

High Frequency Fatigue Testing Machine

This machine features a digital pulse width modulator and an intelligent force amplifier. Its air gap structure allows for easy vibration start, and it displays experimental waveforms, load values, resonant frequency, and cycle count in real time.



Product Overview

High Frequency Fatigue Testing System

This high frequency fatigue testing machine utilizes electromagnetic excitation resonance technology to evaluate the anti-fatigue fracture performance of various metal materials and components. Designed for versatility, the system supports a wide range of testing protocols including symmetrical, asymmetrical, unidirectional pulsating, and block spectrum fatigue tests. It serves as an essential tool for material analysis in industries such as aerospace, automotive, metallurgy, and academic research.

Technical Capabilities

Supported Test Types

- Symmetrical fatigue test
- Asymmetrical fatigue test
- Unidirectional pulsating fatigue test
- Block spectrum fatigue test
- Modulation control fatigue test

Suitable Test Objects

Gears, Bolts, Chains, Connecting rods, Fine steel bars

Industry Applications

Target Industries

Automotive • Aerospace • Universities • Scientific Research • Quality Inspection • Metallurgy • New Material R&D

System Features

Operating Principle

Electromagnetic excitation resonance