

8802 Servohydraulic Fatigue Testing System | Up to 250 kN

The Instron® 8802 is a versatile servohydraulic fatigue testing system that meets the challenging demands of a varied range of 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. With a large number of configurations and options available, the 8802 system provides a versatile platform for any laboratory.

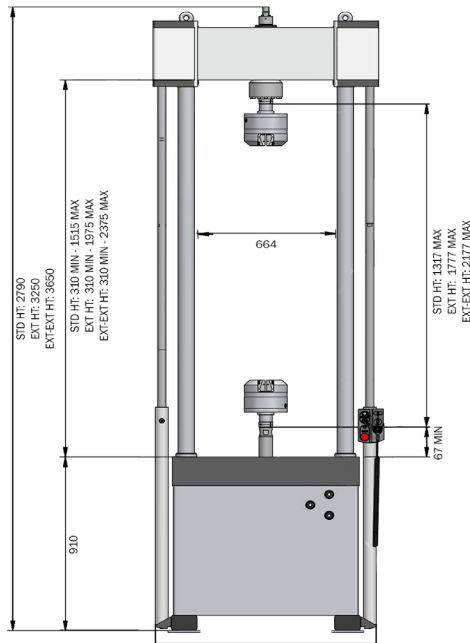
Features

- High stiffness load frame with force capacity up to ± 250 kN
- 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 and Extra-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
- 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

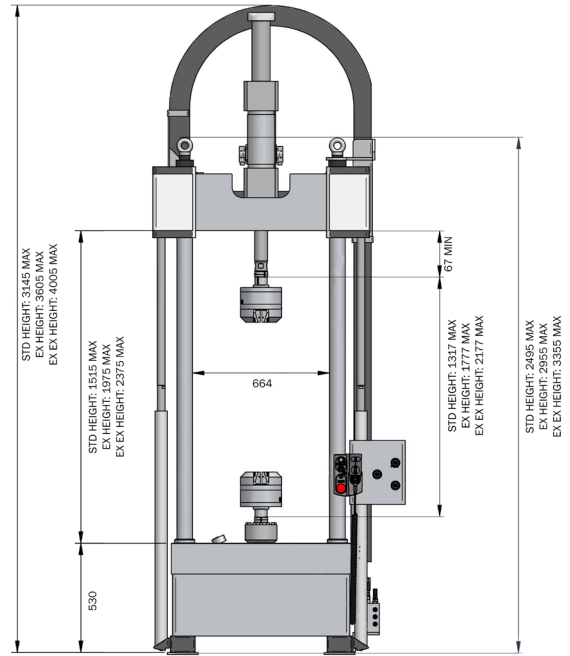
Controller and Software

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





Total frame footprint 1.2 m²
Instron® 8802 Actuator in Base Dimensions
(All Dimensions are in mm)



Total frame footprint may vary
Instron® 8802 Actuator in Crosshead Dimensions
(All Dimensions are in mm)

		Standard Height Frame	Extra Height Frame	Extra-Extra Height Frame
Daylight Opening (Maximum Between Load Cell and Actuator at Mid-stroke, with Largest Capacity Actuator)	mm	1240	1700	2100
	in	48.8	66.9	82.7
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, Dual Valve, or High-Flow Manifold		
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		
Maximum Frame Weight (Dependent on Final Configuration)	kg	1330		
	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

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