



INDUSTRIAL EXCELLENCE

STRENGTH IN EVERY CONNECTION.

PRODUCT CATALOG 2026

Hebei Keyfix Trading Co., Ltd.

Professional Fastener Solutions & Manufacturing





EST. 2007 · 20 YEARS OF EXCELLENCE · SHIJIAZHUANG, HEBEI, CHINA

COMPANY PROFILE

Established in 2007, Hebei Keyfix Trading Co., Ltd. is a professional manufacturer specializing in customized precision fastener solutions. With a modern production facility staffed by 100+ skilled employees, we deliver high-quality custom fasteners to clients worldwide.

Keyfix specializes in custom screws, bolts, nuts, CNC-machined parts, and other specialized fastening components. Our factory is equipped with advanced CNC machining centers, multi-station cold forging systems, and progressive stamping lines, achieving manufacturing precision of $\pm 0.001\text{mm}$ and quality control standards at an exceptional 0 PPM level.

Our products serve diverse industries, including automotive, machinery, electronics, medical devices, wind power, and aerospace. With nearly two decades of industry expertise and continuous innovation, we hold internationally recognized certifications, including IATF 16949, ISO 9001, and ISO 14001, along with 50+ patented products – a testament to our strong R&D capabilities and technological leadership. We are committed to being your trusted fastener partner, delivering precision in every product and excellence in every service.

 20 YEARS HISTORY	 20+ SENIOR ENGINEERS	 100+ COMPLETED PROJECTS	 100+ CLIENTS SERVED
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Slogan :

Key Solutions, Fixed Results.

Value :

Delivering precision beyond standards — our service process ensures every fastener meets the exact requirements of your most critical applications.

Positioning :

Global Custom Precision Fastener Manufacturer

Mission :

To deliver precision fastening solutions that empower industries worldwide to build safer, more reliable products.

Brand Statement :

Engineering excellence with dedicated craftsmanship — your trusted partner for custom fastener solutions.

Advantages :

Production Advantage: $\pm 0.001\text{mm}$ precision with advanced CNC, cold forging, and stamping capabilities

Quality Advantage: IATF 16949 certified with 0 PPM quality control standards

Service Advantage: One-stop custom solutions from design to delivery, backed by 20+ senior engineers

ENGINEERING EXCELLENCE

Advanced manufacturing processes delivering precision and quality.



01 PRECISION CNC MACHINING

Specializing in high-precision components with multi-axis turning and milling centers. Ideal for complex geometries and critical tolerances.

±0.001

MM TOLERANCE

3/4/5

AXIS CNC

24/7

OPERATION



02 ADVANCED COLD FORGING

High-speed multi-station cold heading technology enhances material grain structure, ensuring superior mechanical strength and efficiency.

M2-M24

DIAMETER RANGE

MULTI

STATION

HIGH

SPEED



03 PRECISION METAL STAMPING

Efficient production for complex thin-walled parts and washers. Integrated tool design enables high-speed manufacturing with consistent quality.

CUSTOM

TOOLING

RAPID

PRODUCTION

THIN

WALL PARTS



04 HEAT TREATMENT

Comprehensive heat treatment processes including quenching, tempering, and carburizing to enhance material hardness, strength, and wear resistance for critical applications.

HRC 58-62

HARDNESS RANGE

VACUUM

FURNACE TYPE

ISO

CERTIFIED PROCESS

SURFACE TREATMENT

INDUSTRIAL COATING & SALT SPRAY TEST STANDARDS



ZINC PLATING
SALT SPRAY TIME: 72 - 200 HRS



HOT DIP GALVANIZING
SALT SPRAY TIME: 500 - 1,000 HRS+



BLACK OXIDE
SALT SPRAY TIME: 2 - 24 HRS



DACROMET
SALT SPRAY TIME: 480 - 1,000 HRS



RUSPERT
SALT SPRAY TIME: 1,000 - 1,500 HRS



TEFLON (PTFE)
SALT SPRAY TIME: 500 - 1,000 HRS

FULL SALT SPRAY TEST REFERENCE

PLATING TYPE	TIME (HOURS)
Zinc Nickle Plating	1000+ hrs / 1500 hrs max
Magni	300 / 500 hrs
PVD	96 hrs
Black Zinc	48 / 96 hrs
Electrophoresis	48 / 72 hrs
Anodize	24 / 48 hrs
Tin Plating	24 / 48 hrs
Green / Yellow / Red Zinc	24 / 48 hrs
White / Blue / Color Zinc	4 / 8 / 12 / 24 / 48 / 72 / 240 hrs

PLATING TYPE	TIME (HOURS)
Silver / Black Nickle	4 / 12 / 24 hrs
Brass Plating	12 / 24 hrs
Silver Plating	12 / 24 hrs
Gold Plating	12 / 24 hrs
Chrome Plating	4 / 8 / 24 hrs
Brass Plating (Thin)	2 hrs
Electroless Nickel Plating	2 hrs
Painting	12 / 24 / 48 hrs

MATERIAL EXPERTISE: CARBON & ALLOY STEEL

Professional selection for high-strength fastening and structural durability.



01 1022 / 1022A

BASE INTRODUCTION

Manganese-enriched low carbon steel featuring exceptional cold heading formability and high ductility. Highly effective for carburizing treatment to achieve superior surface hardness.

APPLICATION SCENARIOS

Self-tapping/drywall screws, self-drilling screws, and Class 4.8/5.8 standard construction fasteners.



02 42CRM04

BASE INTRODUCTION

Chromium-molybdenum quenched and tempered alloy steel. Provides elite fatigue strength, impact toughness, and wear resistance for heavy-duty structural integrity.

APPLICATION SCENARIOS

Wind turbine tower bolts, automotive chassis, bridge anchor bolts, and heavy machinery connectors.



03 35CRM0

BASE INTRODUCTION

Medium carbon alloy structural steel with high static and creep strength. Maintains stable impact toughness in extreme temperature environments from -110°C to 500°C.

APPLICATION SCENARIOS

Grade 10.9 high-strength bolts, pressure vessel fasteners, and wind power assembly components.

MATERIAL EXPERTISE: STAINLESS STEEL

Premium corrosion-resistant alloys engineered for diverse industrial and marine applications.



04 SS 304

BASE INTRODUCTION

The most versatile austenitic stainless steel (18%Cr-8%Ni) featuring excellent formability, weldability, and resistance to atmospheric and freshwater corrosion[cite: 278, 279]. It is non-magnetic with a service temperature capability of approximately 800°C[cite: 279].

APPLICATION SCENARIOS

Ideal for food and medical equipment, architectural decorative fasteners, universal industrial standard parts, and electronic device connectors[cite: 280].



05 SS 316

BASE INTRODUCTION

Enhanced with 2–3% molybdenum, this grade offers significantly superior resistance to chloride-induced pitting and crevice corrosion compared to 304[cite: 282, 283]. It is the standard material for highly corrosive saline and acidic environments[cite: 283].

APPLICATION SCENARIOS

Marine environment fasteners, chemical processing equipment bolts, pharmaceutical engineering connections, and desalination systems[cite: 284].



06 DUPLEX 2205

BASE INTRODUCTION

A 22Cr-5Ni-3Mo-N dual-phase stainless steel providing nearly double the yield strength (≥ 450 MPa) of austenitic grades[cite: 286, 287]. It offers exceptional resistance to stress corrosion cracking and pitting in harsh environments[cite: 287].

APPLICATION SCENARIOS

Offshore oil and gas platforms, high-pressure equipment bolts, seawater desalination infrastructure, and pulp/paper machinery[cite: 288].

MATERIAL EXPERTISE: SPECIALTY ALLOYS

High-performance non-ferrous alloys engineered for precision, lightweight, and aerospace excellence.



07 ALU 7075-T6

BASE INTRODUCTION

A high-strength "Aerospace Grade" aluminum alloy featuring zinc as the primary alloying element[cite: 291]. It offers exceptional fatigue resistance and a strength-to-weight ratio comparable to many steels[cite: 292].

APPLICATION SCENARIOS

Aerospace structural fasteners, high-performance racing components, and critical military equipment[cite: 293].



08 ALU 6061-T6

BASE INTRODUCTION

A magnesium-silicon alloy providing excellent corrosion resistance and weldability[cite: 296]. It is a standard choice for structural applications where a balance of strength and weight reduction is required[cite: 296].

APPLICATION SCENARIOS

Automotive lightweighting, marine hardware, electronic enclosures, and bicycle frames[cite: 297].



09 BRASS

BASE INTRODUCTION

A copper-zinc alloy (Cu-Zn) known for superior electrical and thermal conductivity[cite: 300, 301]. It is non-magnetic, non-sparking, and provides a unique aesthetic with excellent corrosion resistance[cite: 301].

APPLICATION SCENARIOS

Electrical terminals, plumbing and bathroom hardware, decorative architecture, and explosion-proof safety components[cite: 302].



10 TI-6AL-4V

BASE INTRODUCTION

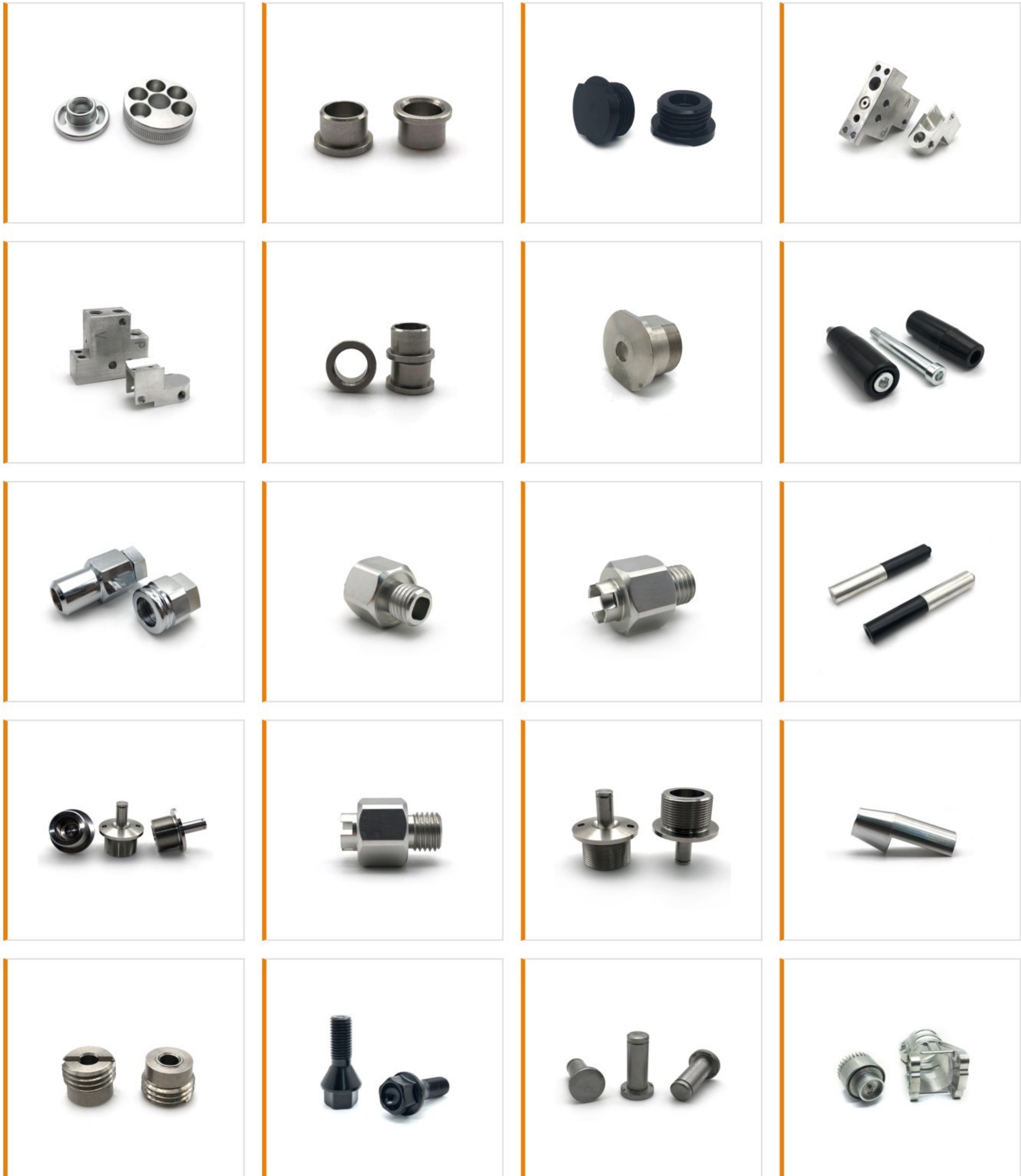
Grade 5 alpha-beta titanium alloy delivering high specific strength and exceptional corrosion resistance[cite: 305, 306]. It is 40% lighter than steel while maintaining comparable mechanical integrity[cite: 306].

APPLICATION SCENARIOS

Aviation airframes, jet engines, medical implants, and high-performance racing (F1) parts[cite: 307].

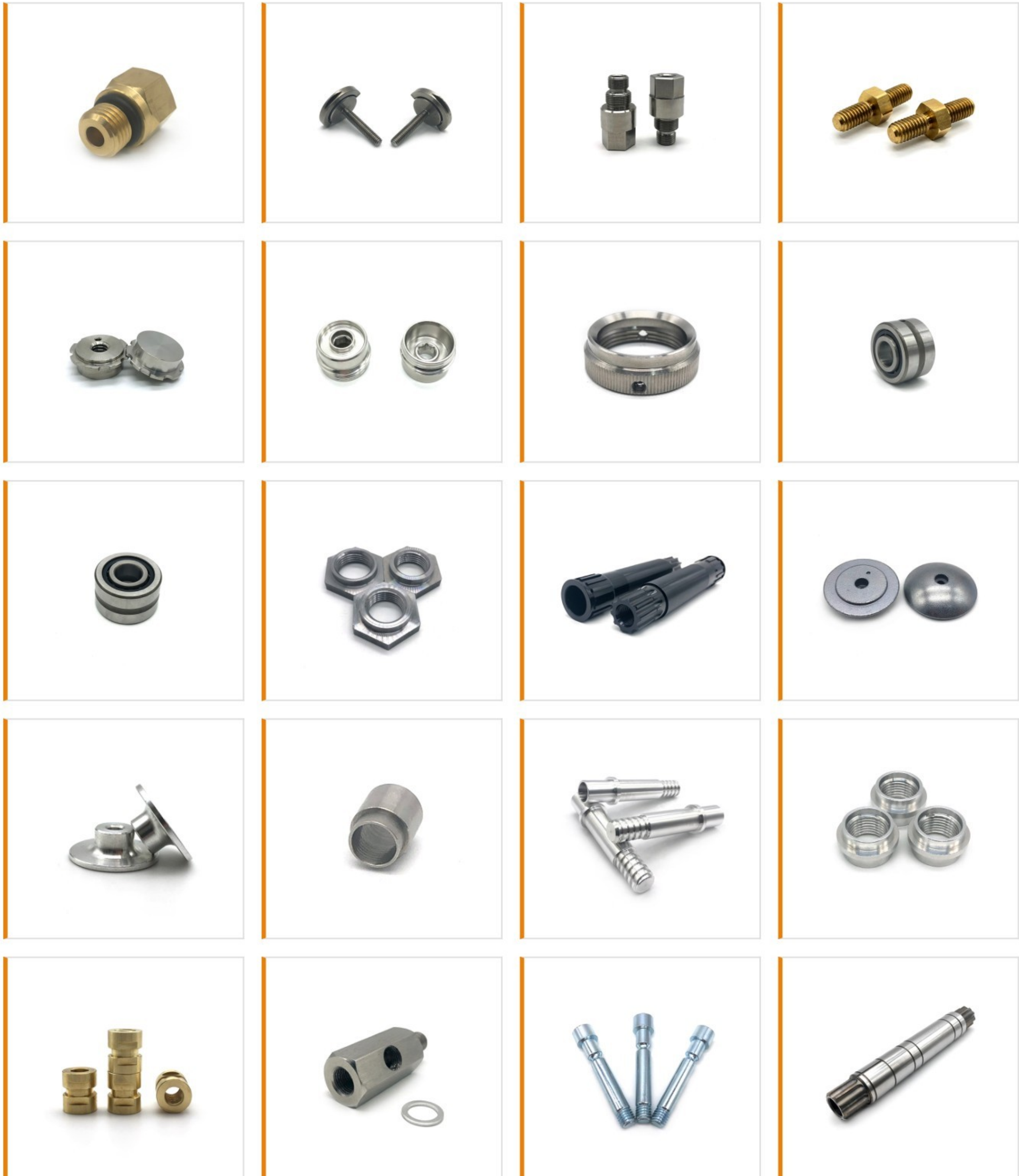
CNC PARTS

Precision-machined components for industrial applications.



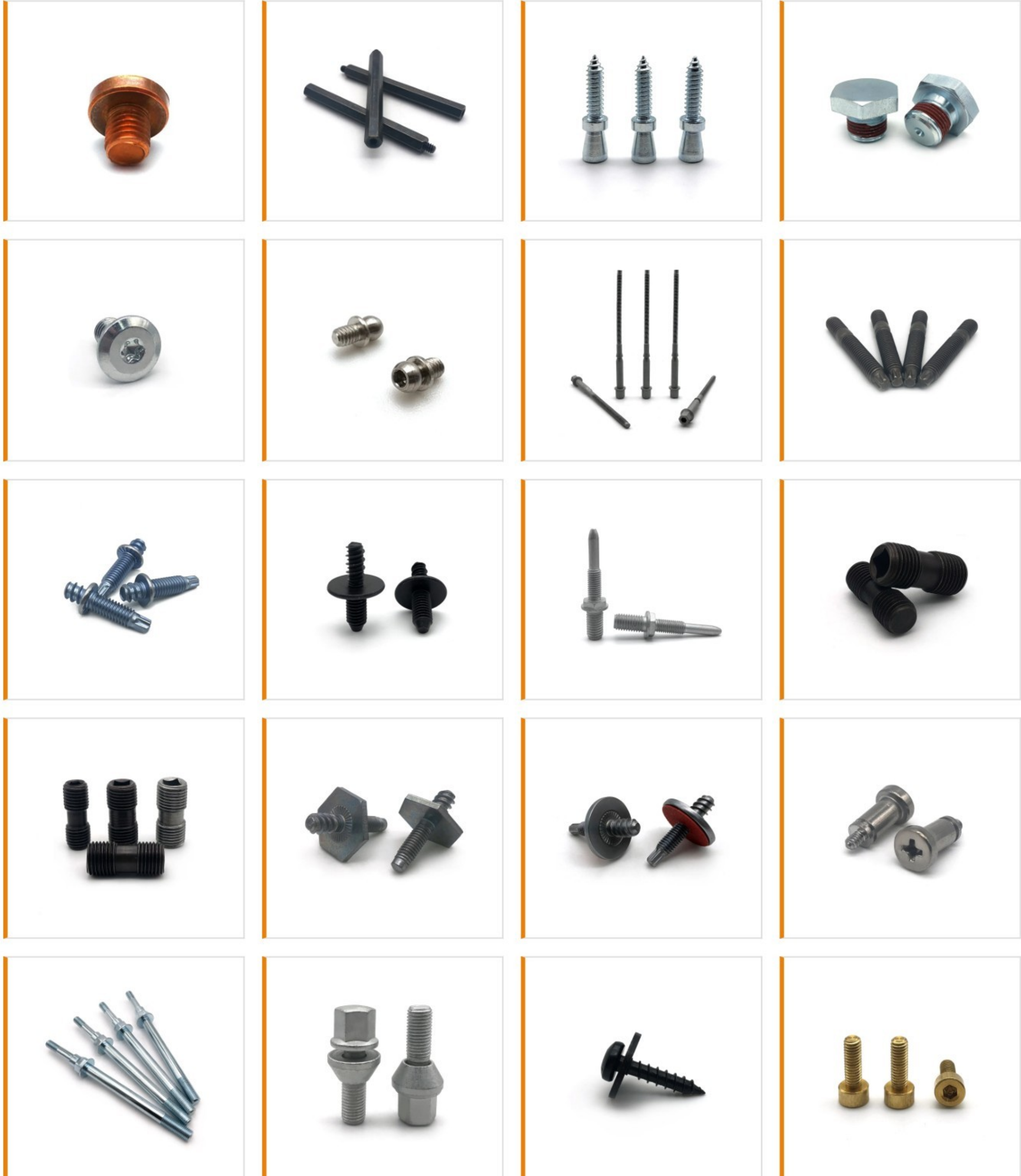
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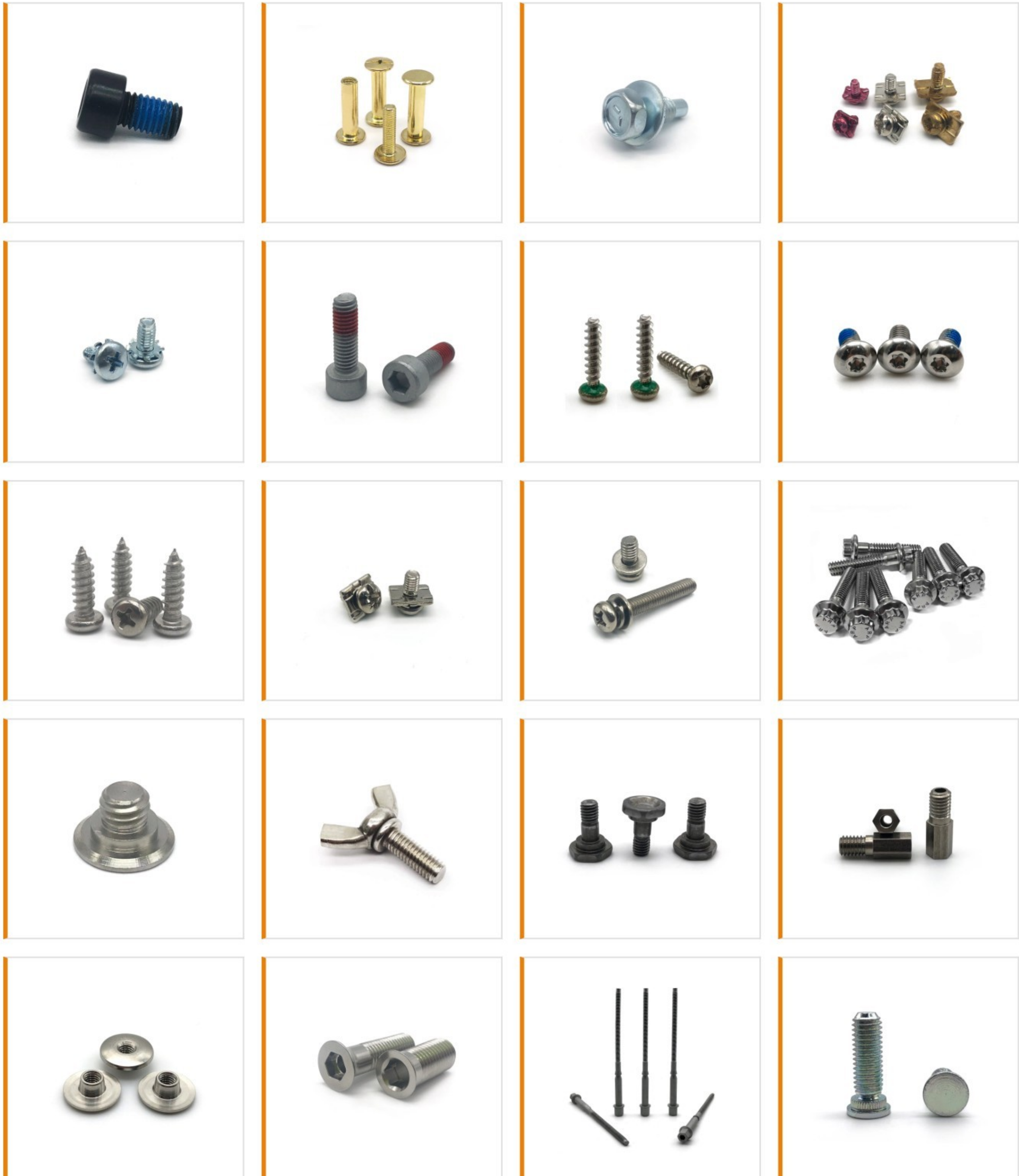
CUSTOMIZED SCREWS

High-precision fastening solutions engineered for extreme durability.



CUSTOMIZED SCREWS

High-precision fastening solutions engineered for extreme durability.



CUSTOMIZED NUTS

Precision-engineered nuts for secure fastening solutions.



INDUSTRY APPLICATIONS

Precision fastening solutions for high-tech, high-strength, and high-precision sectors.

■ AUTOMOTIVE

Providing high-strength bolts, flange nuts, and precision parts for engine, chassis, and EV battery pack assembly[cite: 5, 6]. Engineered for the demands of lightweighting and electrification[cite: 4].



■ MACHINERY & EQUIPMENT

Supplying heavy-duty bolts and pins for construction and mining machinery[cite: 12]. Designed to ensure reliability under extreme vibration and alternating stress[cite: 10].

■ NEW ENERGY (WIND & SOLAR)

High-strength bolts for wind tower flanges, blade hubs, and solar mounting systems[cite: 19]. Features advanced anti-corrosion for 20+ years of outdoor service in harsh environments[cite: 17, 20].



■ ELECTRONICS & ELECTRICAL EQUIPMENT

Micro screws (down to M1 size), precision shafts, and spacers for consumer electronics and telecom hardware[cite: 25, 26]. Delivering high-precision and aesthetically refined finishes[cite: 23, 26].

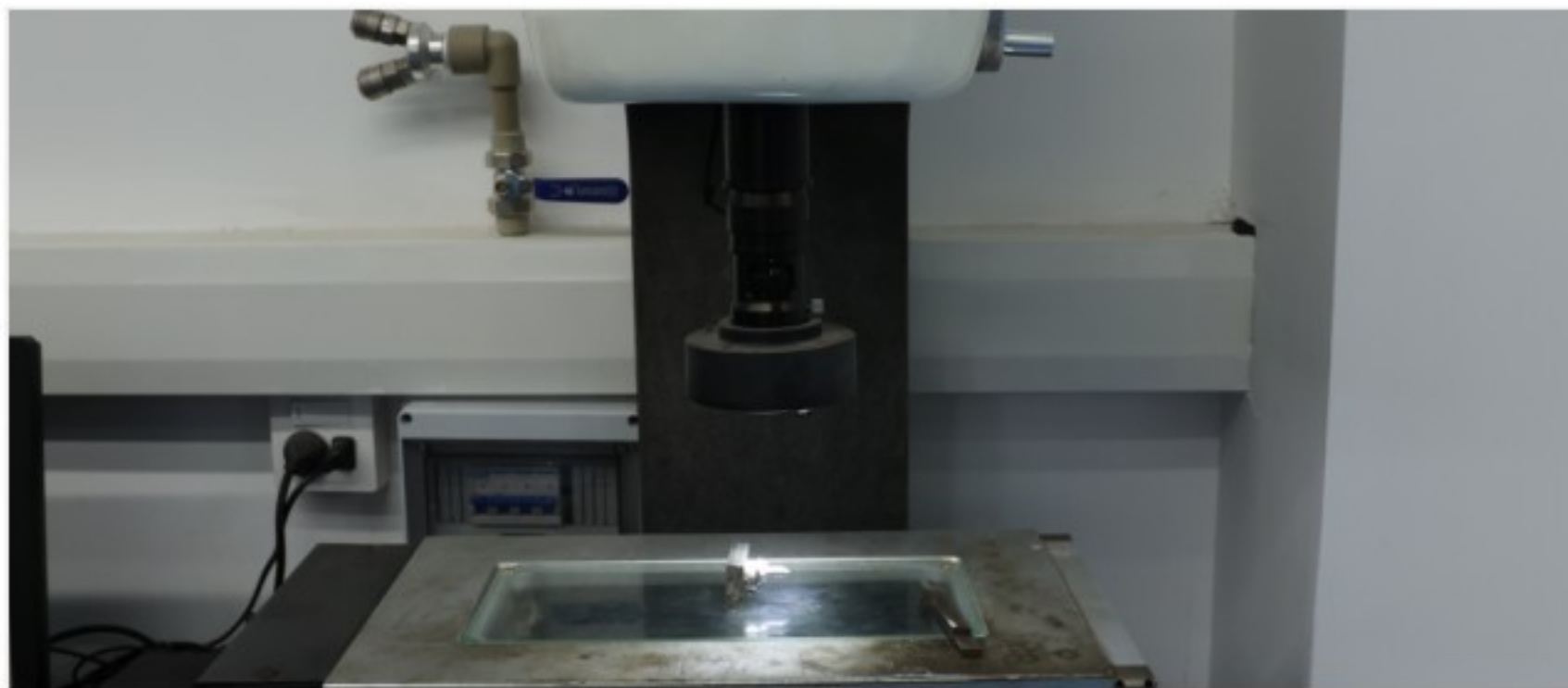
■ AEROSPACE

Flight-critical titanium and high-temperature alloy fasteners for airframes, engines, and launch vehicles[cite: 32, 35]. Subject to rigorous quality control and full batch traceability[cite: 31, 33].



PLANT LAB AND INSPECTION

GEOMETRIC DIMENSION & SURFACE INSPECTION



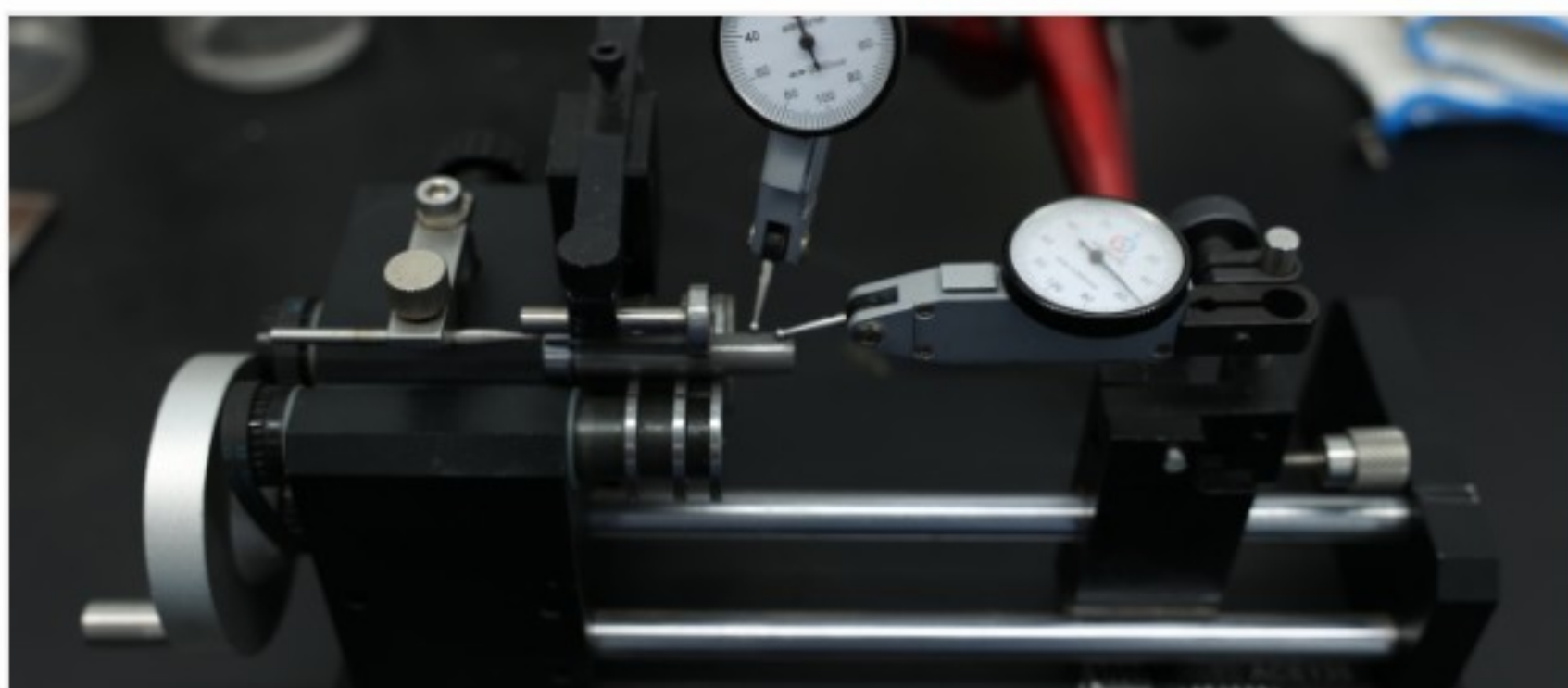
OPTICAL PROJECTOR

Precision 2D measurement for complex fastener geometries and thread verification.



2.5D MEASURING MACHINE

Automated vision system for batch dimensional inspection with micron-level accuracy.



CONCENTRICITY TESTER

Ensures the axial alignment and structural symmetry of high-strength components.



SURFACE ROUGHNESS TESTER

Quantitative analysis of surface finish to guarantee coating adhesion and performance.

MECHANICAL PROPERTY TESTING



HARDNESS TESTING SUITE

Equipped with Rockwell and Vickers/Micro Hardness testers to verify material strength.



TORQUE COEFFICIENT TESTER

Evaluation of torque-tension relationships to ensure reliable assembly and safety.

PLANT LAB AND INSPECTION

CHEMICAL PROPERTY TESTING



SPARK OES SPECTROMETER

Precision elemental analysis for raw materials, providing full chemical composition validation.



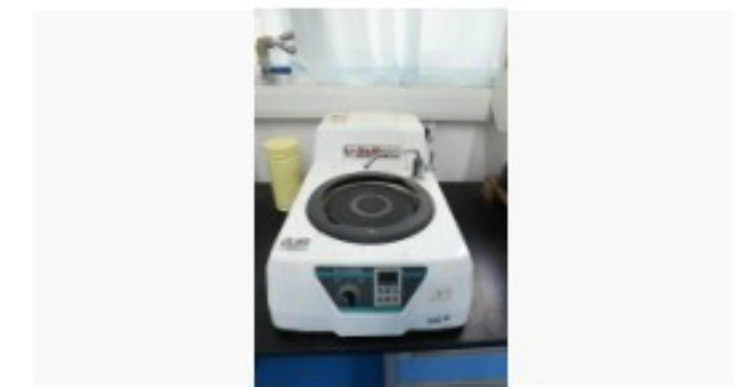
METALLURGICAL MICROSCOPE



CUTTING MACHINE



MOUNTING PRESS



POLISHING MACHINE

CORROSION PERFORMANCE TESTING

SALT SPRAY TEST CHAMBER

Our Salt Spray Chamber simulates extreme environmental conditions to evaluate the durability of anti-corrosion coatings, ensuring 20+ years of reliable service in harsh outdoor environments.





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PRECISION, STRENGTH, RELIABILITY

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