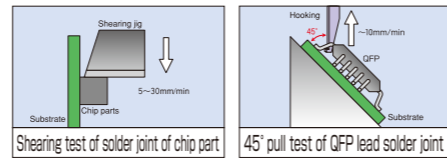


# JIS-Rated Lead Free Solder Tester

## MODEL-1605 VC/NF

Capacity: 50 N (5 kgf)  
Force - Displacement



The MODEL-1605 VC/NF is a precision tester designed for lead-free solder tests of boards with parts in conformance to JIS Z 3198-6 and JIS Z 3198-7. Jigs are replaced according to the test conditions. The pull point and shearing point are adjusted with the X-Y table. Measured data are stored in the Model-1016C amplifier and may be printed out or loaded into a PC after completion of measurement.

### Standard Specifications

Max. force	50 N (5 kgf)
Test speed	0.5 to 600 mm/min.
Stroke	250 mm
Displacement display	Provided
Detector	Rotary encoder
Display resolution	0.01 mm
Display accuracy	0.1 mm
Displacement reading	10 μm (Standard) 1 μm (Option)
Table size	W475 x D150 mm, M10 x 1.5
Driving mechanism	Ball screw
Drive motor	Servo motor
Weight	Approx. 50 kg
Size	W480 x H578 X D375 mm
Power supply	100 to 240 VAC, single-phase, 5A

### Standard Configuration

- Tester: MODEL-1605VC
- Amplifier: MODEL-1016C
- Load cell: MODEL-3005 (5 kgf)
- Jig (Full set): M-500 FS

### Applicable Tests

- 45° pull test of QFP lead solder joint JIS Z 3198-6
- Shearing test of solder joint of chip part JIS Z 3198-7

## MODEL-1308U/NF

Capacity: 50 N (5 kgf)



The MODEL-1308U/NF is a low-price and compact JIS-rated lead-free solder tester. It is designed for 45° pull tests of QFP lead solder and shearing tests of chip parts, which are enabled by replacing the jigs and RZ series digital force gages. Measured data are stored in the RZ series digital force gage and may be printed out or loaded into a PC after completion of measurement. The jigs are commonly used for the MODEL-1605 VC/NF.

### Applicable Tests

- 45° pull test of QFP lead solder joint: JIS Z 3198-6
- Shearing test of solder joint of chip part: JIS Z 3198-7

### Standard Specifications

Max. force	50 N (5 kgf)
Test speed	5 to 100 mm/min., variable
Stroke	400 mm
Table size	W250 x D140 mm
Weight	Approx. 20 kg
Size	W255 x H810 X D300 mm
Power supply	100 to 240 VAC, 0.5 A

### Standard Configuration

- Tester: MODEL-1308U
- Digital force gage: select proper RZ Series (up to 5 kgf)
- Jig (full set): M-500 FS



# CUSTOM ORDER PRODUCTS

# Comprehensive Syringe Needle Force Measuring Tester

## MODEL-1310VC/SL

Capacity: 2kN (200Kgf)



### Torque feeling tester



This tester is designed to test a correlation between torque value and the rotation angle. The acquired torque value and angle data are drawn on a torque-angle graph. It is also possible to automatically acquire the click torque value and angle during turning and show typical measurement values (click values).

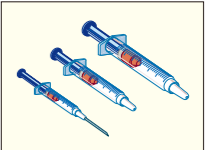
### Switch & Silicone Rubber Durability Tester (3-CH)

MODEL-SR-3



The MODEL-SR-3 is designed for durability tests of various electronic parts. It automatically stops a test at the preset cycle or when a test work is broken.

The MODEL-1310 is designed for comprehensive force tests of various syringes shown below, for which various jigs are available. In particular, a one-touch needle chuck is supplied for sharpness tests of syringe needles. Measured waveform and maximum value are displayed on the screen. Select the test items from those shown below. Different jigs are used according to the test types. The MODEL-1310 has a vertically movable table.



### Standard Specifications

Max. force	2kN (200Kgf)
Stroke	150mm
Column length	750mm
Column interval	250mm
Test speed	5 to 125mm/min.
Table size	200mm dia.
Weight	Approx. 41Kg
Size	W356xH1102xD314mm
Power supply	100 to 240VAC, single-phase 1A

### Options

- Select the following according to the test requirements.
- A. Sharpness measurement
  - B. Sharpness measurement in the condition where needle bases are fixed to needles
  - C. Tensile strength measurement of needle-needle base adhesive
  - D. Slide strength measurement between barrels and pistons
  - E. Air tightness measurement between barrels and pistons
  - F. Dislocation (withdrawal strength) measurement of needles from barrels
  - G. Dislocation load measurement between needles and caps
  - H. Three-point bending measurement of needles only

### Power Cable Bending Durability Tester (5CH)

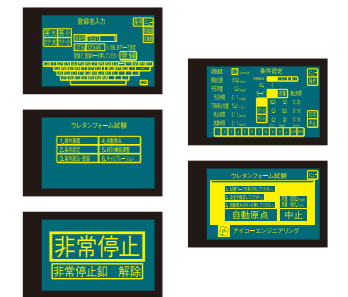
MODEL-CBL/5S



This is designed for durability tests of cables in conformity to the UL and JIS standards. It stops operation automatically at the set values (±90° & ±45°) and when the cable is broken. (Interlock type and manual type are available.)

### Urethane Foam Load Measurements Instrument (Screen Display Type)

MODEL-1900N



The MODEL-1900N allows all test patterns to be set on the touch panel. It stores a maximum of ten JIS, JAS and any optional patterns in the memory unit, which may be read out in tests. The test data are displayed on the screen and may be printed out.