

WHAT IS COMPLETE SWITCHGEAR, ITS APPLICATION, ADVANTAGES AND NECESSITY IN OUR LIFE

Complete switchgear (CS) is a device that operates for receiving and distribution of electrical energy.

It consists of cabinets and connecting elements (e.g. conductors), which are supplied as separate cubicles or in blocks consisting of several cubicles, assembled or prepared for installation.

CSs are fully manufactured at factories: which means they are only mounted on site.

These switchgears meet the requirements of industrialization of power construction to the fullest; therefore they are currently becoming the most common form of switchgear design.

At the same time, mixed-type switchgears are also widely constructed, partly as prefabricated and partly as complete.

Complete switchgears can be used for both indoor and outdoor installation (in the latter case, they are called CSO). CSs are widely used when a tight placing of the switchgear is required.

Particularly, switchgears are used at power plants, urban substations, for powering oil industry facilities such as oil pipelines, drilling rigs, and in ships' power consumption schemes.

Prefabricated chambers of one-sided service (PCOS) are separately distinguished among switchgear cabinets.

One-sided service allows you to place PCOS right to the wall or back walls to each other, which saves space that is important in the high density of constructing areas.

The application of complete switchgears is the basis for industrialization of construction and installation work in the construction of power plants, transformer substations and electrical devices of industrial enterprises.

Complete switchgears have the following main advantages: a significant reduction of the volume of construction and installation work and a reduction of their execution time; significant savings in labor costs; improvement of quality of electrical devices and increase in reliability and safety of their maintenance and reduction of operating costs.

They also provide the convenience and speed when expanding and renovating; mounting and supply in production of construction and installation work is simplified and the scopes and design times are reduced.

So, I believe that the creation of CS is a very important event in the world of the electric power industry. Moreover, CS in our time is an irreplaceable electrical apparatus, as it greatly simplifies the work of electrical substations, power plants and other enterprises.