

# FIRST TECH

COPPER BUSBAR & PLATING

**FIRST TECH,**  
**Your everlasting**  
**partner**



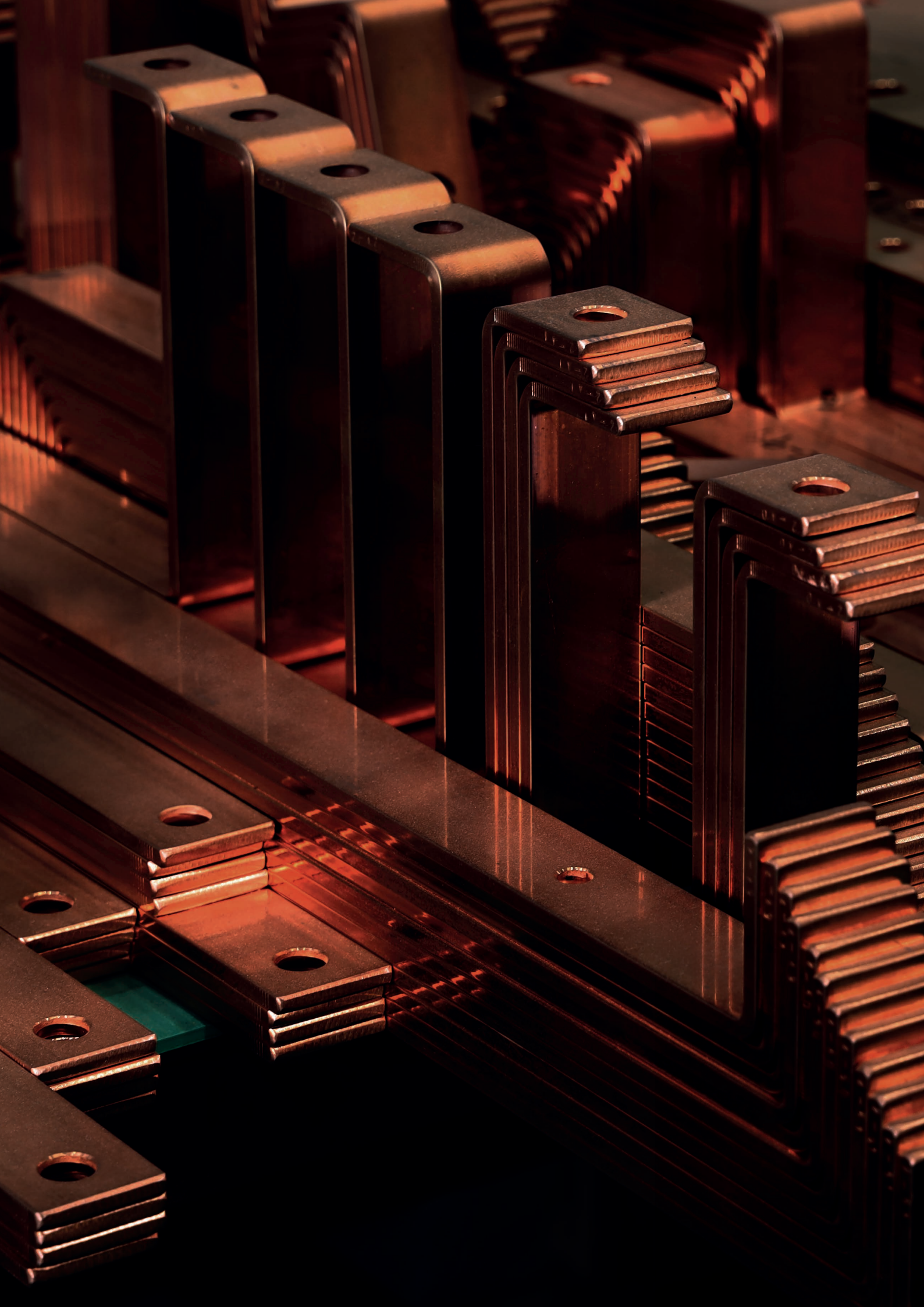


UPS

Switchgear  
Panel

Electrical  
Control  
Unit

First Tech Co., Ltd. manufactures copper components used in UPS (Uninterruptible Power Supply) systems, data centers, various power distribution boards, and electrical control panels, all tailored to customer specifications. By implementing automated machining and plating systems, we ensure outstanding product quality and superior reliability.

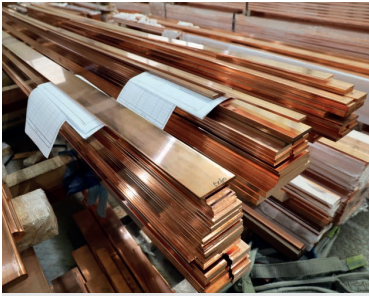




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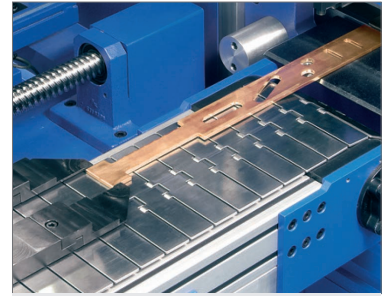
# Busbar Manufacturing Process



Material receipt



Material cutting



Hole machining



Shipment



Packaging



X-ray Inspection



## Busbar processing size

Thickness  
2 ~ 20mm

Width  
10 ~ 200mm

Length  
5meters



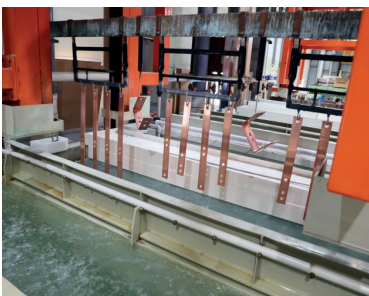
TAP process



Deburring



Dimensional inspection



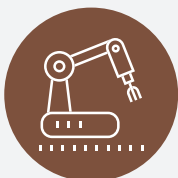
Plating process



Final inspection



Banding process



### Equipment

Busbar automatic M/C  
Busbar FlexPunch  
Machine(10Tools, 6Tools)



### Production capacity

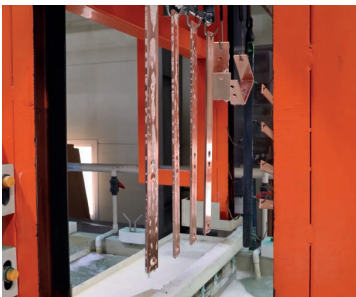
80 ~ 100 Tons per month

# Plating Manufacturing Process



toxic





**Electrolytic degreasing**

A process in which the product is set as the cathode or anode to electrically remove contaminants adhered to the surface.

**Soaking time : 1~3min**



**Rinsing**

A process that removes residual chemicals from the surface of the workpiece after degreasing.

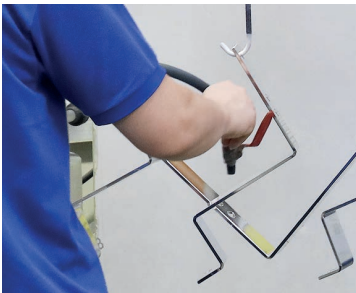
**Soaking time : 10sec**



**Activation**

A process that removes the thin oxide and passive films remaining after rinsing.

**Soaking time : 50sec**



**Drying and packaging**

After plating, remove any remaining water from the product and package it in vinyl to prevent scratches and provide cushioning.



**Discoloration prevention**

A process that neutralizes residual acidic components remaining on the plated surface after plating to prevent discoloration.



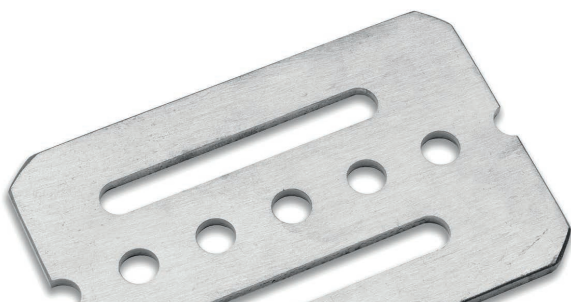
**Tin plating**

A low-toxicity, air-stable, corrosion-resistant plating that also protects copper and adds a glossy, elegant finish when using tin.

**Soaking time :**

**Matte - 8 min or more**

**Glossy - 6 min or more**



**Plating bath size**

Height 1200mm  
Length 2400mm  
Width 800mm



**Remark**

Tin plating,  
Matte tin plating,  
Aluminum plating



**Processing production capacity**

80 Tons per month

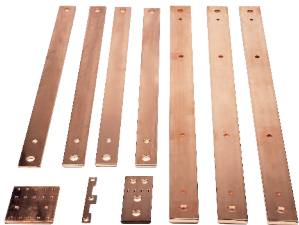
# Status of Manufacturing Facilities

## Busbar FlexPunch Machine (10Tools)

Production capacity | 40Ton

Units owned | 1

Manufacturer | EHRT (Germany)



## Busbar FlexPunch Machine (6Tools)

Production capacity | 40Ton

Units owned | 1

Manufacturer | EHRT (Germany)



## Busbar Punching Machine

Production capacity | 20Ton

Units owned | 1

Manufacturer | Shin-IL Tech (Korea)

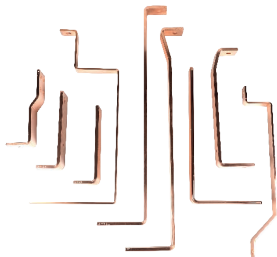


## Busbar Bending Machine

Production capacity | 30Ton

Units owned | 2

Manufacturer | Shin-IL Tech (Korea)

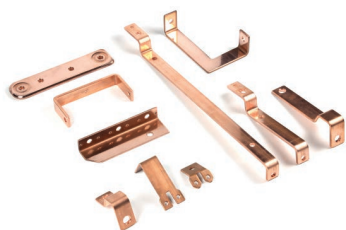


## Vertical Bending Machine

Production capacity | 30Ton

Units owned | 2

Manufacturer | Amada (Japan)



# Plating Inspection and Laboratory Status





## X-RAY INSPECTION MEASURING DEVICE (FISCHERSCOPE)

ED-XRF(The Energy Dispersive X-Ray Fluorescence)  
Through analysis, non-contact and non-destructive measurement and evaluation of coating thickness are possible. It can measure plating ranging from single-layer to multi-layer and alloy coatings.

Manufacturer		HELMUT FISCHER GMBH
Product Name		FISCHERSCOPE X-RAY
Model Name		XDLM 237
Specs		100-240V~/ 50-60HZ / 180VA



## HULL CELL RECTIFIER

The HULL CELL RECTIFIER observes cathode specimens plated at various current densities to determine optimal conditions, assess additives and impurities, and can use step currents from 0.01 A to 10 A with equipment chosen per plating solution.

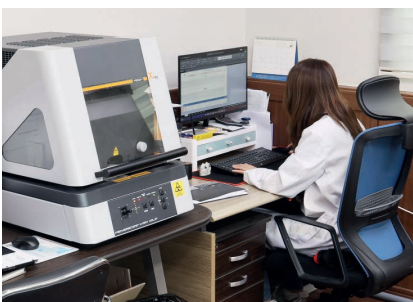
Manufacturer		JUNGDO TEST INSTRUMENT CO
Product Name		HULL CELL
Model Name		RD1510
Specs		AC 220V / 60HZ



## HEATING OVEN

This equipment is a box oven that uses hot air inside the chamber to shrink and dry tubing after inserting the manufactured copper (plated) busbars.

Model Name		TJ - BO SERIES
Specs		380V*3PH*4W*22KW
		MAX TEMP : 200°C
		Internal Dimensions : 2500(W)*1500(D)*2000(H)
		External Dimensions : 2860(W)*1900(D)*2400(H)



## Top quality! Fast service! Minimized defect rate!

First Tech Co., Ltd. is driven by creative thinking and a pioneering spirit, continuously researching and investing in technological capabilities.

Based on this, we provide products that quickly and accurately meet customer needs.

We also provide products of the highest quality and at competitive prices, and we will always do our best to meet your needs and expectations.

### FIRST TECH Merit



We operate automatic busbar machines covering the entire process from processing to shipping, enabling more competitive pricing than others.



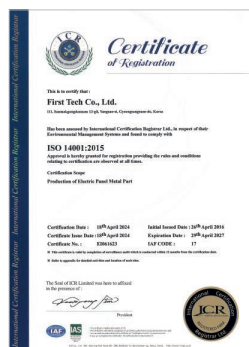
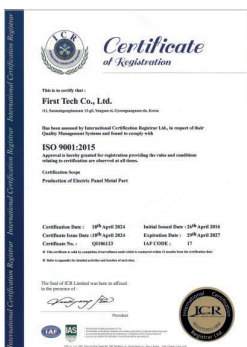
We aim to reduce delivery time to 10 days via planned production and inventory management.



Our quality assurance system ensures fast response to customer needs through rigorous quality control and after-sales management.



## Certifications and Awards





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