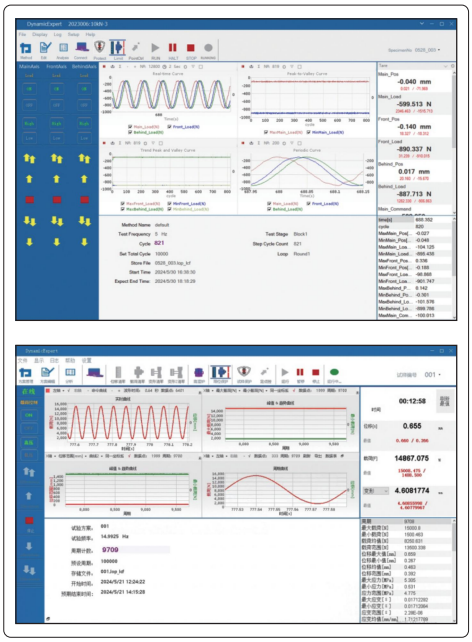
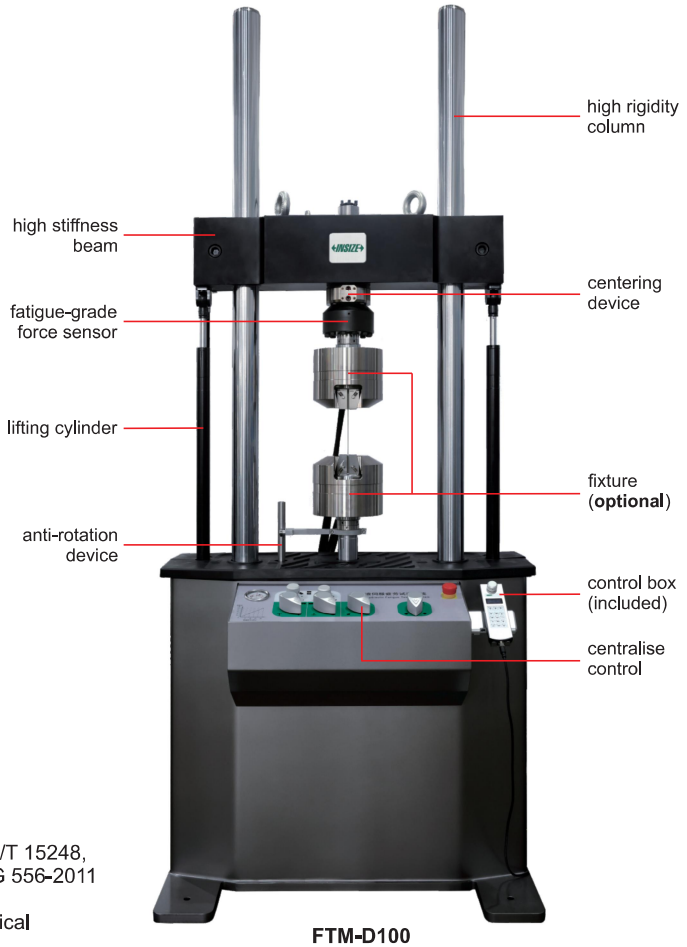
SERVOHYDRAULIC FATIGUE TESTING MACHINES (CYLINDER DOWN-MOUNTED)

ATTENTION: CUSTOMIZED ACCORDING TO TEST METHOD

VIDEO

software (included)





FTM-D100

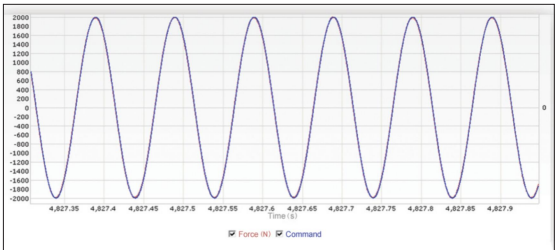
- According to ASTM D3479, ASTM D7615, GB/T 3075, HB5287, GB/T 15248, GB/T 6398, GB/T 4161, GB/T 21143, ASTM 1290, ASTM-E399, JJG 556-2011
- Suitable for tensile, compression, bending, tension-tension, compression-compression, tension-compression and other mechanical properties of the test
- Suitable for fatigue testing of composite materials, steel, aluminium alloys, super alloys, etc.

SPECIFICATION

Code	FTM-D50	FTM-D100	FTM-D250	FTM-D500
Max. test force	50kN	100kN	250kN	500kN
Accuracy of static force measurement	±0.5% of indicated value			
Accuracy of dynamic force measurement	±2% of indicated value			
Range of test force	0.5%~100%FS			
Actuator stroke*	±75mm			
Accuracy of displacement measurement	linearity error<40μm, repeatability<0.001%FS			
Range of frequency	0~100Hz			
Concentricity	≤5%			
Vertical test space*	1120mm	1200mm	1235mm	2000mm
Effective test width*	540mm	540mm	650mm	780mm
Test waveform	sine wave, square wave, triangle wave, ramp wave, random wave, spectral loading, sweep srequency, etc.			
Stiffness	5×10^8N/m			
Dimension (L×W×H)	1040×730×3000mm	1040×730×3000mm	1265×900×3800mm	1500×980×4200mm
Weight	1050kg	1150kg	1650kg	2400kg
Power supply	AC 380V, 3Ø, 50Hz			

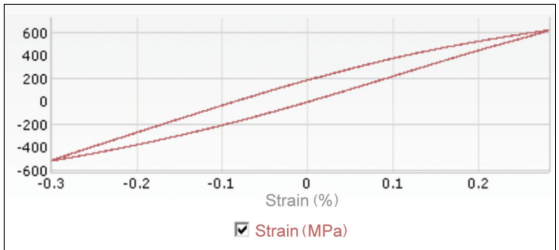
*Can be customized according to test requirements

WAVEFORM OF WORKING CONDITION



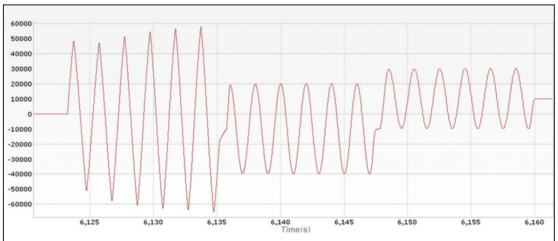
high cycle fatigue test

- Cyclic testing of specimens or components until failure, for fatigue, pre-cracked fracture mechanical specimens



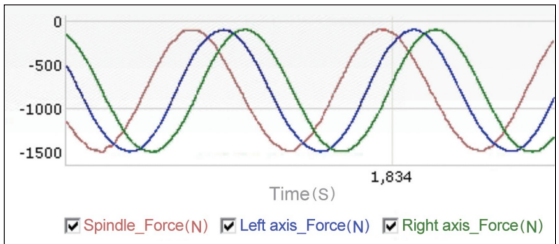
low cycle fatigue test

- Perform strain-controlled or load-controlled fatigue tests with simultaneous acquisition of force and strain hysteresis loop data



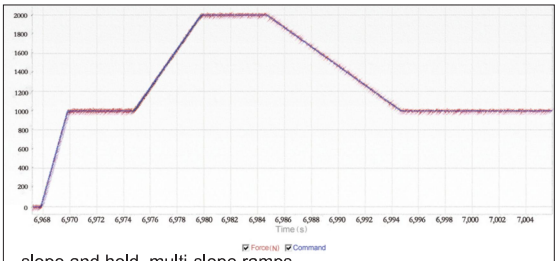
block-wave loading

- Build a block cycle wave to load the part
- Collect peak/valley data and monitor component failure



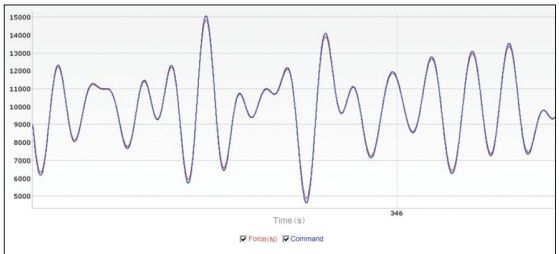
multi-axis test

- Run multiple in-phase or out-of-phase control channels to create multi-degree-of-freedom loading states such as bi-axial, tri-axial, multi-axial and axial-torsion tests



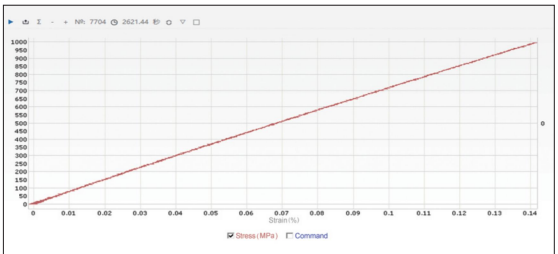
slope and hold, multi-slope ramps

- Use of ramp and hold sequences to assess creep fatigue or to establish thermal fatigue effects, to simulate real strain rate loading or to assess strain rate sensitivity in the presence of multi-slope ramp waves



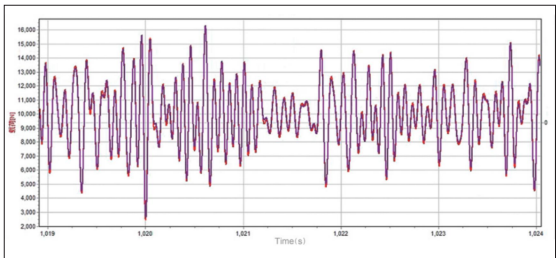
spectral block playback test

- Use the spectrum playback function to play back frequency data and value data defining the operating history



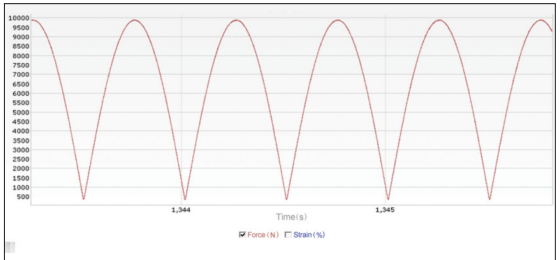
tensile, compression or bending test

- Fast or slow ramp wave commands set by speed or time to simultaneously collect stress, strain and displacement data for modulus, stiffness, yield or ultimate strength analysis

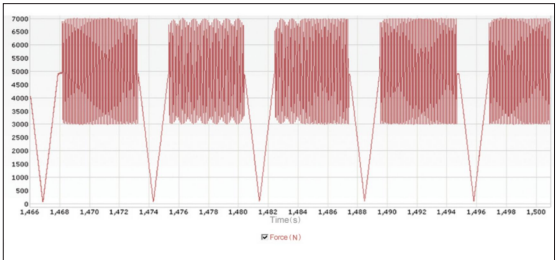


double frequency superposition wave

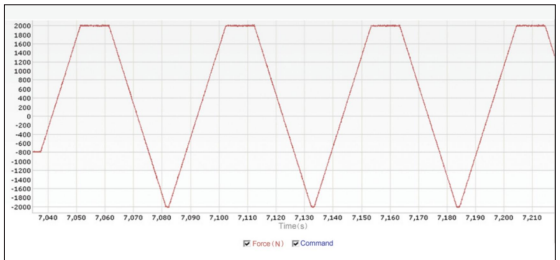
- Two signals of different frequencies and amplitudes are superimposed to generate a new waveform



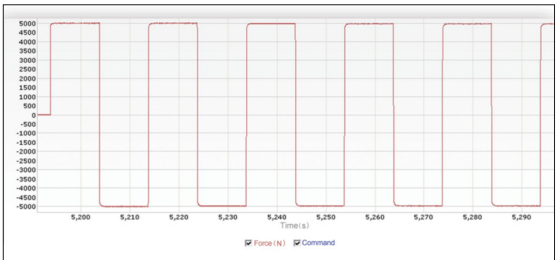
half-sine wave



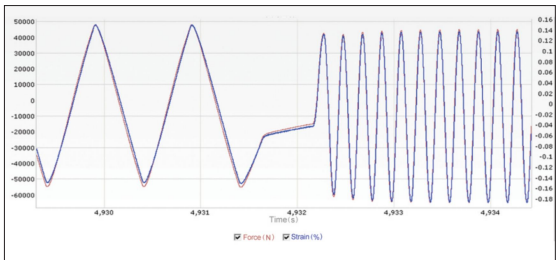
waveforms superimposed on sine and trapezoidal waveforms



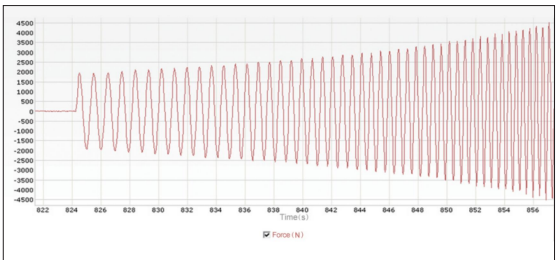
stress, strain maintenance



square wave



cycle life trigger control mode, control waveform switching



sweep frequency, sweep amplitude

STANDARD DELIVERY

Main unit	1 pc
Hydraulic oil source	1 set
Main circulating cooling water system	1 set
Control box	1 pc
Measuring software	1 set
Computer	1 pc
Printer	1 pc

OPTIONAL ACCESSORY

Fixture	customized
Extensometer	
High-temperature extensometer	
High and low temperature test chamber	
Temperature and humidity test chamber	
High-temperature furnace	
Security door	
Video extensometer	**UTM-M** series