



# Shenzhen Xintegu Hardware Co., Ltd.

Innovative Hardware Manufacturing • Oriented to Global Development

Professional Fasteners & Success Stories

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# Company Profile

## Welcome Cooperation · Create Brilliance Together

Shenzhen Xintegu Hardware Co., Ltd. sincerely invites your partnership and cooperation, to share resources and achieve win-win success. We are committed to providing our customers with competitive pricing, superior quality, and reliable delivery assurance. Whether for high-difficulty non-standard parts or standard fasteners, Xintegu is your trusted and reliable partner.

### About Xintegu

An innovative hardware enterprise integrating fasteners, non-standard customized components, precision metal parts, and the design, development, manufacturing, and sales of high-difficulty metal products.

Founder Lin Yibo has dedicated decades to the fastener industry, crafting each product with meticulous craftsmanship while leading the team in continuous innovation and rapid growth.

In 2019, the production and sales base was relocated to Fenggang Town, Dongguan, covering a total area of 4,500 square meters.

Equipped with over 280 sets of advanced machinery, with an annual output value exceeding 87 million RMB.

Our products are exported to numerous countries and regions across Europe, South America, North America, Southeast Asia, and the Middle East, with offices in South Korea and Brazil to stay closely aligned with the needs of our international clients.

# Factory Gate | Factory Equipment



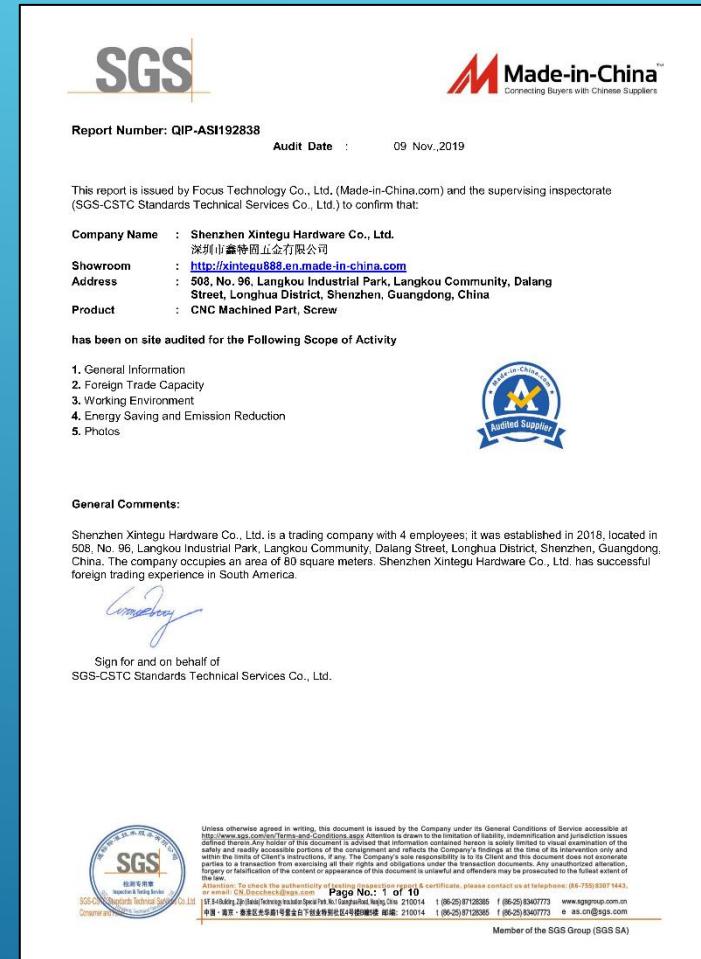
# Office Corner | Warehouse Corner



# Inspection Equipment | Packaging Equipment



# ISO 9001 Quality Management System Certification | Globally Recognized SGS On-Site Certification



# Company Patents



## Team Highlights



# Characteristics and Trends of the Fastener Industry

## 1. Comprehensive Product Range and Diverse Applications

Covers a full series of products including screws, nuts, washers, pins, and expansion kits, meeting the varied needs of different industries and clients.

## 2. Diverse Material System

Extensively utilizes materials such as iron, alloy steel, stainless steel, copper, aluminum, and titanium, balancing requirements for strength, corrosion resistance, and lightweight performance.

## 3. Complex Standard Systems

Encompasses multiple standard systems including GB (Chinese National Standards), DIN (German Standards), and ISO (International Standards), accommodating technical specifications across regions and industries.

## 4. Wide Industry Coverage

Products are broadly applied in machinery manufacturing, construction engineering, automotive, rail transit, electronics and electrical appliances, energy, and other sectors.

## 5. Segmented Competitive Landscape

Intense competition exists in the low-end and general markets, while high-end and precision segments have higher entry barriers and relatively limited competition—making technology and service key advantages.

## 6. Sustained Market Growth

With a massive global market size, the industry is projected to maintain an average annual growth rate of approximately 5.3% over the coming years, offering vast development potential.

# Core and Featured Products



**Deeply Cultivating  
the High-End  
Segment  
Integrating the  
Industry  
Building the Brand**

**1. Independent R&D Innovative Products**  
Continuously launch new types of fasteners that meet market demands.

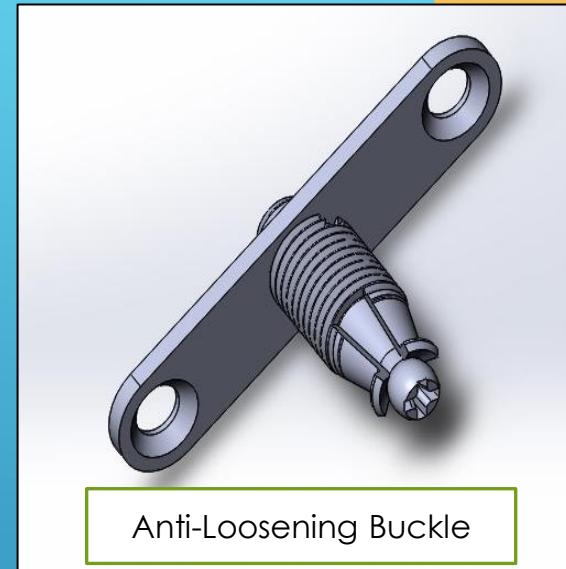
**2. Collaborative Development and Agency Products**  
Jointly develop products with partners and act as an agent for premium brands.

**3. High-Difficulty Cold Heading Product Supply**  
Capable of steadily supplying cold-headed parts with complex specifications.

**4. Customized Solution Services**  
Provide tailor-made fastener solutions for premium clients to solve real-world hardware challenges.



# Core R&D Products and Selected Representative Product Showcase



# Collaborative R&D and Selected Agency Product Showcase



# Selected Global Success Stories Showcase

## Case 1 (China)

Provided Xiaomi with solutions to prevent screw loosening, breakage, and rust, significantly enhancing product reliability.

## Case 2 (China)

Assisted Yadea Electric Vehicles in resolving wheel-end fastening issues — preventing both loosening and over-tightening — to ensure riding safety.

## Case 3 (China)

Supplied anti-loosening nuts for trial use on the Dashengguan Bridge section of the Nanjing Metro, achieving remarkable results and gaining official recognition.

## Case 4 (China)

Solved the issue of screws and nuts loosening and detaching caused by vibration in the crushers at Hainan China Resources Runfeng Mining.

## Case 5 (Peru)

Delivered blind-hole screws for a Peruvian food-grade machinery client, meeting the stringent 72-hour salt spray test requirement and ensuring exceptional corrosion resistance, resulting in high customer satisfaction.

## Case 6 (Malaysia)

Provided complex, high-precision bolts to a Malaysian client whose stringent requirements had not been met by multiple suppliers. Our solution perfectly fulfilled their high standards.

## Case 7 (USA)

Supplied lockable, easy-to-remove nut columns to an American furniture manufacturer, effectively preventing nut loosening and easing disassembly, thereby boosting production efficiency.

## Case 8 (Mexico)

Welcomed a major Mexican fastener company to our factory for an on-site audit conducted by an authoritative third party. Delivered customized screws with stringent specifications and near-zero tolerance, earning their satisfaction and securing a long-term partnership.

# Xiaomi Group – Screw Issues

1

Insufficient Hardness of Stainless Steel Screws

2

Alloy Steel Screws Prone to Rust

3

Alloy Steel Screws Prone to Brittle Fracture After Plating

4

Some Components Loosen Easily After Machine Vibration

## Core Challenge:

For certain alloy steel screws, traditional surface treatment processes posed potential quality risks — such as hydrogen embrittlement — primarily arising from specific stages in the process. These risks were difficult to control and complex to detect.

Following evaluation, we replaced the original process with a new composite coating technology. This method effectively eliminates the root causes of these risks through targeted post-treatment measures, while also meeting aesthetic requirements (grey/matte black) via surface adjustment techniques.

In addition, a standardized material identification code has been established, significantly improving supplier order accuracy and operational efficiency.

Dispensing Screws



# Domestic High-End Electric Vehicle Brand – Key Component Anti-Loosening Performance Optimization Plan



## Plan Highlights

In the complex operating environment of high-end electric vehicles, the high-frequency vertical vibrations combined with parallel thrust generated during driving impose stringent requirements on the anti-loosening performance and preload torque stability of critical fasteners such as screws and nuts. Under multi-axis loading and high-frequency working conditions, conventional fastening methods are prone to preload torque decay, compromising connection stability and safety.

To address this challenge, we developed a multi-level fastening system enhancement plan based on force analysis and material performance optimization. This solution, while preserving the overall structural integrity of the vehicle, effectively strengthens the resistance of screw-nut assemblies against loosening under dynamic loads.

The approach not only improves torque retention and safety redundancy but also significantly extends the full lifecycle performance of key components, providing a solid guarantee for the stable operation of the entire vehicle.

# Nanjing Metro Dashengguan Bridge Nuts

## Test cases

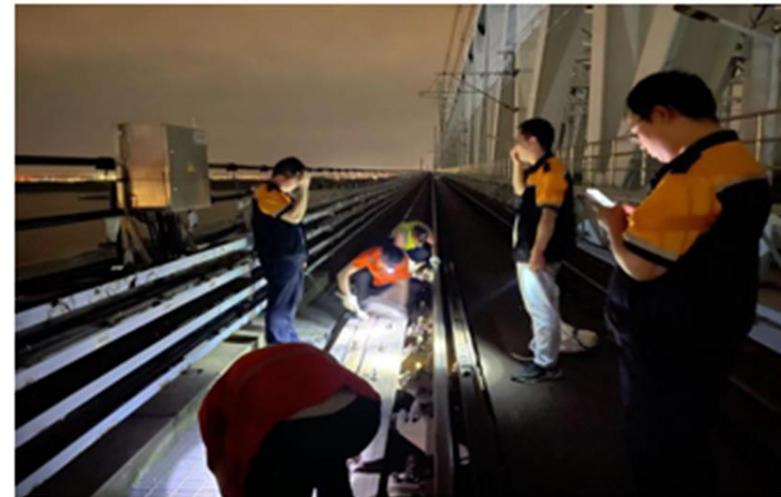
Nanjing Metro Operation Co., Ltd.: Anti-loosening locknut testing with hook bolts and guard bolts on the Dashengguan Bridge section, testing period from July 4, 2024 to present.

Technical parameters for the connection of hook bolts and guard bolts on the Dashengguan Bridge:

No.	Item & Specification	Material	Axial Preload (N)	Working Nut Torque (N·m)	Locknut 1 Torque (N·m)	Locknut 2 Torque (N·m)	Installation Height of Working Nut & Locknut (mm)
1	Hook head bolt <b>M22*320-340</b>	<b>Q235-A</b>	<b>76300</b> Suggestion: Meet the installation torque requirements according to usage specifications.		<b>120-160</b>	400-450, i.e., inner and outer tapered nuts fully engaged.	<b>45</b>
2	Sleeve bolt <b>M22-334</b>	<b>Q235-A</b>	<b>76300</b> Suggestion: Meet the installation torque requirements according to usage specifications.		<b>120-160</b>	400-450, i.e., inner and outer tapered nuts fully engaged.	<b>45</b>

## Test cases

On-site construction photos



### Anti-loosening Nut Test Results for Nanjing Dashengguan Bridge Urban Rail Transit:

For the Nanjing Dashengguan Bridge urban rail transit project, the anti-loosening test of M22×320–340 hook head bolts and M22–334 sleeve bolts was conducted on the test track section of the bridge starting at 23:00 on July 4, 2024. After nearly six months of operational testing, the locking and anti-loosening performance of the nuts met the client's usage requirements.

# Hainan China Resources – Screw and Nut Loosening and Detachment Issue

## Application cases

### Hainan China Resources Runfeng Mining Co., Ltd.:

Vibration testing was conducted on the hopper walls of the crusher system and finished product screening system. The bulk steel silo for finished products, finished product screening units, belt conveyor discharge chutes, and jaw crusher hoppers were all installed using anti-loosening bolts as fastening connections.

#### Summary of Anti-loosening Bolt Test Results

No .	Specification /Model	Hopper Wall Vibrator Parameters	Total days	Daily vibration duration (minutes)	Frequ ency	Vibra ting force	Total number of vibrations	Axial preloading force (N)	Torque (N·m)	Test results
1	M12*70、8.8级	Y70-8-2、0.55KW、2880r/m、8KN	28	1	2880	8KN	80640	15KN	160	No loosening detected
2	M20*90、8.8级	Y70-15-2、1.1KW、2880r/m、15KN	68	1	2880	15KN	195840	100KN	260	No loosening detected
3	M20*90、8.8级	Y70-15-2、1.1KW、2880r/m、15KN	50	10	2880	15KN	1440000	100KN	260	No loosening detected
4	M20*90、8.8级	Y70-15-2、1.1KW、2880r/m、16KN	59	10	2880	15KN	1699200	100KN	260	No loosening detected
5	M24*100、8.8级	Y20-30-4、1.5KW、2880r/m、30KN	16	1	1440	30KN	23040	150KN	350	No loosening detected

## Looking Ahead

### Driving Industrial Upgrades through Technological Innovation

Continue to increase R&D investment, overcome key processes and core technologies, and continuously set new benchmarks for fastener performance and quality to elevate the industry to new heights.

### Accelerating Global Strategic Deployment

Deepen cultivation of existing international markets, expand into emerging high-end markets, and establish long-term, stable partnerships with premium global clients to build an internationally competitive advantage.

### Focusing Deeply on Customer Value

Gain insights into diverse needs to deliver precise, customized products and solutions, comprehensively enhancing customer experience and partnership loyalty to achieve shared value.

### Leading the Green Intelligent Manufacturing Trend\*\*

Actively implement sustainable development strategies, extensively adopt eco-friendly materials and energy-saving processes, and build a low-carbon, environmentally friendly, and highly efficient green supply chain system.

### Building a Digital Smart Factory

Integrate digital management with intelligent manufacturing technologies to comprehensively enhance production efficiency, quality control, and flexible manufacturing capabilities, setting a new benchmark for the factory of the future.



# Thank You for Your Attention

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