

8802 SERVOHYDRAULIC FATIGUE TESTING SYSTEM

Up to 250 kN

The Instron® 8802 is a compact servohydraulic fatigue testing system that meets the challenging demands of various static and dynamic testing requirements. 8802 systems provide complete testing solutions to satisfy the needs of advanced materials and component testing, and are ideally suited for fatigue testing and fracture mechanics. The compact design of the 8802 frame makes it ideal for installation within any laboratory environment, generally without the need for strengthened floors or raised ceiling heights.

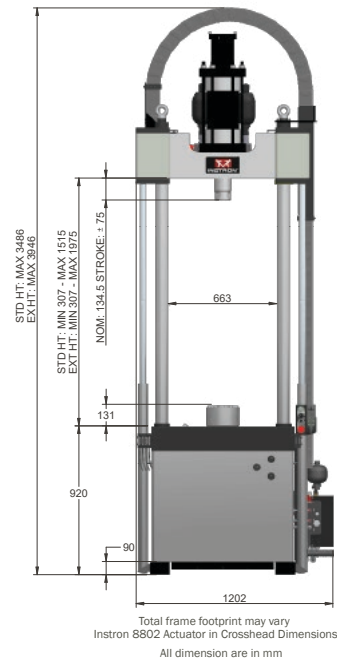
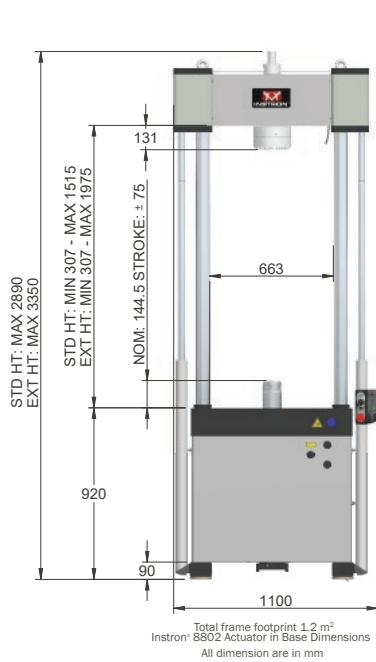
FEATURES

- Double acting Servohydraulic actuator force capacity up to ± 250 kN (± 56 Kip)
- High-stiffness, precision-aligned load frame with twin columns and actuator in lower base or upper crosshead
- 150 mm (6 in) of usable stroke
- Designed for both dynamic and static testing on a variety of materials and components
- Choice of hydraulic configuration and dynamic performance to suit application
- Extra-height frame options for testing longer load strings
- Adjustable upper crosshead with hydraulic lifts and locks fitted as standard for easy adjustment of daylight
- Patented¹, Dynacell™ advanced load cell technology for faster testing and reduction of inertial errors
- Floor-standing servohydraulic fatigue testing system – frame requires less than 1.2 m² (12.9 ft²) of floor space
- Hydrostatic bearing actuators for higher side-load resistance or material critical applications, such as low-cycle fatigue (LCF)
- Designed to be used with the 3520 Series of Hydraulic Power Units
- Compatible with a large range of grips, fixtures, chambers, video extensometers, protective shields, and other accessories
- Patented stiffness based tuning algorithm that enables users to tune a variety of specimens in seconds

CONTROLLER AND SOFTWARE

The Instron 8802 is supplied with a digital 8800MT controller that provides full system control, including features such as stiffness based tuning, amplitude control specimen protect, 19-bit resolution across the full range of transducers, and adaptive control technology. It also allows access to WaveMatrix 2 Dynamic Testing Software, Bluehill Universal Software for axial static tests, and other application specific software, such as the Low Cycle Fatigue or Fracture Mechanics suite.





FRAME SPECIFICATIONS

		Standard Height	Extra Height	
Daylight Opening (Maximum Between Load Cell and Actuator at Mid-stroke, with Largest Capacity Actuator)	mm	1240	1700	
	in	48.8	66.9	
Dynamic Load Capacity	kN	Up to 250		
	kip	Up to 56		
Actuator Stroke (Total)	mm	Standard offering 150*		
	in	5.9		
Actuator Force Rating	kN	Standard offering 50/100/250*		
Configuration		Twin-Column High Stiffness Load Frame with Actuator in Lower Table or Upper Crosshead		
Lift and Locks		Hydraulically-Powered Lifts and Locks		
Load Cell		Patented ¹ Dynacell™ Fatigue-Rated Load Cell with Capacity to Suit Actuator		
Load Weighing Accuracy		±0.5% of Indicated Load or ±0.005% of Load Cell Capacity (1-100), Whichever is Greater		
Manifold Options		Single Valve or Dual Valve		
Servo-Valve Options	l/min	5, 10, 20, 40, 65 or 130		
		1.3, 2.5, 5, 10, 17 or 34		
Hydraulic Pressure Supply (Required)	bar	207		
	psi	3000		
Frame Stiffness	kN/mm	585		
		kg	1330	
Maximum Frame Weight (Dependant on Final Configuration)		lb	2929	

MECHANICAL INTERFACES

Load Cell	M30/M48 x 2 Right Hand Female Central Thread
Actuator	M30/M48 x 2 Right Hand Female Central Thread
Table and Crosshead	4 x M10 Holes on a 280 mm x 90 mm for Accessory Mounting

* Consult factory for alternative available configurations
1) US Patent Number 6508132

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