



# Industrial Electronics

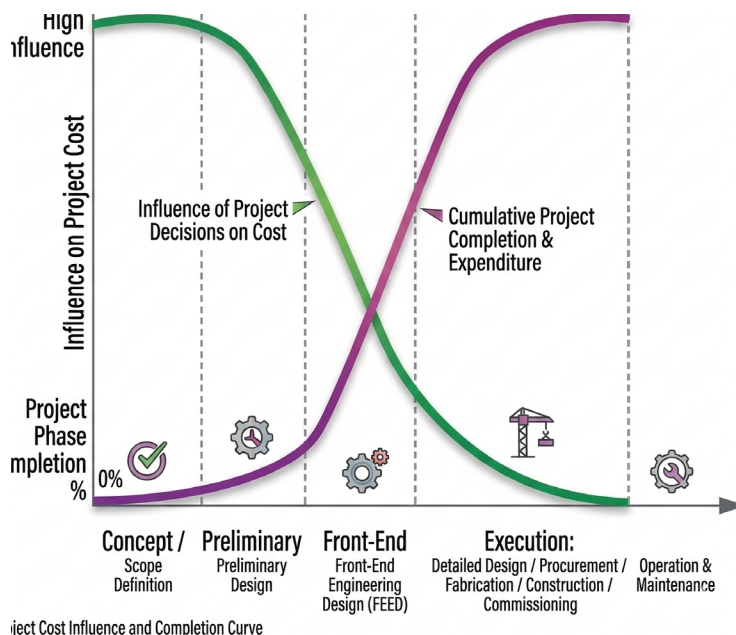
## One-Stop Fastening & Connection Solutions



# Industry Challenges

## Project Cycle Cost Impact Model

In today's rapidly evolving society, the core challenge facing enterprise R&D lies in this paradox: the early-stage decision-making window is extremely narrow, yet it locks in the majority of costs; while substantial investments are made in the later stages, the cost of correcting mistakes becomes prohibitively high—resulting in a serious mismatch between risks and returns. This requires enterprises to make accurate judgments at the very early stage to address market uncertainty.



## The 15-85 Law

Another challenge facing enterprises today is this: excessive focus on explicit procurement costs, while ignoring the implicit costs that account for 85% of the total. Enterprises often lack systematic coordination across design, supply chain, after-sales and other links, leading to high manufacturing costs, rework, quality and after-sales issues caused by early-stage decision-making errors—ultimately driving up the total cost of ownership (TCO) significantly.

**15%**

**VISIBLE COST**

Fastener Procurement Cost

**85%**

**HIDDEN COSTS**



# Services Offered by ZCJ

Total Cost Optimization Expert from Prototype Design to After-Sales



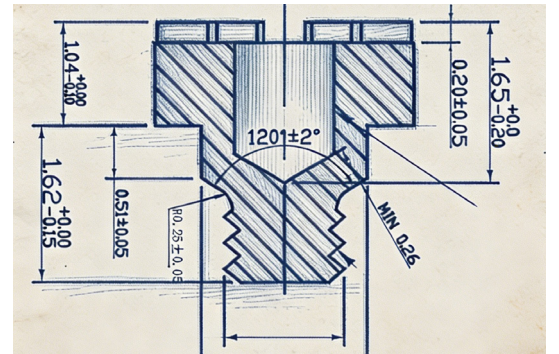
Rapid Prototypes



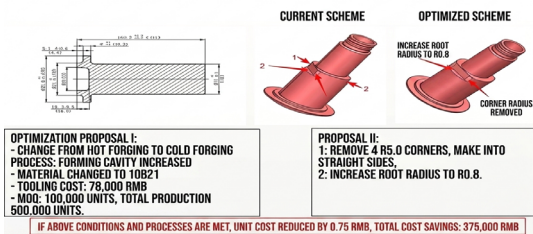
Professional Training



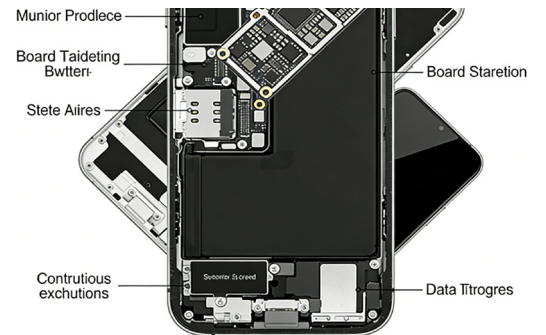
Professional Testing Services



Professional Design Consulting



Continuous Process Improvement



Professional Teardown & Analysis



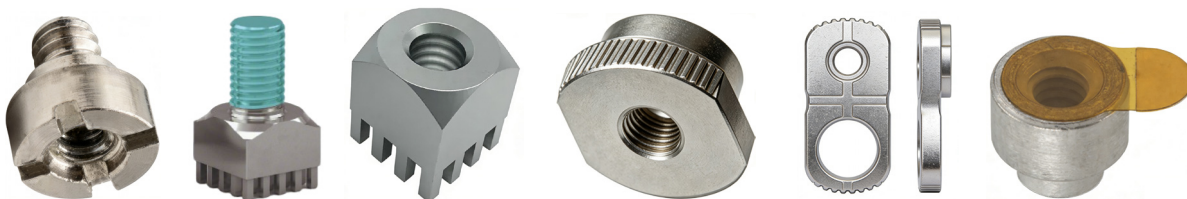
Riveting Products - Blind & Clinching Riveting  
(Sealed & Non-sealed)



Screws - Locking, Sealing, Captive Screws, etc.



## Thread Reinforcing Inserts for Light Alloys (Mg, Al)



## PCB Applications, SMT

## PCB Application

Tin-plated copper nuts and small plates are used for PCB soldering to form threaded connections and can also be applied for height spacing. Both can be supplied in tape & reel packaging.

High-current terminals are used in high-current applications to conduct electricity while connecting PCBs and forming reliable threaded connections. Threads (internal and external) can be pre-coated with adhesive for locking.



## Riveting Products

Clinching nuts/studs, rivet nuts and blind rivets are used for the fastening connection of sheet metal cabinets in HPC-AI servers, while clinching grounding terminals are used for the grounding connection of sheet metal.

Sealed clinching studs, pre-coated rivet nuts and rivets are used for the connection of waterproof sheet metal cabinets, achieving an IP68 sealing rating.



## Thread Inserts

Thread inserts are mainly used to enhance the threaded connection performance of lightweight structural parts.

Although they do not directly form the "apparent musculature" of EV, they play a vital role in ensuring high-precision, long-life and lightweight internal structural connections.

Thread inserts made of carbon steel and stainless steel can achieve strength grades above 8.8.



## Locking, Sealing, and Captive Screws

Bolts achieve locking through combination and pre-coated thread locking compound (chemical or physical). Sealing up to IP68 can also be realized by pre-coating compound on the head or thread, or adding a sealing ring.

Brexit screws (PEM studs) can be removed from the panel without the screw falling off.



#### YF Zhichengjia Precision Hardware (Shenzhen) Co., Ltd

Address: No.13 Zhongxing Rd., Kengzi Sub-district, Pingshan New District, Shenzhen, China

Landline: 0755-84061349

#### ZCJ Metal Technology (Xiangyang) Co., Ltd

Address: Sancha Road Economic Development Zone, Chengguan Town, Gucheng County, Xiangyang, Hubei, China

Landline: 0710-7269998

#### PT Toprecision Fastening Insonesia

Adress: Jl,Interchange tol dawuan No.10,CIKAMPEK-41373,Jawabarat, Indonesia

Website: [www.zcjtech.com](http://www.zcjtech.com)