

PRODUCT INFORMATION

Electronic Servo Universal Testing Machine

FT-20

I . Product Image



II . Product Applications:

FT-20 universal testing machine is applied to the test and analysis of tensile, compression, bending and other mechanical properties of metal and nonmetal materials. The machine can automatically strike ReH, ReL, Rp0.2, Fm, Rt0.5, Rt0.6, Rt0.65, Rt0.7, Rm, E and other test values according to the standards GB, ISO, DIN, ASTM, JIS and other international standards.

Corresponding standards:

ASTM D638, ASTM D790, ASTM D882, ASTM D412, ASTM D624, EN 61386, ISO 34, ISO 37, ISO 527, ISO 4578, ISO 845, ISO1798, ISO 1856, ISO 2439, ISO 3386, ISO 10371, GBT 16491, GB 1446, GBT 20041, etc.

III. Function and Features


1. FT-20 universal testing machine moves the crosshead up and down through the transmission mechanism driven by servo motor to achieve test loading process. The machine casting is **Steel-Cast**, high rigidity and strength compared to cast-iron, steady performance, high accuracy.
2. It has adopted advanced all-digital closed-loop control system for control and measurement, and has used the computer for the dynamic display of test process and experimental curves as well as data processing. After the test, the curve data can be analyzed and edited using the graphics processing module.

IV. Technical Parameter

Model	FT-20	
Maximum test load	100N, 200N, 500N, 1kN, 5kN, 10kN, 20kN (Different load cells are Optional)	
Resolution grade	0.5grade	
Load parameters	Force measurement range	0.2% ~ 100%FS(full-scale)
	Force display deviation	Within $\pm 0.5\%$ of display value
	Test force resolution	$\pm 1/300000$ of maximum load, internal and external do not divide class, and during whole test resolution unchanged
Large deformation parameters	Large deformation test range	10~800mm
	Large deformation display deviation	Within $\pm 1\%$ display value
	Large deformation measurement resolution	0.008mm
Displacement parameters	Displacement display deviation	Within $\pm 0.2\%$ of display value
	Displacement resolution	0.015 μ m
	Force control rate adjustment range	0.005 ~ 5%FS/s
	Force control rate control accuracy	Within $\pm 2\%$ set value when rate < 0.05%FS/s Within $\pm 0.5\%$ of set value when rate \geq 0.05%FS/s

Control parameters	Deformation rate control range	0.005~5%FS/s
	Deformation rate control accuracy	Within $\pm 2\%$ set value when rate $< 0.05\%$ FS/s
		Within $\pm 0.5\%$ of set value when rate $\geq 0.05\%$ FS/s
	Crosshead speed control	0.001~500mm/min
	Crosshead speed control accuracy	Within $\pm 0.2\%$ of set value
	Constant force, constant deformation, constant displacement control range	0.5%~100%FS
Constant force, constant deformation, constant displacement control accuracy	Within $\pm 0.5\%$ of set value when set value $\geq 10\%$ FS	
	Within $\pm 1\%$ set value when set value $< 10\%$ FS	
Host machine parameters	Outside dimension	730mm×426mm×1570mm (L×W×H)
	Effective tensile space	750mm
	Effective compression space	800mm
	Maximum stroke	900mm
	Effective test width	410mm
	Power	1 phase, 220V $\pm 10\%$, 50/60HZ, 0.4KW
	Machine weight	180Kg

V. Standard Configuration

<p>One set of steel-casting host machine</p> <div style="border: 1px solid black; padding: 10px; margin: 10px auto; width: 80%; text-align: center;"> <p>One set of steel-casting host machine</p> </div>	
<p>One piece of 20kN USA TRANSCCELL (Founded in 1981, more than 30 years' experience in producing load cells) high precision load cell for tensile and compression; Accuracy FS$\pm 0.02\%$</p>	