EFIBAR

EFIBAR Busbars

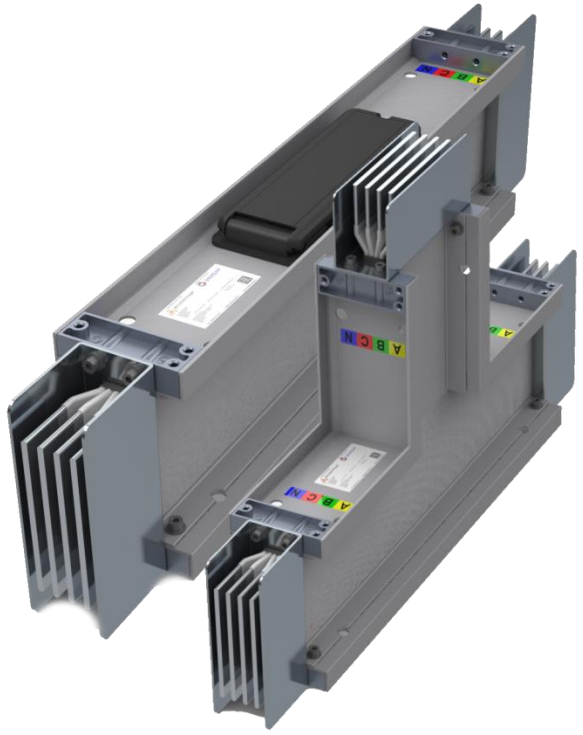
Trunk Line and Distribution Busbars

Nominal voltage up to 1,000 V
Nominal current up to 6,300 A

EFIBAR Busbar

Busbar is a system of insulated rigid buses (copper, aluminum) in a metal protective enclosure, designed for transmission and distribution of electric power of up to 1,000 V.

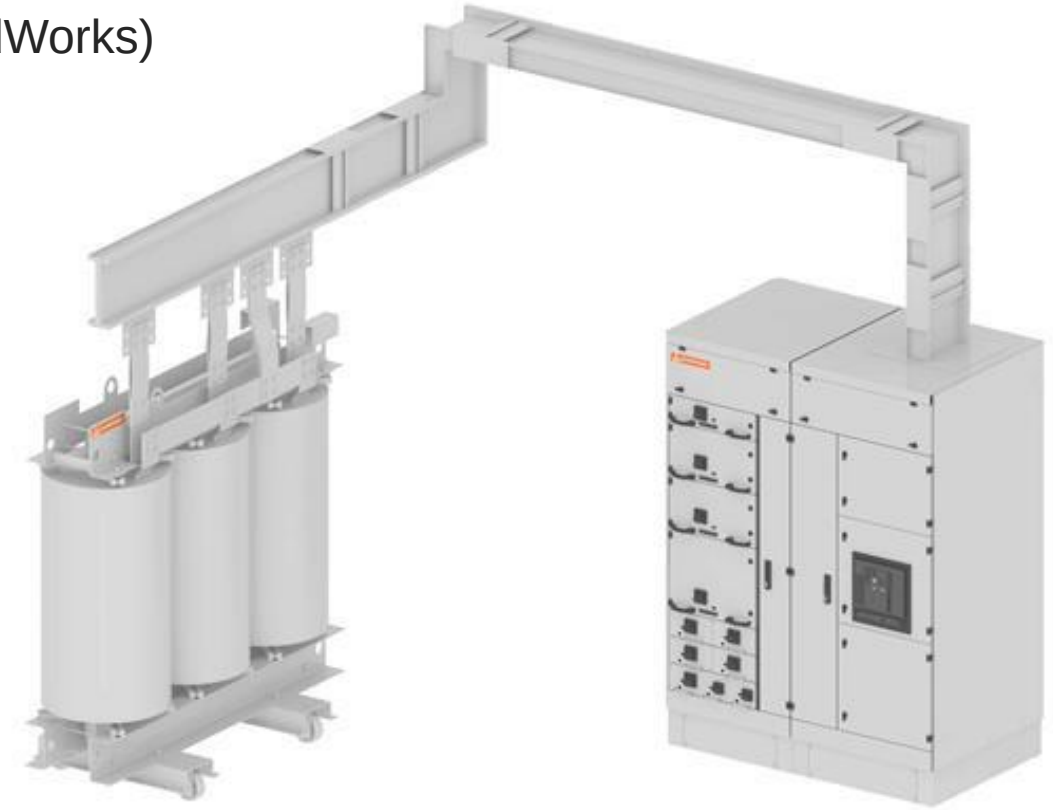
- 390 km of busbars installed over 70 years of production
- Compliance with the requirements of GOST, TR TS
- Polymer insulation from Italy
- Two-piece aluminum case
- “Pure” aluminum bus (99,8%)
- Contact plating with silver and tin
- Fireproof



EFIBAR Busbar

We offer services in 7 areas:

- Packaged supply
- Design (AutoCad, Revit, SolidWorks)
- Installation supervision
- Installation
- Service maintenance
- Warranty maintenance
- Personnel training

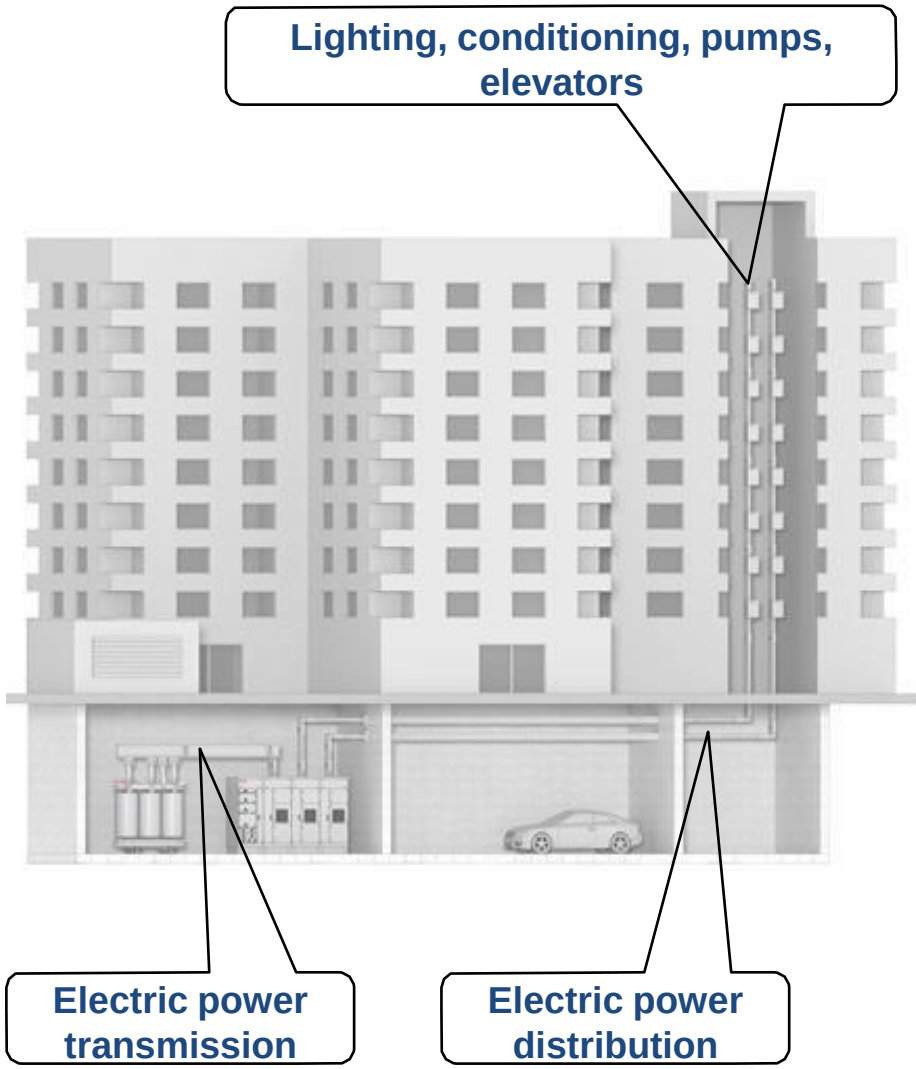


Sphere of Application for EFIBAR Busbar

Applications of EFIBAR busbars:

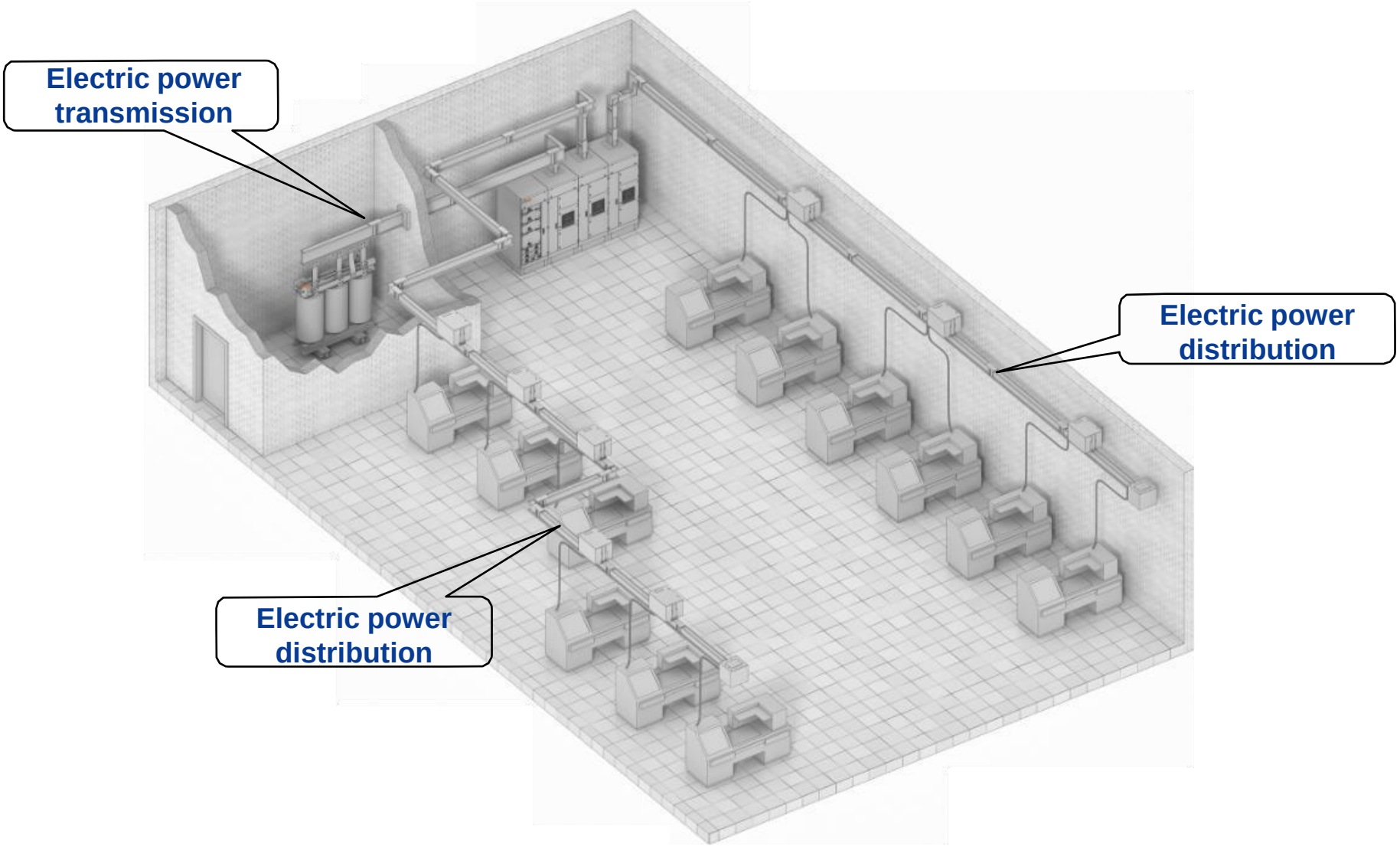
In business centers and high-rise buildings:

- As a feeder between transformers and main switchboards
- For power distribution to the floors via riser boards
- Horizontal installation as a feeder to switchboards and equipment



Sphere of Application for EFIBAR Busbar

At industrial facilities and indoors



Sphere of Application for EFIBAR Busbar

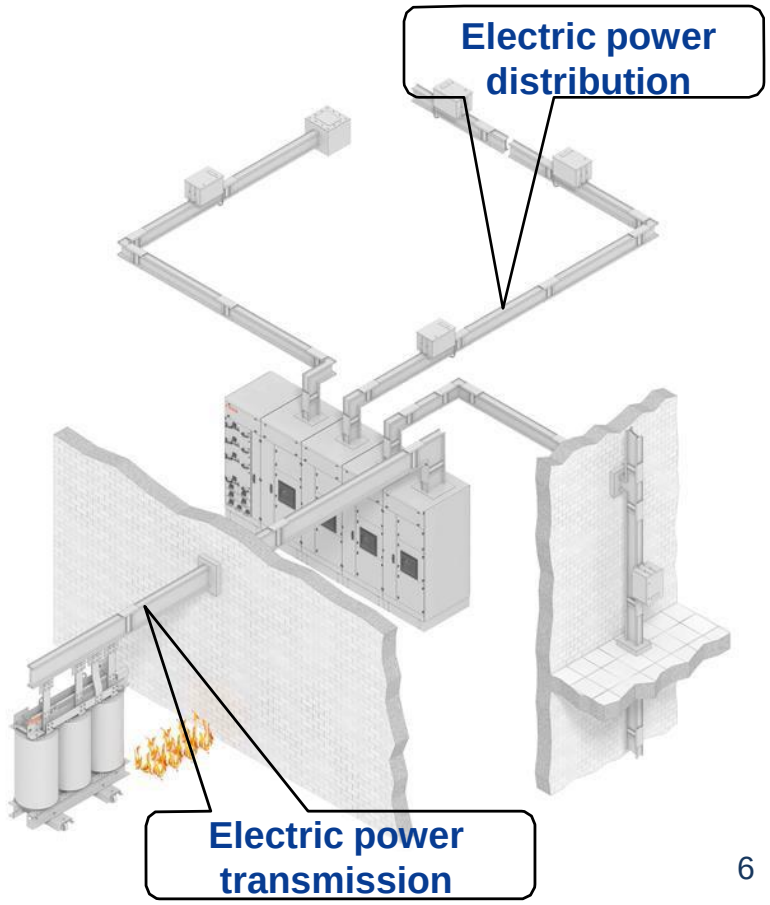
In hotels, sports venues and institutions:

- As a feeder between transformers and main switchboards; and
- For power distribution to the floors via riser boards.

In trade centers/supermarkets:

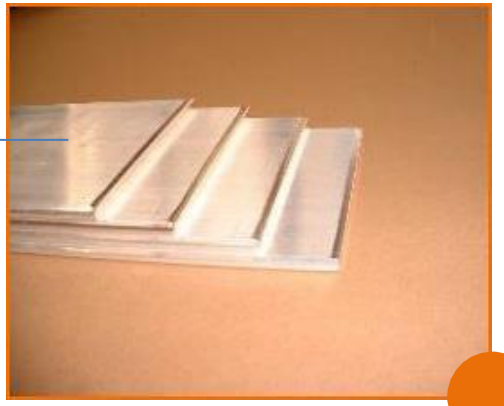
- As a feeder between transformers and main switchboards;
- For electric power distribution in vertical and horizontal routing; and
- As a feeder for power supply to light fixtures.

In data centers.
At energy facilities



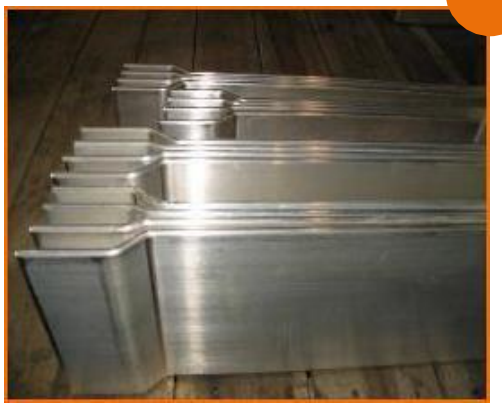
Description: Conductors Used

Conductor materials:

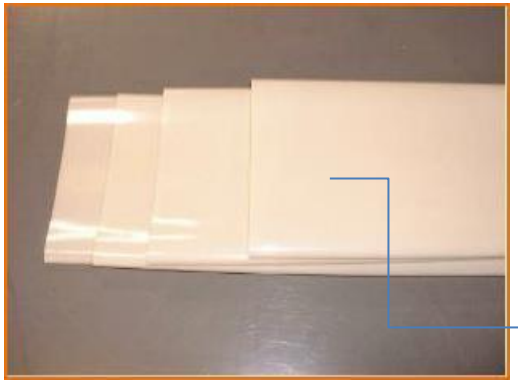


- Conductors are made of electrical aluminum/copper

- A radius bus is used
- The ability to manufacture conductors with electroplated contact zones (provides a decrease in contact resistance)



Mylar insulation:



- Each bus is insulated in two insulation layers
- Heat resistance class B (130ºC), on request F (155ºC)
- More than 40 years of operation without breakdowns

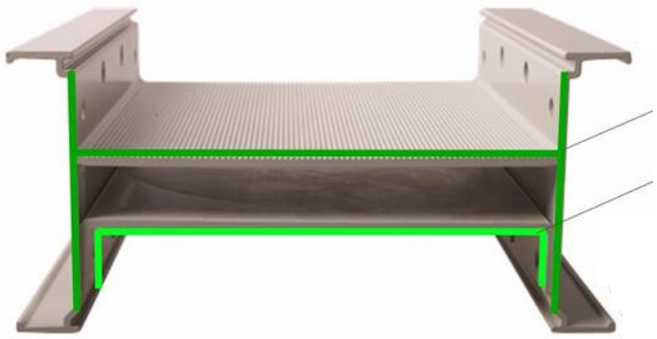
Description: Body Features

Design:

- The case, consisting of 2 parts, has increased moisture / dust protection and resistance to short-circuit shock currents;
- Robust and lightweight non-magnetic aluminum case, eliminating eddy currents;
- High mechanical strength due to a metal thickness of at least 3 mm and a special configuration of extruded aluminum.

Material: aluminum with magnesium alloy:

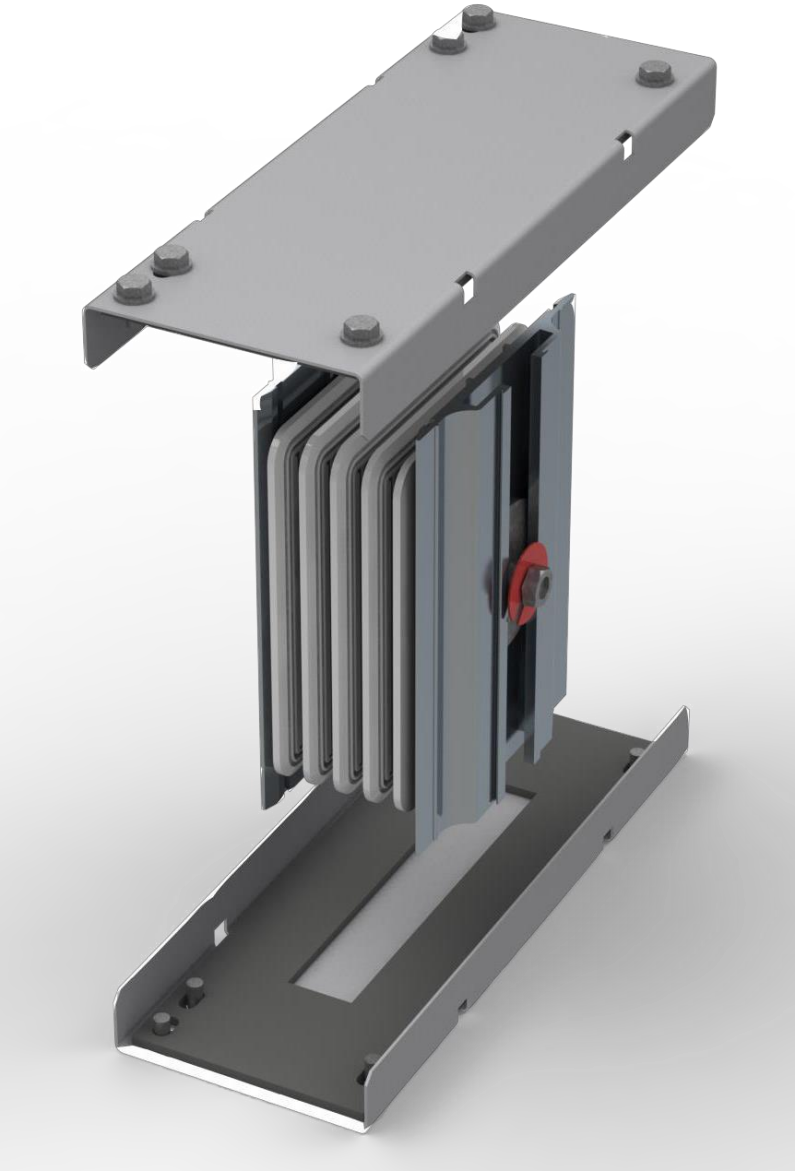
- Effective heat removal;
- Usage of the body as an earthing lead;
- Low weight;
- Corrosion resistance (1,000 hours in salt mist); and
- No eddy currents.



The first case part

The second case part

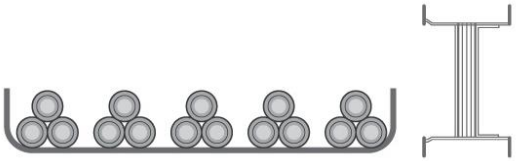
Description: Joint Blocks



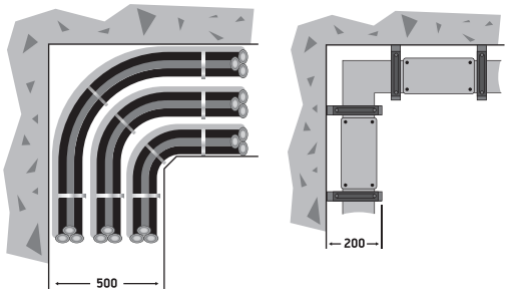
- Monoblock connection;
- Easy installation - double shear head bolt;
- Contact plates;
- Plating of plates - silver or tin;
- Class F insulation at junction areas; and
- Heat indicator at every junction

Busbar or cabel?

is more profitable to use busbars, which have a number of advantages over cable systems, during transmitting high currents:

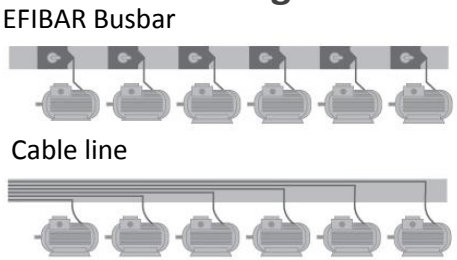


Compactness



Safety and reliability

Saving



Simplicity

- Save space when laying the busbar
- High current density in conductors
- Busbar track turning elements are more compact. Cabling requires large bending radius
- In case of using more than four parallel cables, busbar trunking is the preferred solution (due to the risk of overheating)
- Simple busbar installation
- Saving material and labor costs when installing the busbar trunking. Installation of busbar trunking requires 2-3 people and time equivalent to installation of cable trays
- Low cost of connecting additional consumers with easily installed power take-offs

Key Projects

№	ОБЪЕКТ	ТИП ОБОРУДОВАНИЯ
1	PJSC «GZAS named after. A.S.Popova»	EFIBAR polymer-insulated busbar 400A, 630A, 1600A, 2500A–930 meters.
2	Congress and Exhibition Center ”Expoforum”	EFIBAR polymer-insulated busbar 2000A – 190 meters.
3	JSC «NPO Energomash» named after academician V.P. Glushko» (GC «Roskosmos»)	EFIBAR polymer-insulated busbar 800A - 11 meters. 1250A - 166 meters. 2000 - 267 meters. 2500A - 25meters.
4	PJSC «MMK-METIZ»	EFIBAR polymer-insulated busbar P 1600A – 345,5 meters.
5	JSC «TPP in Sovetskaya Gavan town» (PJSC «RUSHYDRO»)	EFIBAR polymer-insulated busbar 1250A, 1600A-78 meters.

Application of EFIBAR Busbars at Various Facilities

EFIBAR

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