

NANO TEST SYSTEM

BI-7000

The Bi-7000 Series test systems are possibly the most cost effective solution to mechanical testing requirements for strength, fatigue and fracture in the 25 kN force range of static and dynamic loading. These stand-alone test systems require no site preparation and no special utilities such as water cooling or even 3-phase supply. Just plug into the closest 15 A mains socket like any other office equipment and the system is ready for use. The systems are ideal for engineering colleges, R&D as well as industry users, searching for a lowcost solution in materials testing.

FEATURES

- 25 kN force rating
- +/-25 mm stroke servo-actuator
- 0-65 Hz operation
- Virtually noiseless
- No external cooling required
- Rated for indefinite operation
- USB interface for host computer
- Includes application software

UNIQUE FEATURES

Universal Grips: A pair of grips is used for the entire range of static and dynamic tests.

No site preparation: Runs on single phase supply and requires no special flooring.

Dedicated application software: Single window to run static and dynamic tests. Step-by-step prompting makes it easy for all users.

Quiet, energy efficient, air cooled: Virtually noiseless operation and is self-cooled.

Easy to relocate: Castor wheels attached on the base of the machine allow easy movement. In addition, the wheels are lockable to ensure stability during operation.

APPLICATIONS

- Tension/Compression
- Ductile and Brittle Fracture
- Fatigue crack propagation
- Threshold stress intensity
- Low/High-Cycle Fatigue (LCF/HCF)
- Elastomer properties



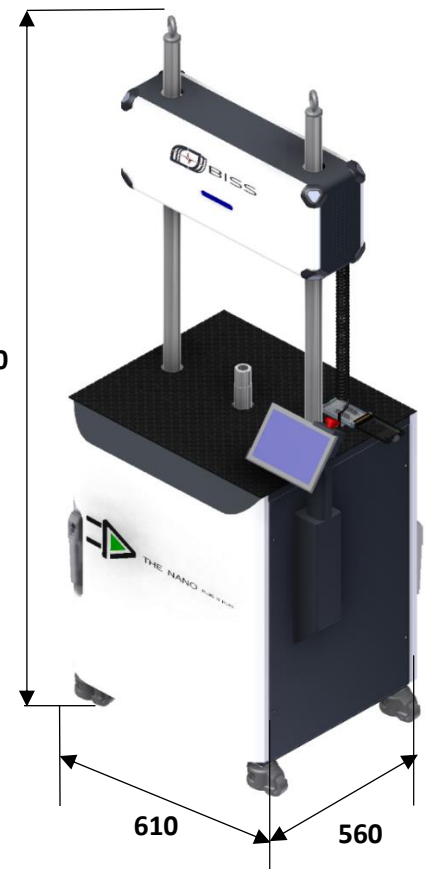
SPECIFICATIONS

		Nano 25 (BI-700)
Dynamic Load Capacity	kN	25
Actuator Stroke (Total)	mm	50
No. of Columns		2
Actuator Position		On Bottom Crosshead
Frame Stiffness	MN/m	160
Loadcell Accuracy		0.3% of full scale
*Cycling Frequency	Hz	0-65 Hz
Column Clearance	mm	400
Daylight Opening (Maximum Between Load Cell and Actuator at zero position)	mm	700
Electric Supply		200-240V, 15 A single Phase Supply
Max. Frame Weight	kg	<200

1800

ACCESSORIES

	Description
Universal Grip	25kN static and fatigue testing mechanical grips. Can be configured with suitable adaptors and fixtures listed below and used for conducting variety of tests
Adaptors	
To test flat samples	0.5 – 5 mm thick
To test round samples	8 – 12 mm
To test smooth samples	8 – 12 mm
To test threaded samples	8 – 12 mm
Three Point Bend Fixture	Span : 35 to 150 mm adjustable 5 mm roller pins
Compression Platens	set of 60 mm platens
Clevis Grips	Width = 25.4 mm Thickness = 6.35 mm Hole and pin diameter = 6.35 mm
Tensile extensometer	12.5 mm gage length, 6.25/-3.1 mm travel
LCF extensometer	12.5 mm gage length, ± 1 mm travel
COD Gage	5 mm gage length, 3/-1 mm travel



NOTE

Please refer to individual brochures for information on the selected power packs & accessories.
CE certification on Demand
Specifications are subject to change without prior notice

www.instron.com


Worldwide Headquarters
825 university Ave, Norwood MA 02062 – 2643, USA
Tel: +1 800 564 8378 or +1 781 575 5000

India Headquarters
#497 E, 14th Cross, 4th Phase, Peenya Industrial Area,
Bangalore – 560058, India.
Tel: +91 80 283 60184 Fax: +91 80 283 60047

Instron is a registered trademark of Illinois Tool Works Inc. (ITW). Other names, logos, icons and marks identifying Instron products and services referenced herein are trademarks of ITW and may not be used without the prior written permission of ITW. Other product and company names listed are trademarks or trade names of their respective companies. Copyright © 2016 Illinois Tool Works Inc. All rights reserved. All of the specifications shown in this document are subject to change without notice.

Nano Test Systems_V1