

# BUSBARS AND ACCESSORIES



# PROMET - GROUP

Promet, with its headquarter in Kirchberg, Switzerland and another production site in Germany, is the specialist in engineering solutions for the energy industry and control technology. At all locations, Promet uses the most modern technologies in production. Innovative concepts and solutions can be implemented efficiently and with minimum cost. Thanks to the latest methods, Promet is able to optimize product features and to reduce the costs of the final product significantly.

## PROMET GLOBAL



#### HISTORY

Since the founding of Promet, enthusiasm for energy and control technology has flowed into our ideas. Thanks to our extensive know-how, we are able to efficiently implement ambitious projects. We rely on the latest technologies in the global production of small and large series.

## QUALITY

As a Swiss company, we meet the high quality requirements of the solar, energy and wind power industry as well as those of the machine and railway industry.



## SAFETY AND ENVIRONMENT

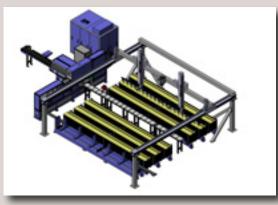
We have committed to constantly being on the cutting edge of technology. Safety and environmental aspects are paramount in the process.

# BUSBARS

As one of the largest busbar producer in Europe, we support our local and global customers in the selection of a suitable conductive material, in the design of the products and the optimization of costs. With innovative methods of production and a fully automated machine outfit, we help you to increase your efficiency. International production sites enable an optimal price-performance ratio, as well as logistics concepts that go far beyond conventional solutions.

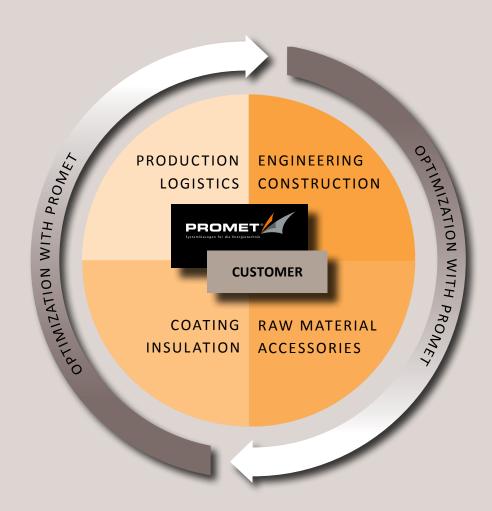
## FULLY AUTOMATED PRODUCTION OF BUSBARS







## CIM PRODUCTION



## EVERYTHING FROM ONE SOURCE

TECHNICAL ADVICE

**ENGINEERING** 

**CUSTOMIZED PRODUCTION** 

**SERIES PRODUCTION** 

Personal technical advice with optimizations

**Develop products** together successfully First sample production, special production and express production

Fully automatic series production

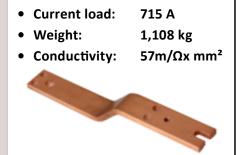
## YOU SAVE EXPENSES BY CHOOSING THE RIGHT CONDUCTIVE MATERIAL

The decision regarding which material is used depends on various factors. Promet supports you in choosing the suitable material for your purpose.

We advise you with the goal of achieving an optimal cost-performance ratio while taking into account the market prices of raw materials and find the appropriate material for you as concerns the physical factors of conductivity, machining options, degree of hardness and weight. You increase your efficiency with our innovative production methods.

Copper (Cu-ETP)

Example bars: 40x10mm



Aluminum composite (AIC)

Example bars: 40x10mm

Current load: 617 A

Weight: 0.438 kg Conductivity:



 $38m/\Omega x mm^2$ 

Aluminum (Al)

Example bars: 40x10mm

• Current load: 557 A

Weight: 0.340 kg

**Conductivity:** 34m/Ωx mm<sup>2</sup>

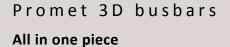


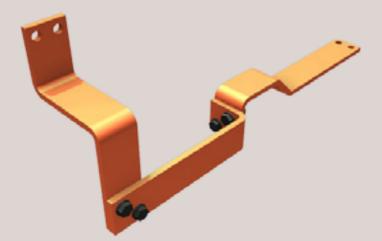
Material	Cu-ETP	Cu-OFE	Cuponal	Al pure 1350	Al 6101 B T6
Features					
Engineering / interpretation	DIN 43671	DIN 43671	DIN 43670	DIN 43671	DIN 43671
Conductivity [(m/(Ω*mm²)] at +20°C	57	58 – 59.1	38	34 - 35	30
Weight [kg/m, reference 100x10mm]	8.9	8.9	3.6	2.72	2.72
Costs	High	High	Average	Moderate	Moderate
Volatility of stock exchange	High	High	Moderate	Moderate	Moderate
Availability	Worldwide stock	Worldwide stock	EU from stock	Worldwide stock	Customized
Construction	Very good	Very good	Very good	Sehr gut	Difficult
Mechanical processing	Very good	Very good	Very good	Good	Good
Bendability	Very good	Very good	Very good	Very good	Difficult
Flow behavior	Very good	Very good	Good	Moderate	Good
Handling	Good	Good	Good	Very good	Good
Surface coating	Very good	Very good	Good	Good	Difficult
Welding	Demanding	Very good	Good	Good	Demanding
Brazing / Soldering	Good	Very good	Good	Good	Demanding

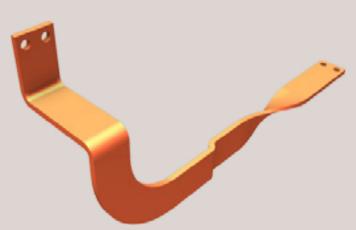
## EFFICIENCY INCREASE THROUGH INNOVATIVE PROCESS ENGINEERING

Standard busbars

3 bars with screw connections



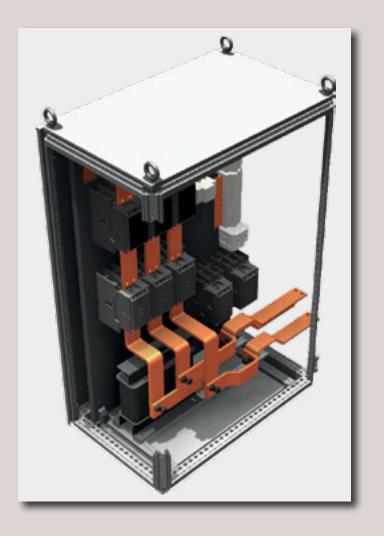


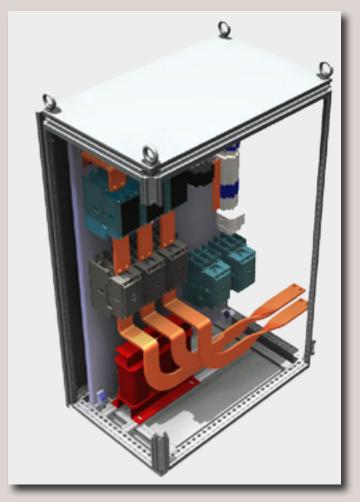


Cost reduction: 25% less material requirements and 50% less mounting accessories

Shorter assembly time and easy storage

Increases the service life and risk minimization





## COATINGS AND INSULATIONS

Material	Cu-ETP	Cu-OFE	Cuponal	Al pure 1350	Al 6101 B T6
Coating					
Tin					
Nickel					
Silver					
Nickel / Tin					
Elektro less nickel / Tin					
Nickel / Tin Electroplating					
Copper / Tin					
Electro less nickel /					
Tin Electroplating					
Epoxy Coating					
Insulation coating					
Shrink sleeve					
Coated					

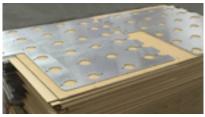
Legend Possible Not possib
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## RAW MATERIALS

Flat busbars and sheets:

- Copper
- Aluminum
- Cuponal / Aluminum composite





## ACCESSORIES

## Earthing tapes

- Customized
- Uncoated / tin-coated
- Press welded



## Busbar support

 Standard 60 mm and 180 mm system



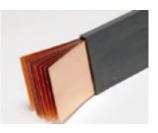
## Insulators

- Resistant
- Easy handling



## Flexible copper busbars

- High flexibility
- Wide range of dimensions



## CUSTOMIZED PRODUCTION AND SERVICES

## CNC production



Water jet



Laserpress



Cutting plotter



Bending



Punching



## ENGINEERING

We offer you comprehensive services in the following areas:

- Development and design
- Consultation and development of technical solutions
- First samples and test reports
- Technical documentation

- 3D model printing
- Design with inventor / EPLAN
- Creation of CAD models and drawings
- Project management and monitoring

## MEASUREMENT ACCURACY

With the FARO measurement arm, we can efficiently and quickly measure the key coordinates and compare them directly with the CAD drawing.

- 3D inspections
- Accuracy: from 0.024 mm to 0.064 mm
- Target-actual comparison of product STEP file
- Flexibility with mobile measuring station
- Installation sizes up to 2.4 m
- Measurement service with documentation



## CONTACT



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## **OUR EXPERTISE**



