

5 : Quality System & Testing Capabilities

Quality System & Testing Capabilities: Proven by Data, Not Claims

Shanghai Caifu Mechanical has fully implemented the ISO 9001 Quality Management System since 2014. From incoming materials to final delivery, we enforce 100% batch traceability control to ensure absolute quality stability for every fastener.

Full-Process Testing Capabilities: :

- **Raw Material Verification:** Visual inspection, macro-structure metallographic testing, and Optical Emission Spectrometry (OES) for chemical composition.
- **Mechanical Property Testing:** Four essential tensile tests (tensile strength, yield strength, elongation, reduction of area).
- **Extreme Temperature Testing:** -60°C low-temperature impact testing and high-temperature testing up to 300°C.
- **Hardness & Metallographic Testing:** Rockwell (HRC) and Vickers (HV) hardness testing after heat treatment, plus metallographic analysis.
- **Non-Destructive Testing (NDT):** Fluorescent Magnetic Particle Inspection (MPI for surface defects), Ultrasonic Testing (UT for internal defects), and Eddy Current Sorting (hardness deviation and material mix-ups).
- **Precision Dimensional Inspection:** Vision Measuring Machine (geometric dimensions, position tolerance) and Flatness Inspection Table (flatness, parallelism).

R&D and Quality Commitment: :

Our R&D center is equipped with a full suite of testing instruments, operating under a management model where "every production process is supported by a production plan and process route card." We only deliver high-quality products that meet drawing requirements, providing the most solid backing for your critical connections.