

# FGS-200W Manual, Hand-Wheel Operated Vertical Test Stand

## Operation Manual



### CAUTION

- Do not modify, disassemble or attempt to repair the unit.

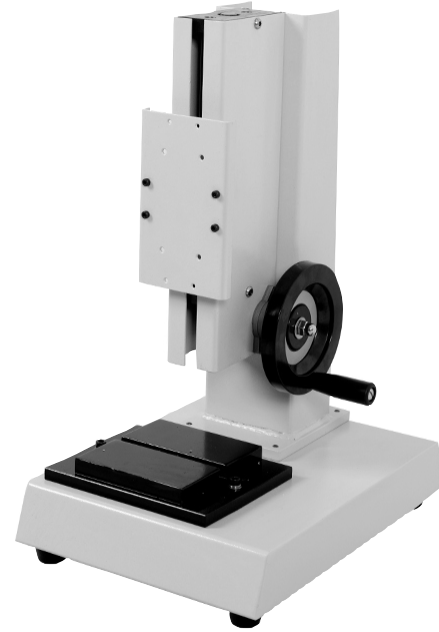
- If upon delivery damage to the unit is detected, do not operate the unit. Notify the shipping carrier immediately to obtain damage claim instructions.

- Only measure forces that are in line with the measuring shaft. Do not attempt to take any measurements at any angle. Failure to keep measurements in line will damage the instrument.

- Ensure operation is performed on a level surface.

- If applying large loads, ensure test stand does not move during testing.

- For details on the force gauge, refer to the force gauge operation manual for each model.



The FGS-200W Hand-Wheel Operated Vertical Test Stand includes a robust housing with large stand base. The FGS-200W is designed for use with a mechanical or digital force gauge. When combined with appropriate grip or attachments this test stand can accomplish a variety of push/pull compression and tension as well as strength and destruction testing. Its side hand wheel loading is driven by an accurate screw displacement which achieves readily consistent, stable motion which produces repeatable force tests. The movable base platform with its four-way movement allows for quick set up by reducing time to align the test grips with the gauge.

### SPECIFICATIONS

**Capacity:** 220 lb (100 kg)

**Travel:** 2" (52 mm)

**Stroke:** 7" (180 mm)

**Weight:** FGS-200W: 39.7 lb (18 kg); FGS-200W-EX: 66.1 lb (30 kg)

**Dimensions:** FGS-200W: 10.2 x 13.9 x 19.3" (260 x 352 x 490 mm). FGS-200W-EX: 10.2 x 13.9 x 30.7" (260 x 352 x 780 mm)

**Included Accessories:** Flat Chuck Grip, M6 x M6 male 45 mm threaded base connector, gauge and bracket mounting screws and bolts, Allen wrenches & mounting brackets and screws for digital scale (Digital Scale FGS-200W-DSK sold separately)

### Set-Up Summary for Hand-Wheel Test Stand

1. Remove the gauge mounting bracket from the test stand by loosening and removing the four M 4x15 socket cap screws holding the mounting plate.

2. Using the appropriate screws provided in the accessory kit, install the force gauge onto the mounting bracket.

3. After securely mounting the gauge to the mounting bracket, reuse the four M4 socket cap screws to re-install the mounting plate onto the stand's frame.

4. According to the characteristics of the sample tested, place the grip attachment on the base in a proper position.

6. Carefully check the travel of the stand by Rotating the hand wheel on the side of the testing frame. The gauge should move smoothly up and down.

6. Testing may now begin with the force gauge and test stand.

See Measuring Procedure.

### Measuring Procedure

Install the stand body on a level, solid table to ensure accurate readings.

Properly secure test specimen in grip or apparatus on the bottom base and attachment on force gauge.

During measurement, operate the handle wheel at a constant speed as smoothly as possible. If the movement of the operation speed is rapidly changed, accurate measurement may not be achieved. If applying large loads, secure the test stand on a flat surface.

For details on the force gauge, refer to the force gauge operation manual for each model

### Routine Maintenance

Keep the machine stand components clean. In the process of the machine stand operation, if the operation is unsmooth or encounters resistance when not testing, add a little machine oil into the re-oiling hole of the bearing seat on the two sides of the machine stand to lubricate.

