To date we have delivered 5 systems.

Within our scope was the control cabinet, the visualization and the control system.



Data Logging Reporting Alarming for Power Plant

We have delivered complete modern SCADA system for data logging reporting trending and alarming for a power plant erected in 1985 with a 1.200MW installed capacity,

The scope of our supply included

- Redundant SCADA system and operator displays at the control room.
- The PLC I/O collection at the plant by the turbines,
- The Gigaswitch network at the plant.



Istanbul City Water Company ISKI

Because Istanbul is a city whose ever-growing population currently exceeds 15 million people, projects regarding its water supply are mission critical and require planning, precision and high reliability.

We are especially proud of our delivery of numerous large-scale, turn-key projects to the Istanbul Municipality water company (ISKI) and we continue to be a preferred vendor.

- Redundant control systems,
- Medium voltage motor control systems,
- Drinking water modernization projects,
- Several pumping station mechanical and electrical works



Yolbulan Ba tu Steel Iron Plant

The barn new steel and iron plant was erected at Osmaniye, Türkiye.

ABC ENSER has the batch control system for improving the quality of the molten metal.

The scope of supply included, Scada PLC system and cabinets, low voltage control cabinets, site work.

SECURITY SYSTEMS

www.abcenser.com.tr



ABC ENSER has been active since 1975 in this field delivering solutions for industrial, military, commercial, residential, mixed use, and public, projects.

Our scope of supply can be summarized to include any of the following systems:

- Fire detection alarm systems;
- Public announcement and evacuation systems,
- CCTV systems,
- Gas detection systems,
- Perimeter control access control systems,
- X-Proof systems for power plants refineries,

We have completed projects in Turkey, the Middle East and the former CIS (Central Asia). Our clients range from government entities, contractors, commercial end users.

We have competence in designing systems compliant with UL-FM, FM-200 and EN54. Our scope of supply is the low voltage systems for above mentioned projects.

	<p>Power Plants</p> <p>We have designed, delivered and commissioned the fire alarm systems for several power plants located in MEA</p> <ul style="list-style-type: none"> - Al Khairat: 1250MW, 10 X 125 MW Gas Turbines - Nainawa: 750 MW, 6 X 125 MW Gas Turbines - Eren Energy Zetes 2 2x615 MW Coal Power Plant - Navoi 475kW Combined Cycle Power Plant
	<p>Pipe Lines</p> <p>We have designed, delivered and commissioned the fire alarm, gas detection, CCTV and electronic perimeter control systems for 2 stations on a Jordanian pipe line.</p> <p>We also provided the integration with SCADA and Control system.</p>
	<p>Petrochemical</p> <ul style="list-style-type: none"> - Banias Refinery IP CCTV monitoring system. <p>System included the fibre optic based wide area network, total of 200 cameras, 26 of which were ex-proof, and central monitoring system</p>

	<p>Metal Industries</p> <ul style="list-style-type: none"> - ISDEM R Iskenderun Steel and Iron plant Exproof zone fire detection system. - Kardemir Karabük Steel and Iron Plant Exproof fire and gas alarm system - Met Nikel Manisa Cobalt plant Exproof fire and gas alarm system - Kazakhstan Copper Plant Fire detection system.
	<p>White Goods Manufacturer</p> <ul style="list-style-type: none"> - Arçelik/BEKO is the largest manufacturer of white and brown goods (Kitchen appliances and TV sets). <p>We cover their major plants against fire and gas. The system has a central monitoring servers and close to 2.000 sensors and/or call points.</p>
	<p>Airports</p> <p>We have designed, delivered and commissioned the fire alarm systems for several airports, including:</p> <ul style="list-style-type: none"> - Istanbul Atatürk Airport - Dalaman Airport - Ankara Esenboğa Airport - Bursa Yenişehir Airport - Konya Airport - Adana Airport - Dushanbe Airport
	<p>Food and Beverage</p> <p>We have provided with fire and gas detection systems to</p> <ul style="list-style-type: none"> - Turkey's largest sprit producer. - Turkey's largest vegetable oil producer.



PROJECT ENGINEERING AND CONSULTANCY

www.cedetasltd.com.tr

Founded in 1958 as CEDETAS ELECTRIC, and incorporated in 1974 as **CEDETAS ENGINEERING AND CONSULTANCY COMPANY LTD.**, it is the pioneering consultant and engineering company of Turkey.

The company has a vast engineering and construction project experience and provides services to various commercial, administrative and industrial sectors.

- Shopping Centers
- Hotels
- Administrative Buildings
- Congress & Culture Centers Museums
- Restoration Projects
- Houses and Residential Buildings
- Health Facilities
- Educational Buildings
- Industrial Buildings

Our services can be summarized under below headlines;

- Design & consultancy
- Project management
- Lighting consultancy
- Construction supervision
- Energy management systems

Cedetas Engineering and Consultancy has collaborated over the years on numerous international projects with American, Japanese, Canadian, British, German, French and Italian technical consultancy and architecture engineering companies. Several of the works were financed by the World Bank, NATO and various International Financial Societies.

As of yet, the total area of our projects approaches 8.000.000 square meters and counting...



AKASYA

Located in Acibadem, Istanbul. Shopping center and residential project's total covered area is 630.000 m².

Services Provided:

- Design & Construction Project
- Lighting Consultant
- Tender Documents

The project consists of 1.357 sellable units and AVM with 80.000 m².

AKASYA Project has received the BREEAM (Building Research Institutional Environmental Assessment Method) in 2013. Energy savings were achieved through efficient illumination automation.



SEA PEARL

Located at Ataköy district of Istanbul, Sea Pearl's total covered area is 920.000 m².

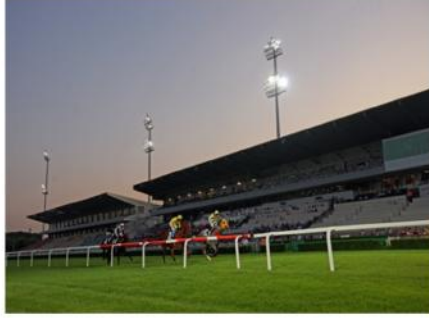
Services Provided:

- Design & Construction Project,
- Tender Documents, Technical Specs
- Site Survey Services.

Project consists of 8 residential, 1 commercial, 1 Hotel Block.

Hotel block has 136 apart units and 113 rooms. It's designed and build based on JUMER AH Hotel standards, which is the chosen operator.

The campus installed power is 10MVA which is backed up %100 by generator.



TJK

Turkish Jockey Club, legal operator of the horse races in Turkey, has elected the Istanbul Veliefendi hippodrome as their benchmark in Turkey to set the standards for design and application of the lighting project.

Cedetas LTD has won the bid for the project with Australian ASC. And delivered the project with success.



LUTFI KIRDAR INTERNATIONAL CONGRESS CENTER

Located at Harbiye district of Istanbul the center's total covered area is 28.000m².

Services Provided:

- Design & Construction Project,
- Lighting Consultant.

The main congress hall capacity is 600 seats, with an exhibition area of 3.000m², restaurant with capacity of 500 seats and several support areas.



ALFARABI RESIDENTIAL PROJECT

Located at Almaty, Kazakhstan, project's total covered area is 70.000 m².

Services Provided:

- Design & Construction Project,
- Tender Documents.

The project was designed and developed in compliance with local codes and regulations as well as social needs and references.



LIGNA DÉCOR, ISTANBUL

Located at Istanbul, this industrial complex has a total covered area of 20.000 m².

Services Provided:

- Design & Construction Project,
- Tender Documents