金鼎紧固件 JINDING FASTENERS

NO QUALITY NO FUTURE

JINDING FASTENERS

宁波金鼎紧固件有限公司



NINGBO JINDING FASTENING PIECE CO., LTD

International Business

Walson Wu +86-574-86535595
Judy He +86-574-86533716
Rita Chen +86-574-86535281
Collen Zhang +86-574-86533711

JINDING FASTENERS 金鼎紧固件

Domestic Business

Ms. Lin 13958219767
Mr. Liu 13362444899

Fax

+86-574-86530858

Website

www.jindingfstn.com

Email

jindf@ jindingfstn.com

Address

No. 188, Xihe Road, Xijingtang Village, Jiulonghu Town, Zhenhai District, Ningbo City, Zhejiang Province



JINDING
FASTENERS
金鼎紧固件

CONTENTS

01 NINGBO JINDING FASTENERS

Company Profile ---- 01
Corporate Honors ---- 02
Sales Map ---- 03
Development History ---- 05

02 PRODUCT INTRODUCTION

Product Display ---- 07

03 PRODUCT SOLUTION

Application Field ---- 11

04 MANUFACTURING STRENGTH

Production Process ---- 13
ERP Automated Management and Control ---- 14

05 CORE ADVANTAGE

Full-Process Intelligent Manufacturing of Fasteners ---- 15
ERP+MES Intelligent Manufacturing Management System ---- 17
Galvanization Factory ---- 19
Phosphating Workshop ---- 20
Testing Center ---- 21
Automated Warehousing System ---- 25

06 GREEN FACTORY

Long-Term Significance ---- 27

ABOUT JDF

880 million CNY	150 million USD	73000 ㎡	>1 billion CNY	470	120,000 tons
Total Assets	Annual Export Value	Floor area	Annual Output Value	Employees	Annual production capacity

COMPANY PROFILE

Ningbo Jinding Fastening Piece Co., Ltd. is located in Xijingtang, Jiulonghu Town, Zhenhai District, Ningbo. Established in 1997, it currently has 470 employees, total assets of CNY 880 million, and covers an area of 73,000 ㎡.

The company specializes in the R&D, manufacturing, sales and service of various high-strength fasteners. Products are widely used in machinery, commercial vehicles, passenger vehicles, rail transit, construction machinery, nuclear power, petrochemical industry, building steel structures, ships, bridges, wind power and solar power.

Its annual production capacity reaches 120,000 tons, with an annual output value exceeding CNY 1 billion and an annual export capacity of USD 150 million. Products are exported to Europe, North America, Southeast Asia and other regions. It has ranked first in China's fastener exports for 8 consecutive years, and its product quality and reputation have won unanimous praise from customers at home and abroad.









CORPORATE HONORS





















SALES MAP AND SALES REVENUE



$150 million

Global sales turnover

China South Korea Japan Malaysia Singapore United Arab Emirates New Zealand Australia

UK Belgium Netherlands Sweden Norway Denmark France Italy Finland Germany Spain

United States Canada Mexico Colombia Chile Brazil Argentina South Africa Algeria

DEVELOPMENT HISTORY

01/ Company Establishment

· Project 1
Ningbo Jinding Fastening Piece Co., Ltd. founded



02/ Sales Exceed CNY 100 million

· Project 1
Sales exceeded CNY 100 million



03/ Trademark Registration

· Project 1
"JDF" registered in the USA (No. 3441955);

· Project 2
Self-operated exports reached 114.79 million USD, surpassing the 100 million USD mark for the first time.



04/ Tariff-free Enterprise

· Project 1
The South African Trade Commission issued a notice announcing the final results of the anti-dumping sunset review on Chinese steel bolts and nuts, imposing an anti-dumping duty of 122.7% on nuts and 55.4% on bolts, with Jinding Company being the only enterprise with zero tariff.



05/ Automated Warehousing System

· Project 1
Semi-finished Product Automated Storage & Retrieval System put into use.



06/ Annealing Furnace

· Project 1
Introduction of 4 sets of RAD-CON cylindrical bell-type annealing furnaces from USA



>1997 >2004 >2008 >2011 >2012 >2017

>2018 >2019 >2021 >2023 >2024 >2026



07/ Output Value Reached USD 150 Million

· Project 1
Phase II expansion of semi-finished product ASRS launched, 3,500 additional positions, capacity up to 9,000 tons

· Project 2
Introduce 4 phosphorus-removal belt furnaces + DX processing production lines

· Project 3
Annual output value reaches 150 million US dollars



08/ Cold Heading Machine

· Project 1
Introduction of advanced M36 cold heading machines



09/ Galvanizing Plant Put Into USE

· Project 1
30,000 t/y Electro-galvanizing plant commissioned

· Project 2
Investment of CNY 30 million in the launch of a finished product automated three-dimensional storage system



10/ Awards Received

· Project 1
National "Little Giant"

· Project 2
National Single Champion Enterprise



11/ Digital and Automated Workshop

· Project 1
Digital thread rolling workshop (2024)

· Project 2
Automated phosphating workshop (2025)



12/ Production Line Automation

· Project 1
Invest in establishing a fully automated zinc-nickel alloy production line

· Project 2
Fully Automated Product Storage Warehouse

PRODUCT DISPLAY

SPECIFICATION DIAMETER

M3 - M90 (8# - 3-1/2")

SURFACE COATING

Plain / Black / Electro-Zinc / Zn-Ni Alloy / Hot-Dip Galvanizing / Dacromet / Geomet / Magni / PTFE

STRENGTH GRADE

Gr.5 / Gr.8 / Gr.8.8 /Gr. 10.9 /Gr. 12.9 / Gr.B7 / Gr.B7M / Gr.B16 /Gr. L7 / Gr.L7M / Gr.L43

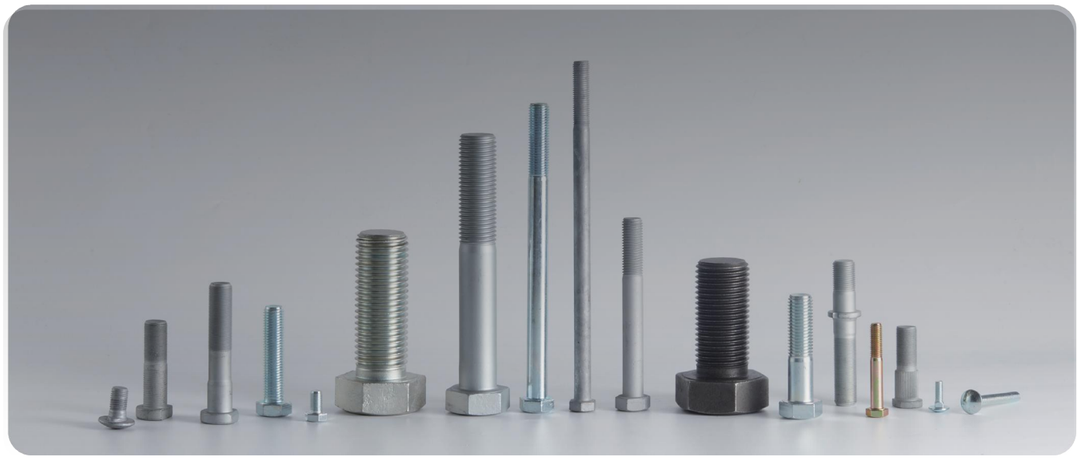
THREAD PATCH

ND 593S / ND 1193S / ND ST-3 / Precote 30/80/85 / Loctite 204 / Nylon Patch



Hex Socket Head Cap Screw / Low Head Hex Socket Cap Screw / Hex Socket Flat Countersunk Head Cap Screw / Hex Socket Button Head Cap Screw

- STANDARD
DIN912 / DIN7984 / DIN7991, ISO4762 / ISO10642 / ISO7380-1, ASME B18.3
- GRADE
8.8 / 10.9 / 12.9, 08.8 / 010.9, A574 / F835
- DIAMETER
M3-M42(8#-2")
- FULL SIZE INVENTORY AVAILABLE



Hex Head Bolt（Coarse Thread and Fine Thread) / Carriage Bolt / Guardrail Bolt / Wheel Bolt / Tower Bolt / Wood Screw

· GRADE
2 / 5 / 8, 4.8 / 5.6 / 5.8 / 8.8 / 10.9 / 12.9

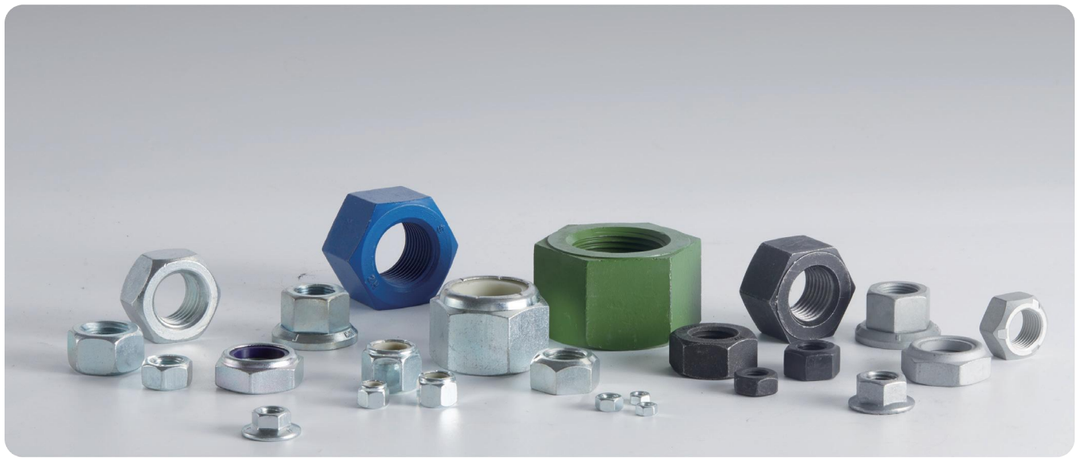
· DIAMETER
M4 - M56(1/4" - 2-1/4")



High-Strength Structural Bolt Assemblies

· STANDARD
ASTM F3125 Grade A325 (M) / A490 (M): Type 1/ Type 3
AS1252: 1983/ AS1252: 2016 K0
EN 14399-3/ EN 14399-4 System HR/ HV: K0/ K1/ K2, EN 15048-1 SB
JIS B1186 F10T

· DIAMETER
M12- M36（1/2" - 1-1/2" ）



Hex Nut / Heavy Hex Nut / Thin Nut / Square Nut / Coupling Nut / Flange Nut / Nylon Lock Nut / All Metal Lock Nut

· STANDARD
ISO898-2/ASTM A194/ASTM A563/SAE J995

·DIAMETER
M3-M100(8#-4")



Fully Threaded Stud / Double-End Stud / U-Bolt / Anchor Bolt / 12-Point Flange Bolt

· GRADE
ASTM A193 B7/B7M/ B16/ B8/ B8M, ASTM A320 L7/L7M/L43/B8/ B8M, 4.8/5.8/8.8/ 10.9, A307/2/5/8

· DIAMETER
M6 - M90(1/4" - 3-1/2")



Hex Flange Bolt

· STANDARD
IFI-111/DIN6921/EN1665/ISO4162/JIS B1189

· GRADE
5/8, 8.8/ 10.9/12.9, CL-90/CL-100

· DIAMETER
M5- M20(1/4" - 3/4")

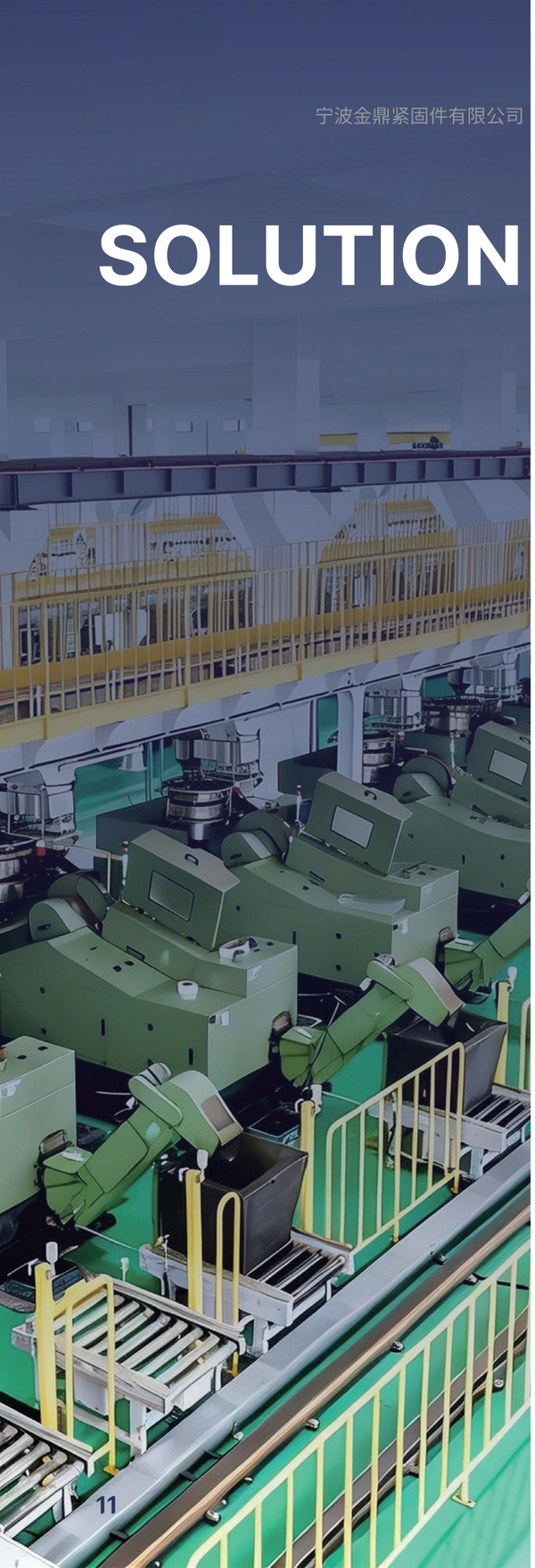


Flat Washer / Spring Washer / Square Washer / Bevel Washer

· GRADE
HV100/HV140/HV200/HV300/F436

· DIAMETER
M3-M100(8#-4")

SOLUTION



APPLICATION FIELDS



Construction Machinery



Commercial Vehicles



Passenger Vehicles

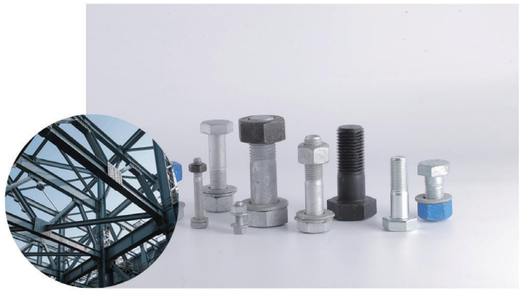
APPLICATION FIELDS



Rail Transit



Wind Power & Solar Power



Building Steel Structure



Petrochemical Industry



Industrial Robots



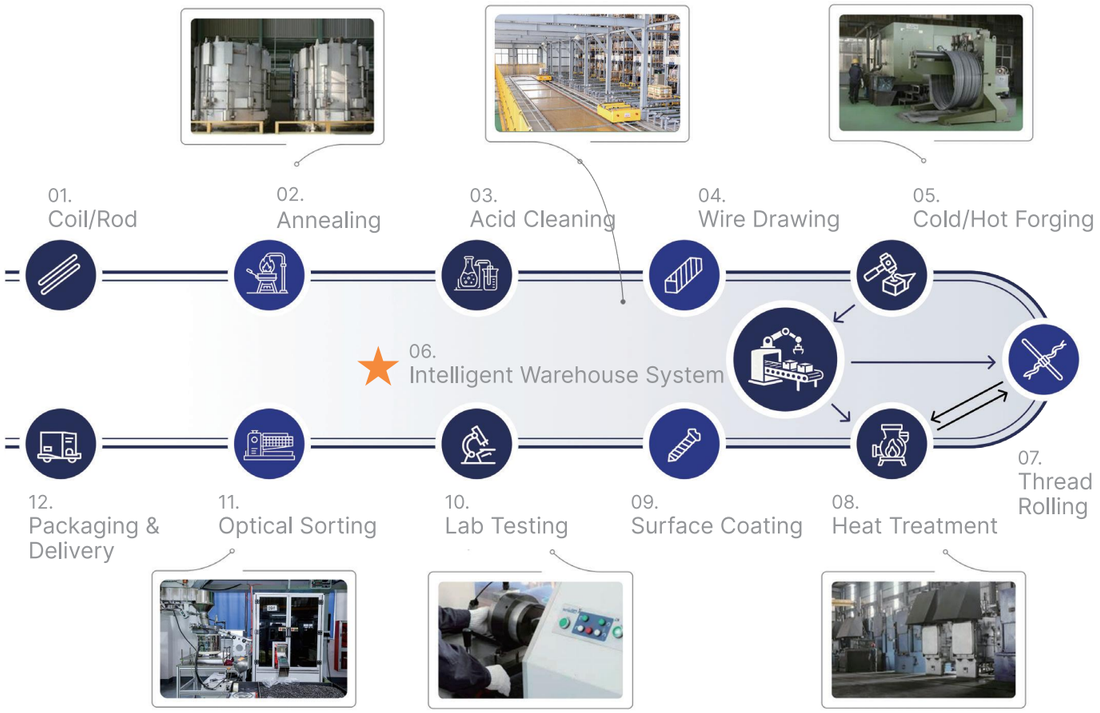
Non-Standard/Customized Parts

MANUFACTURING CAPABILITY

Jinding has full in-house production processes including raw material annealing, acid cleaning, wire drawing, cold/hot forging, thread rolling, heat treatment, machining, surface coating and packaging. All processes comply with IATF 16949 and meet AS/ASTM/EN/JIS/ISO international standards.



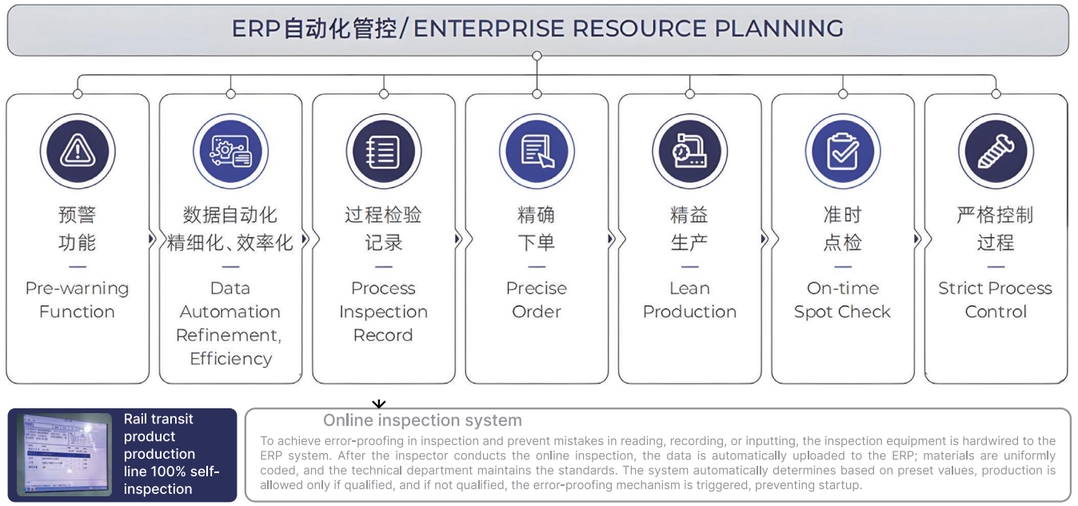
PRODUCTION PROCESS



ERP AUTOMATIC MANAGEMENT

In 2024, the new Kingdee ERP manufacturing system was launched, and an MES execution system was built on this frame work to realize full-system data interconnection, with traceable LOT NUMBER at any link. It realizes effective monitoring an d efficient utilization of production factors (Man, Machine, Material, Method, Environment, Measurement). A management s ystem effectively integrated and coordinated with ERP is built, integrating the ERP system with the production site into a c omplete management system that automatically grasps on-site conditions. It realizes closed-loop management of worksho p scheduling, issuance, output and quality feedback.

Nowadays, the company's finished product inspection pass rate reaches as high as 96%, and the on-time delivery rate and customer satisfaction both exceed 90%.





CORE STRENGTHS AND PRODUCTION PROCESS

Full-Process Intelligent Manufacturing

Jinding Fasteners relies on customized raw materials from Xingcheng Special Steel and full-process intelligent equipment. Through centralized warehouse-linked production, it has created a modern intelligent manufacturing system with high efficiency, high precision, high flexibility, high environmental protection, and high reliability, with excellent processing capabilities for fasteners of all specifications and special-shaped non-standard parts.

Four Core Advantages:

Higher Safety, Efficiency, Accuracy & Environmental Performance

Customized raw materials
—
Source guarantee of high-quality alloy steel

Cold heading workshop
—
High-precision, efficient forming capability for special-shaped parts

Central Automated Distribution Warehouse
—
The intelligent hub of the three main workshops

Thread Rolling Workshop
Fully automated logistics distribution, efficient and precise thread processing

Choose two process routes as needed

Heat Treatment Workshop
Environmentally friendly, automatically switching heat treatment line

Finished Goods Storage/ Delivery
—
Efficient warehousing to ensure order delivery

★ Custom Raw Materials: Custom alloy steel from Xingcheng Special Steel, quality guaranteed from source



Steel billet peeling treatment ▸ The steel billets are all treated with 1.8mm peeling, completely removing surface defects such as oxide scale, cracks, and decarburized layers.

Strict ingredient control ▸ Strictly control the content of sulfur (S), phosphorus (P), and non-metallic inclusions, significantly improve the purity of the steel, and refine the grain size.

American RAD-CON Hydrogen Protection Annealing Furnace ▸ Effectively prevents decarburization on the steel surface. After annealing, a pearlitic structure with a high spheroidization rate and high uniformity is obtained, with good plasticity and low deformation resistance.

Cold heading workshop: High-precision, high-efficiency forming capability for special-shaped parts

Wide Range of Cold Heading: Cold heading diameters M3–M36, covering the full series of production from small precision parts to large high-strength fasteners. Large-Scale Production: Equipped with 130 cold heading machines, offering high capacity and efficiency, capable of handling orders of various types and specifications, specializing in the manufacture of special-shaped and non-standard parts.

Wire Drawing Workshop: Fully automatic logistics distribution, efficient and precise thread processing

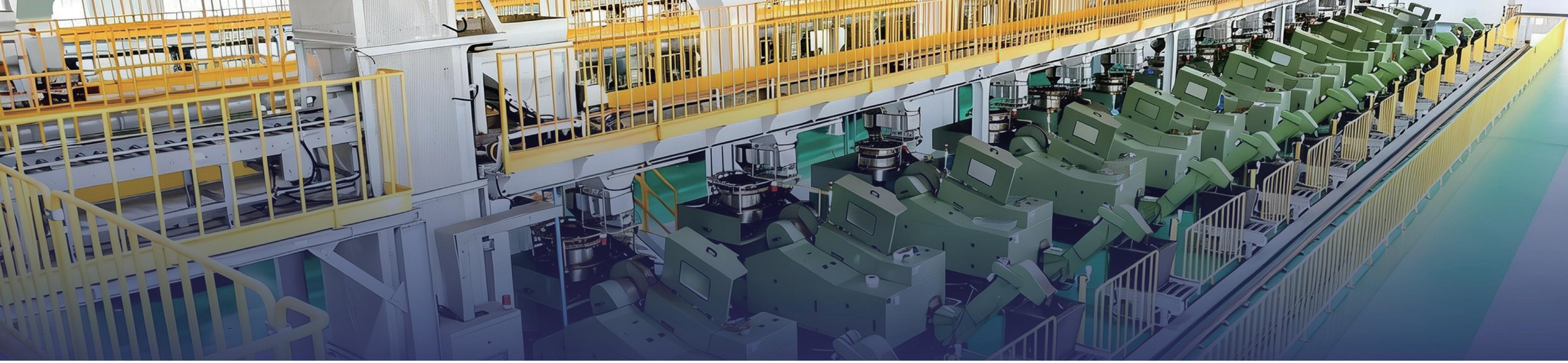
Relying on the central warehouse system to automatically feed into the wire drawing machine, the entire process is unmanned, reducing errors and delays, and improving production efficiency by 15%. It can be flexibly combined with the heat treatment process, allowing either wire drawing before heat treatment or heat treatment before wire drawing, ensuring thread quality and product performance.

Heat Treatment Workshop: Phosphorus-free and environmentally friendly, high-process-capability heat treatment line with automatic process switching

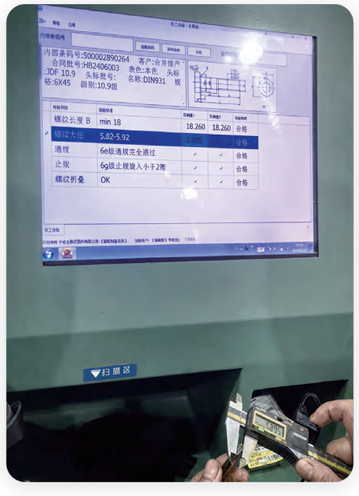
Core advantages of Taiwan San-Yung continuous hardening quenching furnaces :
14 production lines with high efficiency and low consumption, strong mass production capacity; equipped with a pre-phosphorus removal tank to ensure that the surfaces of 10.9/12.9 grade bolts are phosphorus-free, complying with green manufacturing. Suitable for large batches of products with the same specifications, with excellent performance consistency; connected to the central warehouse system to achieve automatic loading and unloading, barcode tracking, and automatic calling of process parameters.

Core Advantages of IPSEN Multipurpose Furnace (2 units, imported from Germany) :
Adapted for small-batch, multi-variety, high value-added products, capable of heat treating extra-large diameter and extra-long specifications, ensuring hardenability and no bending. Precise temperature control, stable carbon potential, high Cpk, with strong performance consistency. Bolts of grade 10.9 and above can undergo heat treatment before thread rolling, preventing decarburization or carburization of the threads.









Integration and Collaboration of ERP and MES

Jinding Fasteners has achieved deep integration with Kingdee ERP and MES systems, realizing full-process digital management. From sales orders and production execution to finished product delivery, all data is online, visible, and controllable throughout the entire process. Real-time monitoring and efficient utilization of the six key production elements — personnel, machines, materials, methods, environment, and measurements — are implemented. A closed-loop management system is formed through scheduling, issuance, output, and quality control, ensuring orderly production and stable quality. Leveraging LOT NUMBERs enables full-chain traceability, allowing product lifecycle information to be queried at any time. Processes are automatically issued, inspections are automatically judged, and data is automatically collected, greatly simplifying on-site operations. The successful implementation of the system marks Jinding Fasteners' official transition from automated manufacturing to intelligent, digital manufacturing, providing customers with more efficient, precise, and reliable fastener products and services.

Production process level: Optimization and solidification of drawings

Jinding Fasteners achieves optimization and solidification of processes and drawings through the system: standardized process packages for orders, digitization of drawings and parameter binding, ensuring precise correlation and easy reference; relying on production data to iterate processes, solidifying optimal parameters and matching mature processes, improving process levels, reducing trial-and-error costs, and ensuring efficient production standards.

Operational level: more efficient, accurate, fast, and simple

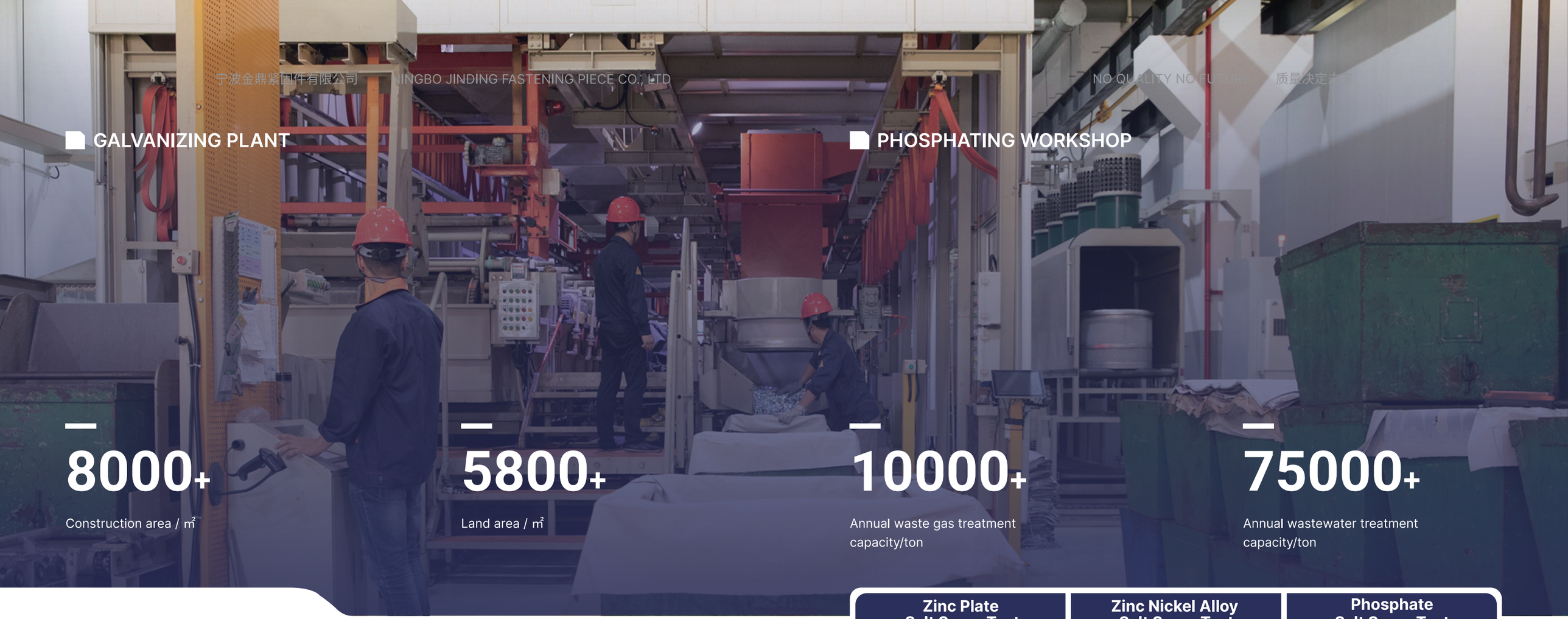
The Jinding Fastener Intelligent Manufacturing System focuses on efficiency, precision, speed, and simplicity, achieving a comprehensive upgrade at the operational level. It improves efficiency through automatic issuing of process parameters, schedule optimization, and data collection; ensures accuracy with automatic batch number association; shortens cycles by quickly responding to orders, automatically switching production, and rapidly locating issues; and reduces operational difficulty with simple workstation terminals, barcode operations, and intelligent guidance.

Online Inspection and Computer Determination: A Revolution in Quality Management

Jinding Fasteners has built an online inspection and automatic judgment system centered on the MES system to achieve an upgrade in quality management. The system automatically triggers inspections, and equipment directly connected to the MES automatically collects data and determines results, eliminating human errors. Relying on unified standards, real-time processes, and traceable data, combined with nonconformance alarms, equipment lockout, and SPC control, it realizes quality risk warnings and rapid response.

Traceability System: Full Process Integration of LOT NUMBER

Jinding Fasteners has built a full-process traceability system centered on the LOT NUMBER, which can trace upward to raw materials, equipment, and personnel, and trace downward to orders, finished products, and customer flow, while fully tracing process parameters, inspection data, and anomaly records. This system supports precise recalls and quality improvement, meets compliance requirements such as ISO 9001 and IATF 16949, and ensures product quality throughout the entire lifecycle.



GALVANIZING PLANT

PHOSPHATING WORKSHOP

8000+
Construction area / ㎡

5800+
Land area / ㎡

10000+
Annual waste gas treatment capacity/ton

75000+
Annual wastewater treatment capacity/ton

GALVANIZATION FACTORY

Ningbo Jinding Electroplating Production Base is located at No. 668 Xiangan Road, Ningbo Petrochemical Economic and Technological Development Zone, covering a land area of 5,800 ㎡ with a building area of 8,000㎡. It was established in 2019 and put into production in March 2021, mainly performs electroplating processing on fasteners. It currently has 30 employees, including 8 engineering and technical personnel and 3 quality control personnel.
The company introduced three fully automated electro-galvanizing production lines from Hongyi in Taiwan, one of which is equipped with a dehydrogenation furnace. The production lines are computer-controlled, according to the quality requirements of galvanization, the corresponding processing program is selected, and all process parameters are recorded in real time to trace product quality.

ELECTROPLATED ZINC-NICKEL ALLOY PRODUCTION LINE

In 2026, the company introduced a fully automatic zinc-nickel alloy electroplating production line from Hongyi, Taiwan, equipped with a dehydrogenation furnace. Through the intelligent control system, real-time monitoring of the production process, data recording, report generation, remote monitoring, and fault alarms are achieved, realizing digital and intelligent production management. Zinc-nickel alloy has the advantages of reducing the risk of hydrogen embrittlement and excellent corrosion resistance, with a friction coefficient of 0.12-0.18 / 0.08-0.14, and salt spray corrosion resistance reaching 720-2500 hours.

Zinc Plate Salt Spray Test	Zinc Nickel Alloy Salt Spray Test	Phosphate Salt Spray Test
Can achieve 48/72/96/120/240/360 hours without white rust	Can achieve 720/1000/1200/1500/2000/2500 hours without red rust	Can achieve 48/72/96/120 hours without red rust

And control the product's friction coefficient according to customer requirements

In 2024, Ningbo Jinding Fastening Piece Co., Ltd. put into operation a phosphating production line that integrates automation, intelligence, and environmental protection. The production line is equipped with an intelligent control system, achieving real-time production monitoring, data recording, report generation, remote monitoring, and fault alarms, promoting digital and intelligent production management. The production line includes core processes such as automatic barrel phosphating, continuous tunnel dehydrogenation, automatic barrel oil immersion, and rust prevention treatment. Fasteners treated with this phosphating process can pass 48–120 hours of salt spray testing without red rust.

The company strictly adheres to national environmental protection regulations, with an annual wastewater treatment capacity of 75,000 tons and an annual waste gas treatment capacity of 10,000 tons. It has a complete supporting testing process and a dedicated testing laboratory, after passing inspection, products are sent back to Jinding's logistics warehouse, and then sampled and tested by Jinding's inspectors to ensure qualification of every single product.

1 set of galvanized wastewater treatment facility

4 sets of waste gas treatment facilities

1 unit of X-ray coating thickness tester

4 sets of neutral salt spray testing machines

TESTING CENTER

Impartial & Rigorous
01 / Quality Policy

Scientific & Practical
02 / Quality Policy

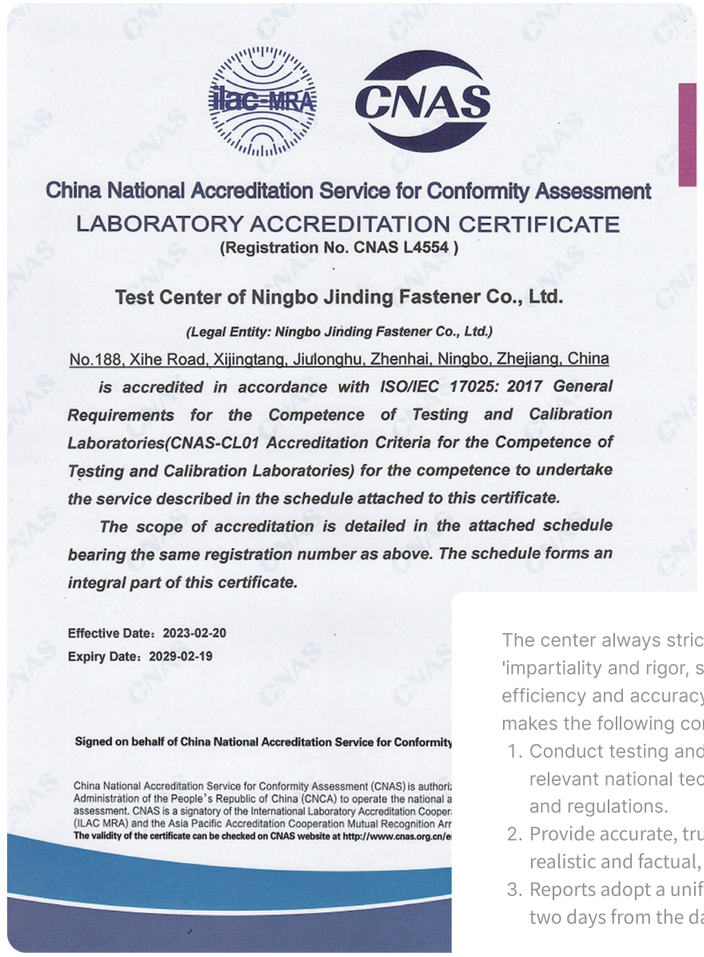
Efficient & Accurate
03 / Quality Policy

Strive for Perfection
04 / Quality Policy

TEST CENTER OF NINGBO JINDING FASTENING PIECE CO.,LTD.



Test Center of Ningbo Jinding Fastener Co., Ltd was established in December 1999, and passed ISO/IEC 17025:2005 laboratory accreditation in May 2010. It serves as the company's authorized independent testing institution, and specializes in fastener product testing.
The center conducts testing based on ISO, ISO/IEC17025 (CNAS/CL01), and relevant domestic and international standards, providing clients with scientific, objective, impartial, and timely testing services.



Customer Complaint Acceptance Rate
100%

Pass Rate of Test Reports/Certificates
99%

Customer Satisfaction Score
95

The center always strictly adheres to the quality policy of 'impartiality and rigor, scientific and pragmatic approach, efficiency and accuracy, and continuous improvement.' It makes the following commitments:

1. Conduct testing and experiments in accordance with relevant national technical specifications, procedures, and regulations.
2. Provide accurate, true, and reliable data and reports, be realistic and factual, and be responsible to customers.
3. Reports adopt a unified format and will be issued within two days from the day after the test is completed.

TESTING CENTER

Impartial & Rigorous

01 / Quality Policy

Scientific & Practical

02 / Quality Policy

Efficient & Accurate

03 / Quality Policy

Strive for Perfection

04 / Quality Policy

TEST CENTER OF NINGBO JINDING FASTENING PIECE CO.,LTD.



·Metallographic Microscope



·Micro Vickers Hardness Tester



·Digital Rockwell Hardness Tester



·Projector



·Contour Measuring Instrument



·Surface Roughness Tester



·X-ray Fluorescence Coating Thickness Tester



·Friction Coefficient Tester



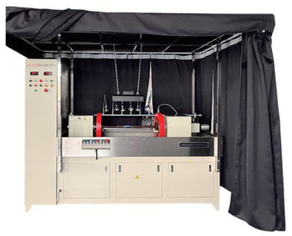
·Torsion Shear Bolt Testing Machine



·Microcomputer Hydraulic Universal Testing Machine



·Microcomputer-Controlled Prevailing Torque Testing Machine



·Magnetic Particle Flaw Detector



·Fatigue Testing Machine



· Hydrogen Ion Content Analyzer



·Direct Reading Spectrometer



·Salt Spray Corrosion Test Chamber



·Charpy Impact Testing Machine



·Cleanliness Tester

AUTOMATED STORAGE AND RETRIEVAL SYSTEM

20000+
Finished Product Storage Capacity / ton

23360+
Finished Product Storage Positions

9000+
Semi-Finished Product Storage Capacity / ton

3800+
Floor Area of Semi-Finished Product Vertical Racks /㎡

The 3,800 ㎡ of semi-finished product 3D racking system can accommodate over 9,000 tons of goods. Each position is equipped with a fixed code, fully supported by a complete enterprise digital management system and ERP management software. It greatly improves the rationality and conciseness of goods stacking, making logistics more accurate and efficient.

The fully automatic 3D finished product warehouse was built in 2020, with 8 automatic stackers and 23,360 positions, capable ofstoring 20,000 tons of finished products.Interconnected with ERP data, the warehouse system is fully computer-controlled and can perform functions such as inbound, outbound, inventory counting, and pallet consolidation. After being moved by forklift onto the inbound conveyor line, the packaged finished product pallets are automatically scanned to generate storage location information, and then automatically stored. When outbound delivery is needed, the computer generates delivery information, the pallets are directly delivered to the container terminal, and then loaded into containers by forklift.



GREEN FACTORY

LONG-TERM SIGNIFICANCE

The construction of green factory in fastener industry is not the optimization of a single link, but a full-chain upgrade covering six core links: energy, warehousing, production, quality, management and environmental protection. Centered on the principles of 'energy saving, consumption reduction, pollution mitigation, and efficiency enhancement,' it integrates intelligent and digital technologies to achieve dual improvements in environmental and economic benefits, thereby building a whole-process green manufacturing system.



OVERVIEW

The green factory in the fastener industry covers comprehensive upgrades across six core areas: energy,warehousing,production,quality,management, and environmental protection. Aiming at energy saving, consumption reduction, pollution reduction, and efficiency improvement, it integrates digital and intelligent technologies to achieve both environmental and economic benefits,building a green manufacturing system.

OVERALL SUMMARY

The green factory for fasteners focuses on full-link collaboration, intelligent empowerment, and full-cycle carbon reduction, building a green manufacturing chain that saves energy at the source, reduces consumption in the process, and decreases pollution at the end, while taking into account cost reduction, efficiency improvement, and the industry's green transformation.

KEY POINTS OF CORE UPGRADES IN EACH LINK

01/Energy Side

The core is to move beyond the limitation of single PV energy source, and achieve an upgrade from "passive power generation" to "intelligent energy utilization".

02/Warehousing Side

Intelligent 3D + unmanned handling boosts storage capacity utilization by over 30%, enhancing both space and efficiency.

03/ Production Side

Optimize oil circulation and iron chip separation system for automatic thread rolling machines, and realize cooling oil recycling through multi-stage filtration technology.

04/Quality Side

Automation combined with professional staff achieves a detection accuracy of 99.99%. Full inspection plus real-time feedback replaces post-event sampling, eliminating waste at the source.

05/Management Side

Digitalization eliminates data silos, linking full-chain data including orders, production, and energy consumption via MES, ERP, and other systems to create a closed data loop and optimize overall process energy efficiency.

06/Environmental Protection Side

Strengthen the disposal of the three wastes, adopt third-party compliant disposal for hazardous waste, some enterprises achieve regeneration and reuse of waste oil, and consolidate the green bottom line