

# EleMech

Electrical and Mechanical solutions





# COMPANY

## ELECTRICAL

HV, MV & LV transmission

Distribution of complete sets of equipment

Power transformer, wires and cables

Electric power automation system, etc.

## MECHANICAL SERVICES

Spare Parts & their Services

Bars, Plates & Tubes, Gear motors

Industrial gears, Belts & Pulleys and

Motion Control

Bulk handling system



Material Supply

Repair  
Solutions

Case Studies



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MATERIAL SUPPLY



REPAIR SOLUTIONS



CASE STUDIES

## COMPANY PROFILE

Some customers prefer to have the job done without their involvement in procurement, installation and operation of their electrical and mechanical needs. We at EMECH also undertake turnkey projects for our customers such as insulation or ATS for your generators, delivering a complete and operational power plant with the partnership of our valued suppliers.

## ABOUT US

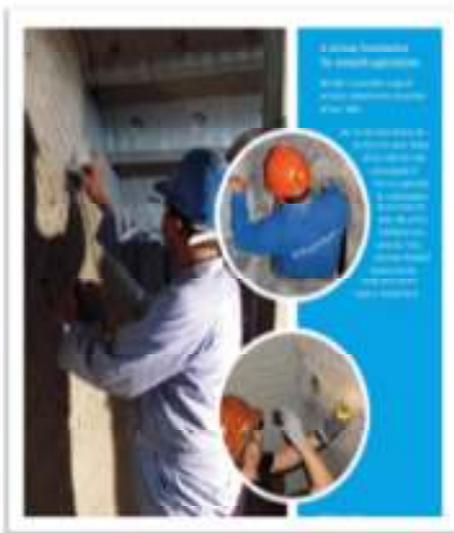
“EMECH” ELECTRICAL AND MECHANICAL SOLUTIONS is a private company and provides a wide range of electrical and mechanical engineering solutions to the customers.

## WHOM WE SERVE:

- Oil and Gas Companies
- Power plants
- Wide range of industrial units
- Cement Plants
- Iron and steel industry

## OUR VISION

To provide the customers with solutions for their electrical and mechanical problems, with cost effectiveness and reliability. Solutions will be provided through our well-known associated and qualified business partner companies.



# SERVICES

## MATERIAL SUPPLY

From a wide range of contractors, ELEMMECH will supply its customers with best quality, and economical materials such as generators and spares, pumps, valves, compressors and wear plates and much more.

## REPAIR SOLUTIONS

Sophisticate mechanical equipments are very difficult and some time impossible to repair but we in ELEMMECH together with our partners will provide a good range of repair solutions to cater all problems of our customers.

## CASE STUDIES

At ELEMMECH, we are specialized to analyze our customer's special business scenarios to best provide them efficient, effective and economical electrical and mechanical solutions. Such analysis may include turbocharger modifications solutions, modification from DFO to HFO etc.

## TURNKEY PROJECTS

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# PRODUCTS

## MECHANICAL PARTS

### ➤ SPARE PARTS FOR LARGE DIESEL ENGINES:

We supply spare parts for Diesel engines for MAN, Wartsila, Deutz, Cat ..etc. engines.

We can offer the customers with another choice which we carry out all the work from dismantling the part from engine, repair it in our repair shop and reinstallation at engine can be done also for the exchange parts status including customs clearance if needed, all this deferent choices in Delivery and change the old or used parts with new or repaired parts is one of our advantage to allow the customers to get the capable choice according to price, delivery time and parts insufficiency.



## PARTS REPAIR

We repair the turbines blades, turbines inducer and impeller shaft ends for almost the turbochargers.

All the repair works made according to the manufacturers terns and its gives the same efficiency as new.

The customers can get ready repaired parts instead of his damaged parts also.



## ➤ SPARE PARTS FOR TURBOCHARGERS:

- Spare parts for Napier type ( NA295, NA297 ...)
- ABB type (VTR series, VTC, TPS and TPL)
- MAN (NR34, NA, ...) are available in our stock

In our stock we have spare parts for commonly used turbochargers in the territory and MAN engines (OEM). We provide our customers with many choices of delivery terms. We also provide the customers with keeping stock parts solution on their demand to increase the customer's reliability on engines in operation.

We also provide the customers with long-term agreements in spare parts supply, this means fast delivery of parts and the customers will be sure that they will not operate out of spare parts

### Turbochargers overhaul

We can make the overhaul for turbochargers including balancing of the rotors and supply or repair the spare parts. Regularly overhauls can also provide by us either on long term service agreement or on request.

Making the Complete overhaul for damaged turbochargers, major failure turbochargers can be done on our repair shop.

### Rotors Balancing

We have the facilities to make the rotor balancing for the rotors of turbocharger using the equipment of the leader manufacturer of the balancing machine.



## ➤ SPARE PARTS FOR SEPARATORS:

**We supply spare parts for all type of separators**



## ELECTRICAL PARTS:

- Power Transformers MV and HV
- HV , MV Cables
- Substations
- MV and LV switchgear
- Surge arrestors
- Insulators
- Vacuum Circuit Breakers VCB
- PT and CT

### Power Transformers MV and HV

#### Introduction

The dry-type transformers are casted with epoxy resin, which are made of high quality materials by means of a strict process with advanced production and testing devices. The product features high



reliability and long service life. In accordance with different operation environment, it can be equipped with different protection casings or without casing. It can replace the oil-immersed transformer and be used in the high buildings, business centers, airports, tunnels, chemical plants, nuclear power stations and watercrafts etc.

#### Performance Characteristics

1. The product is safe, fire-proof, pollution free, and can be used in the load center directly.
2. High mechanical strength, strong short-circuit proof capacity, small partial discharge, excellent thermal stability, high reliability, and long service life.
3. Low loss, low noise, energy saving and maintenance free.
4. Excellent heat dissipation, great overload capacity and a larger operating capacity is available when ONAF is applied.
5. Good humidity resistance, it's



suitable for operating in the highly humid and harsh environment.

6. An intelligent signal and temperature control system is adopted, which can automatically monitor and display all working temperature of the three-phase windings.

The blowing fan can give an alarm, switch on and off automatically and conduct tripping operation to protect the transformer.

7. Due to the structure is compact and weight is light, it can save space and decrease the cost of installation.

We can provide transformer operated in special conditions according to user's requirement.



### **S9-50~20000/35 Three-phase oil-immersed**

#### **No-excitation voltage-regulating power transformer**

The product conforms to the technical parameters and requirements of China National Standard GB1094 and GB/T6451, and a series of significant innovation is applied in aspects of material, design and structure. It has the features of high efficiency and low loss. It can save a lot of operation cost, and the social benefits are very significant. In conclusion, it is a nationally promoted new product and it is deeply favored by customers.



# Cables & Wires

**PVC Insulation and Nylon Sheathed Wires and Cables**  
It is used for fixedly laying in engine devices of A.C. rated voltage 450/750V or lower. Because nylon sheathed wires heat shrinkable small, its diameter small (especially the more obvious 10m2 and below), low friction coefficient, easy to puncture the tube and oil resistance, easy of installation use, safe and reliable.



**PVC Insulation and Nylon Sheathed Wires And Cables**



**35kv or Lower XLPE Insulation Power Cables**



**Fluoroplastics Insulation And Sheath Heat-Resistance Control...**



**Fluoroplastics Insulat PVC Sheathed Control Cable**



**Plastic Insulation Control Cable**



**0.6/1kv PVC Insulation Power Cable**



**Aluminum Stranded Conductors and Aluminium Stranded Conduct...**



**Low-smoke & Halogen-free Flame-retardant Polyolefin Compound...**

# Substations

## **Economy Pre-Fabricated Substation**

This series of pre-fabricated substation uses imported FLUSARC sulfur hexafluoride

ring switch as its HV incoming and out coming wire. And the substation applies integrated automation system which can realize unattended mode.



## **YB Series Pre-Fabricated Substation**

YBF-40.5/0.69 series wind-power substation is tailor-make for the wind-power



## **Low-Voltage Draw-Out Switch Cabinet**

Low-Voltage draw-out type switch cabinet is developed by our company with reference to the MNS low-voltage switch cabinet produced by Swiss ABB Company. The Switch Cabinet, composed of standardized, serialized modules, is the most advanced in China. The secure mechanic interlock mechanism for drawer ensures its safety and reliability. The Switch Cabinet, applicable to three-phase five-wire power supply system

market, improving the voltage from 0.6-0.69KV to 35KV or 10KV. Its appearance adapts to the trends of national wind power substation design.

It features great reliability, safety, practicality and economy and is an ideal system supporting wind power plant product.

## **Metal Crust Pre-Fabricated Substation**

This series substation is constituted by bottom case, side panels, partitions doors roof and other parts.



The box is divided into HV roomy transformer room and LV room. The protection grade of box is IP33.

whose frequency, rated insulation voltage, working voltage, and rated current are respectively 50(60)Hz, 380(400), 660V, 5000A or weaker, may be used in power stations, substations, factories, mines, buildings, hotels, airports, harbors, broadcast televisions to control the equipment's generating, transmitting, distributing, exchanging or consuming power, and to offer reactive compensation, by means of capacitance compensation cabinet, for main bus-bar.

# MV and LV switchgear

## **Metal-Clad AC Draw-Out Switchgear MS\_01**

KYN61A-40.5 Model Metal-clad Ac draw-out switchgear is a new product designed by Xi'an High Voltage Institute and Shanghai Delixi Group Co., Ltd. recently.

## **Low-Voltage Draw-Out Switch Cabinet**

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broadcast televisions to control the equipment generating, transmitting, distributing, exchanging or consuming power, and to offer reactive compensation, by means of capacitance compensation cabinet, for main bus-bar.

## **KYN28A-12(GZS1-12)Model Indoor AC metal-clad withdraw able switchgear**

KYN28A-12(GZS1-12) Indoor AC metal-clad withdraw able switchgear (Hereafter referred to as "switchgear") is an advanced



medium-voltage switchgear, developed by Xi'an Senyuan corporation, is suitable for the applications in three-phase AC electric power system with rated voltage of 12kv and rated frequency of 50Hz, for the acceptance and distribution of the power, and also provide control, protection, and monitor of the circuit. Technical transferred is also provided by the same corporation.

*All products of  
MV & LV Switchgear Series are  
tested as required standards.*



## Arrester



### **0.22kv~35kv Metal Oxide Arrester with Compound Sleeve without Gap For AC System**

Excellent protective performance, powerful current capability, good sealing property, fine anti-fouling and anti-aging property.



### **3-10kv Three-phase Composite Metal-Oxide Arrester with Compound Sleeve for AC System**

Three-phase Composite Metal-Oxide arrester with compound sleeve for AC system is used for 3-110Kv electric power system and prevents transformer equipments from being damaged by operating overrating voltage between phase-phase or phase-earth caused by frequent operations.

## Composite Insulator

### **Composite suspension insulator**

This product is especially applicable for filthy place, high mechanical tensile load, big bridging coil and compact circuit. It features at light weight, compact structure, not easy to break, high resistance to bending and torsion and strong explosion-proof.



This product is applicable for city transmission network. It can effectively make use of narrow area in city transmission network. It can effectively make use of narrow area in city to boost voltage and deliver current. It can lower the height of pole that a lot of financial and material resources can be saved. Its bending strength is so high that ceramic cross-arm



occurring from cascade break accident which is easy to happen can be prevented by ceramic cross-arm.

## Vacuum Circuit Breaker

### **ZN63S-24(VSI+) Indoor High Voltage AC Vacuum Circuit Breaker**

VSm-24 indoor AC high voltage vacuum circuit breaker, equipped with permanent magnet mechanism, can be widely used in power plant, substation and various monitoring and application environments, such as power supply system of chemical plant, steel plant, automatic factory, aero plane factory, aero plane factory and large-



scale  
building  
s.



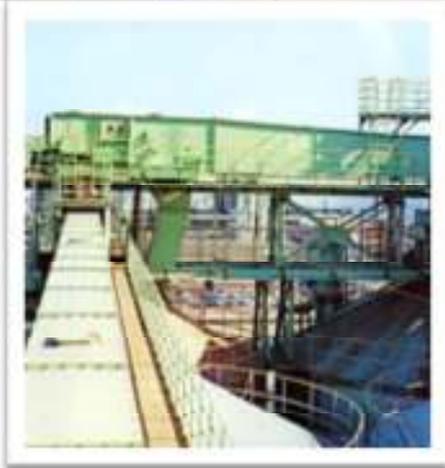
### **ZW32-12 Outdoor High Voltage AC Vacuum Circuit Breaker**

ZW32 outdoor High Voltage AC Vacuum circuit Breaker is a new generation outdoor vacuum circuit breaker researched and developed recently based on the foreign advanced technology, combing the features of power industry of our country.

### **ZN85A-40.5(3AV7)**

Indoor high voltage AC vacuum circuit breaker is a new breaker which is developed by Xi'an HV research Ltd. and our company.







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