

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 AND BENEFITS

- 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 (5,9 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 3621 Series of Hydraulic Power Units
- Compatible with a large range of grips, fixtures, chambers, 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, up to 24-bit resolution across the full range of transducers, and adaptive control technology. It also allows access to WaveMatrix™3 Dynamic Testing Software, Bluehill Universal® Software for axial static tests, and other application specific software, such as Bluehill Fracture.application specific software, such as Bluehill Fracture.



FRAME SPECIFICATIONS

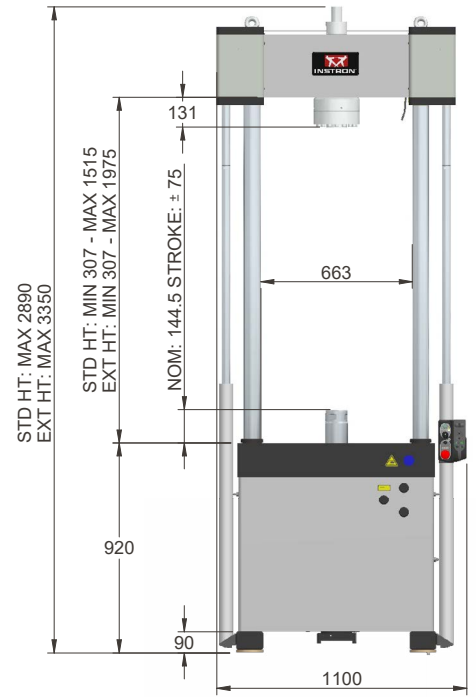
Standard Height Frame

Daylight Opening (Maximum Between Load Cell and Actuator at Mid-stroke, with Largest Capacity Actuator)	mm	1240
	in	48.8
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 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	
Hydraulic Pressure Supply (Required)	bar	207
	psi	3000
Frame Stiffness	kN/mm	585 (at 1000 mm crosshead height)
Maximum Frame Weight (Dependent on Final Configuration)	kg	1366
	lb	3012

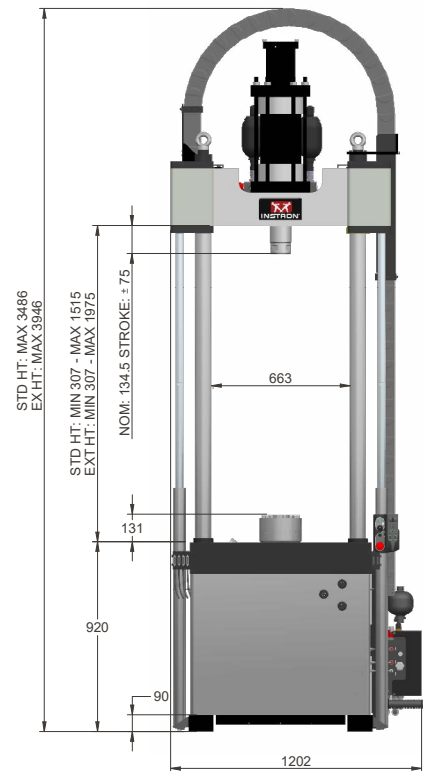
MECHANICAL INTERFACES

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

* Consult factory for alternative available configurations



Total frame footprint 1.2 m²
Instron® 8802 Actuator in Base Dimensions



Total frame footprint may vary
Instron 8802 Actuator in Crosshead Dimensions

1) US Patent Number 6508132
Instron® 8802 Dimensions (All Dimensions in mm)
Drawings not to scale, for reference use only

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