

SHIMPO INSTRUMENTS

Shimpo's manual test stands offer the ability to obtain accurate, consistent results without the high cost of a motorized system.

Our lever operated stands are ideal for rapid testing applications and the hand wheel stands are excellent for applications where more precise control is necessary.

Both the lever and the hand wheel stands are available in various capacities and can ensure accurate, consistent test results with the addition of a Shimpo Instruments digital or mechanical force gage.

Nearly all manufacturers' gauges are compatible with Shimpo's test stands for incredible versatility. These stands are designed for precision, balance, and durability. Therefore they are perfectly suited for measuring a limitless range of materials such as, wire, spring, plastic, paper cord, tubing, glass and composites.

Measuring Quality

Manual Lever & Hand Wheel Force Test Stands



**FGS-100H Hand
Wheel Test Stand**



**FGS-100L Lever
Test Stand**

Features

- Versatile bottom mount mounting plate permits acceptance of both standard and custom-made attachments
- Adjustable clearance setting enables testing on a wide range of samples
- Precision gear movement provides a consistent linear motion that produces repetitively accurate results
- Modular, compact design reduces footprint, weight and cost
- Sturdy all steel construction allows exceptional durability and extended life of the product
- Compatibility with many vendor's force gauges facilitates flexibility when replacing older test stands
- Optional digital length meter added to stand creates deflection measurement testing for applications such as spring rate testing



**FGS-50S Lever
Test Stand**



**FGS-1000H Hand
Wheel Test Stand**

Manual Lever & Hand Wheel Test Stand Specifications

Model	FGS-50S	FGS-100L	FGS-100H	FGS-1000H
Capacity	50 lb (22 kg)	200 lb (100 kg)	200 lb (100 kg)	1000 lb (500 kg)
Stroke	1.97" (50 mm)	1.97" (50 mm)	0.12" (3 mm) /wheel turn approx.	6" (15.2 cm) 0.1" (2.5 mm)/ wheel turn approx.
Vertical Clearance	1.6", 2.75", 3.94" (40, 70, 100 mm)	3.31 - 11.57" (84 - 294 mm) 8 steps, 1.18"/step (30 mm/step)	2 - 7.95" (52 - 202 mm) 6 steps, 1.18"/step (30 mm/step)	Up to 13" (33 cm)
Product Weight	22 lb (10 kg)	33 lb (15 kg)	33 lb (15 kg)	56 lb (25.4 kg)
Warranty	2-Year			1-Year

Ordering Details

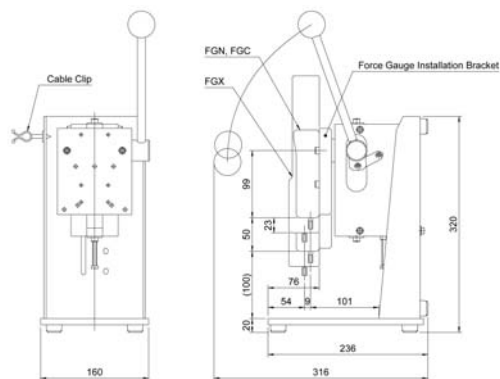
FGS-50S	50 lb (22 kg) Capacity Lever Operated Force Test Stand
FGS-100L	200 lb (100 kg) Capacity Lever Operated Force Test Stand
FGS-100H	200 lb (100 kg) Capacity Hand Wheel Operated Force Test Stand
FGS-1000H	1000 lb (500 kg) Capacity Hand Wheel Operated Force Test Stand

Accessories

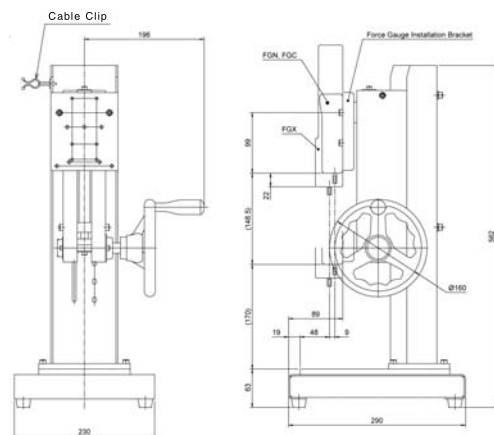
FGS-LENGTH-H	Digital length scale for use with FGS-100H Test Stand
FGS-LENGTH-L	Digital length scale for use with FGS-100L Test Stand
UNI-PLATE	Universal mounting plate for force gauges

*For available force grips and adapters visit our website at www.shimpointst.com

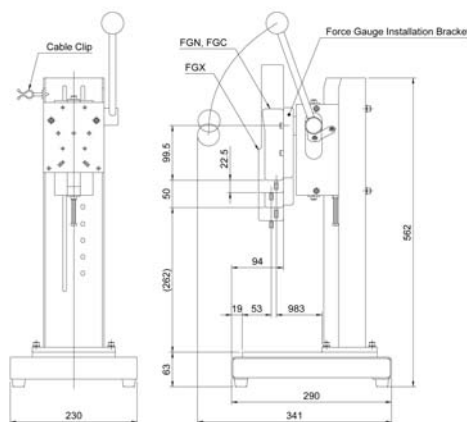
Manual Lever & Hand Wheel Test Stand Dimensions



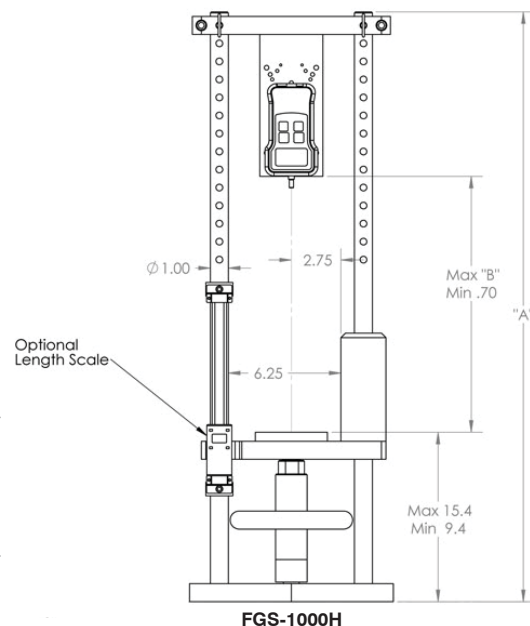
FGS-50S



FGS-100H



FGS-100L



FGS-1000H

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SHIMPO INSTRUMENTS

Measuring Quality

Motorized Programmable Force Test Stands

Shimpo Instrument's advanced Motorized, Programmable Force Test Stands combined

with our line of top quality force gauges, provide a complete force measurement system capable of handling the most precise testing applications. Their all steel construction makes them remarkably rugged while performing with precision. Programming capabilities provide the versatility to tackle a multitude of applications. Two modes of operation, single or continuous cycling allow for a single precise test or repetitive, consistent results. User selectable high and low force set points through RS232 interface or directly through the force gauge allows the test stand to stop at specific force loads while displaying and outputting the displacement. These motorized stands are offered in a wide range of force capacities in both vertical and horizontal configurations and are available in both standard and ultra-slow speeds.



**Series FGS-100PX
Horizontal
Motorized Test Stand**

**Series FGS-100PV
Vertical Motorized Test Stand**

Features

- 5 user programmable set points for speed, distance and stop time permit customized testing
- Compatibility with nearly all manufacturers' force gauges enables flexibility in testing applications
- Analog voltage output of displacement allows graphing and analysis of data on computer
- Manually adjustable upper and lower limits restricts movement, allowing for precise testing
- All gauge functions can be communicated through stand via RS232 interface allowing easy operation and data download
- Compact, modular design reduces weight, footprint and cost of stand

**FGS-250PV Motorized
Test Stand Shown with
Optional Force Gauge**



Horizontal & Vertical Motorized Test Stand Specifications

Model	FGS-100PXH	FGS-100PXL	FGS-100PVH	FGS-100PVL
Operation Orientation	Horizontal		Vertical	
Capacity	110 lb (50 kg)			
Travel Speed	-100PXH: 0.79 - 19.69 inch/min (20 - 500 mm/min); -100PXL: 0.19 - 4.72 inch/min (5.00 - 120 mm/min); -100PVH: 0.79 - 19.69 inch/min (20 - 500 mm/min); -100PVL: 0.39 - 3.93 inch/min (10 - 100 mm/min)			
Stroke	5.5" (140 mm)			
Vertical Clearance	N/A	N/A	2.4 - 7.1" (61 - 181mm) 5 steps, 1.18"/step (30 mm/step)	2.4 - 7.1" (51 - 181 mm) 5 steps, 1.18"/step (30 mm/step)
Display	Four digit LED, 0.41" high (10.5 mm), Reads in inches (0.01 resolution) or millimeters (0.1 resolution)			
Operating Mode	Manual (MANU), Jogging (JOG), Single (SING), Continuous (CONT), Program (PROG)			
Time Delay	0 through 5 second delay between direction change			
Power	120 VAC, 60 Hz			
Product Weight	40 lb (18 kg)	40 lb (18 kg)	42 lb (19 kg)	42 lb (19 kg)

FGS-250PV Programmable Motorized Test Stand Specifications

Model	FGS-250PVL	FGS-250PVM	FGS-250PVH
Operation Orientation	Vertical		
Capacity	500 lb, 250 kg, 2,500N		
Travel Speed	-250PVL: 0.49 - 4.92 inch/min (12.5 - 125 mm/min); -250PVM: 1.97 - 19.70 inch/min (50 - 500 mm/min); -250PVH: 5.12 - 49.23 inch/min (130 - 1250 mm/min)		
Stroke	31.10" (790 mm)		
Display	Four digit LED, 0.41" high (10.5 mm), test stand can change English to metric		
Operating Mode	Manual (MANU), Jogging (JOG), Single (SING), Continuous (CONT), Program (PROG)		
Communication	Gauge: FGV, FGV-H. To PC: RS-232C (Baud rate: 9600bps, data length: 8 bit, stop bit: 1 bit, parity: none)		
Limit Switch Repeatability	-250PVL: $\pm 0.0006"$ (0.015 mm) at max. speed; -250PVM: $\pm 0.0016"$ (0.04 mm) at max. speed; -250PVH: $\pm 0.0036"$ (0.092 mm) at max. speed		
Zeroing Feature Repeatability	-250PVL: Max. 0.015" (0.383 mm) at max. speed; -250PVM: Max. 0.065" (1.649 mm) at max. speed; -250PVH: Max. 0.172" (4.355 mm) at max. speed		
Deflection	0.033" (0.85 mm) at max, capacity		
Power	120 VAC, 60 Hz		
Product Weight	-PVL: 115.7 lb (52.5 kg); -PVM: 115.7 lb (52.5 kg); -PVH: 126.8 lb (57.5 kg)		

Ordering Details

FGS-100PXH	Horizontal Motorized Test Stand with standard speed and 110 lb (50 kg) capacity
FGS-100PVH	Vertical Motorized Test Stand with standard speed and 110 lb (50 kg) capacity
FGS-100PXL	Horizontal Motorized Test Stand with low speed and 110 lb (50 kg) capacity
FGS-100PVL	Vertical Motorized Test Stand with low speed and 110 lb (50 kg) capacity
FGS-250PVL	Vertical Motorized Test Stand with low speed and 500 lb (250 kg) capacity
FGS-250PVM	Vertical Motorized Test Stand with standard speed and 500 lb (250 kg) capacity
FGS-250PVH	Vertical Motorized Test Stand with high speed and 500 lb (250 kg) capacity

Accessories

UNI-PLATE	Gauge mounting plate for FGS-100 Series Stands
FGV-FGS250P	Interface cable for FGS-100 & FGS-250 force test stands
FGS-ANALOG	Analog output cable for force test stands
FG-250PV-RS232	RS-232 Communication cable from FGS stand to computer
FG-HORIZ-ADAP	Grip adapter for horizontal test stands

FGS-VC Motorized Force Test Stands with PC Control & Data Logging

The FGS-VC Series Motorized Force Test Stands are designed to provide accurate and repeatable results for tension, compression, break and cycle performance tests in various applications. A key feature is a SHIMPO exclusive: a precision made servo gear head and ball screw for precise movement control. The large measurement area plus tall 15.75" (400 mm) travel distance allow large, unique parts to be tested. A precise and consistent 0.40-15.75"/min (10-400mm/min) adjustable speed provides for slow tests or quick cycle load testing.

The simple keypad combined with the intuitive on screen operation guides the user through setting up each test. Users can perform standard tests in several automatic or manually selected modes as well as choose higher-end capabilities with the additional dwell time, adjustable acceleration, plus user-defined tests with up to 5 programmed set points.

The FGS-VC's are flexible as they can be operated by the keypad or through a PC via the FGT-VC software which includes data collection, graphing and statistical analysis. The FGT-VC software program allows graphing of force versus distance and the ability to compare several tests on a single graph. Another great feature of the FGT-VC is the comparator mode which enables quick decision pass /fail determination, ideal for production line testing.

The FGS-VC's can be equipped with various gripping and compression fixtures and are compatible with all Shimpo Force Gauges as well as most gauges on the market. These features make the new FGS-VC the ideal push/pull tester for the production line or QC lab.

Features

- User friendly controls and software allows hands off operation, reduces training time, user errors and speeds up tests
- The wide speed range means only one stand required for a majority of testing needs
- Easy install force gauge bracket allows for multiple test ranges to be quickly used on one stand
- FGT-VC software provides graphing analysis of one or several tests. Data can be stored for later analysis.
- Comparator function provides instant pass/fail result allowing for usage on production lines.
- Combining with FGE or FGV force gauges with the stand, overload limit communication is achieved, eliminating potential to damage the gauge accidentally during a test.



Force Test Stand shown with Force Gauge (Sold Separately)



Stand with Optional Grip Performing Peel Test

NIDEC-SHIMPO CORPORATION

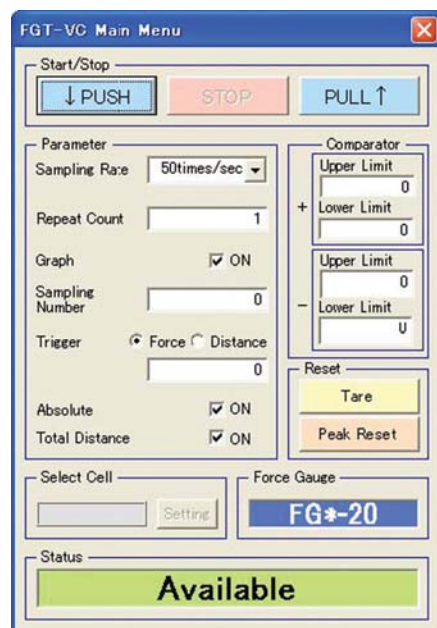
INSTRUMENTS DIVISION • Phone: (800) 237-7079 • Fax: (630) 924-0342 • www.shimpoinst.com

FGS-VC Specifications

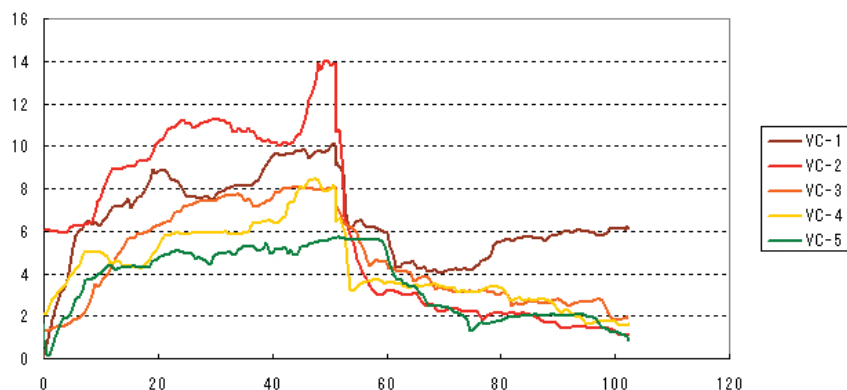
Capacity	FGS-220VC: 220 lb (100kg , 1000N)
Travel Speed	0.40-15.75"/min(10-400mm/min)
Speed Accuracy	±5%
Stroke	15.75 in (400 mm)
Display	Dot-matrix LCD Four digit
Operation Mode	Single (SING); Continuous (CONT); Program (PROG); Manual (MANU); Jogging (JOG)
Communication	USB
Input	Over load from force gauge (The stand will stop immediately, if the over load is detected by force gauge.)
Measurement Table	5.91 x 7.87"(150 x 200 mm)
Temperature Limits	32 to 113 °F (0 to 45 °C)
Power	120VAC standard, 240VAC optional
Dimensions	11.81 x 34.84 x 19.69"(300 x 885 x 500mm)
Product Weight	FGS-220VC 139 lb(63 kg)
Warranty	2-Year
Included Accessories	USB cable, Force gauge communication cable, gauge/plate Mounting accessories.

Ordering Details

FGS-220VC	Force Test Stand with 220 lb (100kg, 1,000N) capacity. Front key pad or PC control operation with FGT-VC software. FGT-VC available for free Download at www.shimpoint.com
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FGT-VC Main Menu



FGT-VC included software
showing multiple tests

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