

# 90 Degree Peel Test Fixture

## P90-200N/P90-200N-EZ/P90-200N-BB

- Ideal for 90 degree peel test of adhesives such as tapes
- Standard type P90-200N/ economy type P90-200N-EZ/  
Breadboard type P90-200N-BB are available
- Designed for peel test complying with a part of IEC, ISO and ASTM Standard



P90-200N

- Complies with a part of IEC, ISO and ASTM Standard
- Standard type to keep peel angle to 90 degree



P90-200N-EZ

- Ideal for elastic samples
- Economy type with the sliding table



P90-200N-BB

- Enables fixing samples with a breadboard and clamps.
- Ideal for 90 degree peel test of adhesives sheets on board






P90-200N Test Image  
(90 degree peel test of  
adhesives tape)



P90-200N-BB Test Image  
(90 degree peel test of  
copper foil of circuit board)

Related Standards (corresponding part only)	
P90-200N/ P90-200N-BB	<ul style="list-style-type: none"> <li>- <b>IEC 249-1:1982</b> Base materials for printed circuits. Part 1: Test methods (Corresponding Japanese standard: <b>JIS C6471:1995</b>)</li> <li>- <b>IEC 326-2:1990</b> Printed boards. Part 2 Test method (Corresponding Japanese standard: <b>JIS C5016:1994</b>)</li> </ul>
P90-200N	<ul style="list-style-type: none"> <li>- <b>ISO 29862:2018</b> Self adhesive tapes-Determination of peel adhesion properties (Corresponding Japanese standard: <b>JIS Z0237:2022</b>)</li> <li>- <b>Japanese Pharmacopoeia 18th Edition</b>:6.12 Methods of adhesion Testing. “3.1.2.2. 90 peel adhesive testing”</li> <li>- <b>ASTM D6862-11:2016</b> Standard Test Method for 90 Degree Peel Resistance of Adhesives</li> <li>- <b>ASTM D3330:2010</b> Standard Test Method for Peel Adhesion of Pressure-Sensitive Tape</li> </ul>
P90-200N-BB	<ul style="list-style-type: none"> <li>- <b>ISO 4525:2003</b> Metallic coatings-Electroplated coatings of nickel plus chromium on plastics materials (Corresponding Japanese standard: <b>JIS H 8630:2006</b>)</li> </ul>
Samples	<ul style="list-style-type: none"> <li>- Sticker, adhesive tape, adhesive sheet, adhesive plaster, magnetic tape, foil laminated film *1</li> <li>- Printed circuit board, screen protector film for panel, copper foil of circuit board, sheet for glass, thick coating film, adhesive sheet on board</li> </ul>

\*1 P90-200N and P90-200N-EZ are suitable for these samples.

How to adhere test sample for P90-200N		
Take off the stainless panel and adhere test sample on it.	Fix the stainless panel by screws.	Grip the sample to get ready to start the peel test.
		

Specifications			
Model	P90-200N	P90-200N-EZ	P90-200N-BB
Peel length (Max)	155mm		See [Dimensions]
Sample Width (Max)	80mm		See [Dimensions]
Thickness of board (Max) *1	-		8mm
Capacity *2	Up to 200N	0.4 to 200N	Up to 200N
Dimensions	See [Dimensions]		
Weight	Approx. 2kg		
Compatible test stand *3	MX-500N, MX2-500N, MX-1000N, MX2-1000N, EMX-500N, EMX-1000N		

\*1 Only for P90-200N-BB. Four clampers and four knobs are included.

\*2 P90-200N-EZ is not suitable when peel force is expected to change suddenly or to be below 0.4N.

\*3 Contact us for compatibility of other models of test stands.

### Examples of Product Configuration P90-200N

#### Example

**Code: 1P2003A**

Peel test up to 200N according to a part of IEC 249-1:1982, IEC 326-2:1990, ISO 29862:2018, ASTM D6862-11:2016, ASTM D3330:2010, JIS Z0237:2022 JIS C5016:1994, JIS C6471:1995 and Japanese Pharmacopoeia.  
The statistic, such as average value, is calculated and converted to unit of adhesive strength by the force-time/displacement graphing software.

Force-Displacement Measurement Unit: FSA-0.5K2-200N-NEXT \*1

(-NEXT: Downloadable Graphing Software Option)

Optional Attachment: P90-200N

Optional Attachment: FC-20 \*2

Additional Function: Peel Testing Module 1 (Download Card Advanced)



### Examples of Product Configuration P90-200N-EZ

#### Example

**Code: 1P2004A**

Simple peel test up to 200N specially for elastic samples.

Digital Force Gauge: DST-200N

Motorized Test Stand: MX-500N \*1

Optional Attachment: P90-200N-EZ

Optional Attachment: FC-20 \*2



### Examples of Product Configuration P90-200N-BB

#### Example

**Code: 1P2006A**

Peel test up to 200N according to a part of IEC 249-1:1982, IEC 326-2:1990, ISO 4525:2003, JIS C5016:1994, JIS C6471:1995 and JIS H 8630:2006.  
The statistic, such as average value, is calculated and converted to unit of adhesive strength by the force-time graphing software. Ideal for peel test of fixing samples with a breadboard and clamps such as thick coating film and adhesive sheet on board.

Digital Force Gauge: ZTS-200N

Motorized Test Stand: MX2-500N \*1

Optional Attachment: P90-200N-BB

Optional Attachment: FC-21U \*2

Optional Cable: CB-528

Optional Software: Force Recorder Standard



\* Product configuration varies depending on the shape and characteristic of the sample, and measurement conditions.



\* The recommended capacity of force gauge varies depending on the expected force to be loaded.

\*1 To ensure enough peel length, long stroke model of motorized test stand is recommended.

The sample cannot be peeled fully if its elongation rate is over 210%.

\*2 Wide width model of film grip is necessary if the sample width is over 20mm.

**[Clamper and Knob]** The set of clamper and knob is available for replacement. \*

Model	Included Parts	Images	
<b>SCK-PRT</b>	Sample Clamper and Knob	 SCK-PRT	 Installation image

\* Only for **P90-200N-BB**.

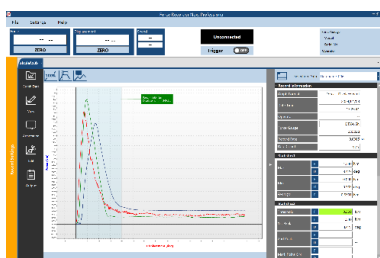
\* This set of parts is sold in two pairs per order, not sold individually.

Related Products		
<b>Spare Stainless Panel SSP-1608</b>	<b>Rubber Roller for Peel Test APR-97</b>	<b>Film Cutter FSC-1525</b>
Using this spare stainless panel, the tester can continue measurement without cleaning a panel after each measurement.	It helps to stick samples on the panel with certain pressure, which improves accuracy of measurement results.	It is designed to cut paper or film in constant-width.
		
	Standard: JIS Z0237:2022 *1	Standard Width 15mm JIS Z1707:1997*1 JIS Z0238:1998*1
		Standard Width 1inch ATSM F88*1
<b>Guide Ruler for Adhesive Tape Peel Test GRP-50</b>	<b>45 Degree Peel Test Fixture P45-50N</b>	<b>180 Degree Peel Test Fixture P180-200N/P180-200N-BB</b>
It is designed to help correctly position the Adhesive Tapes for the Peel Tests with the Peel Test fixtures	It is designed for peel test of cup film or paper lid to evaluate the open-easiness for food and medical packaging industry.	Fixture for 180-degree peel test of adhesive tape and the like.
		
<b>Film Grip FC-21/20/40/21U/41U/21UQ</b>	<b>Sample Plate for Adhesive Tape Peel Test ATP-50N</b>	<b>180-degree High Speed Peeling Tester IPTS-20N/50N</b>
Ideal for gripping thin samples such as film. A wide range of product models are available to fit your needs.	Plate jig for peel test of adhesive tapes which enables easy and fast sample set up just by sticking samples to it.	Specialized peeling tester features high operability with a wide speed range up to 1500mm/min.
		

\*1 It complies with corresponding part only.

## [Related Software]

### Downloadable Graphing Software: Force Recorder Next series



▲ Force Recorder Next Professional

#### Peel Force Values

OK	
Sample Width	24.00 mm
Peel Max	0.49 N/10mm
Peel Min	0.38 N/10mm
Peel Ave	0.436 N/10mm

▲ Peel Testing Module 1

High sampling rate of max. 2000Hz enables accurate graphing.

- Force Recorder Professional: for graphing force-time / force-displacement.
- Force Recorder Standard: for graphing force-time.
- Test condition presets: for effective recording / analysis of measurement results.
- Data editing: overlaying up to 10 graphs, etc., for results editing / analysis.
- Add Images / Comments function: useful for recording measurement data details.
- The Print Command allows images and statistics output in a file form: PDF/Word/Excel.

#### [Additional Function: Peel Testing Module 1 with Download Card Advanced]

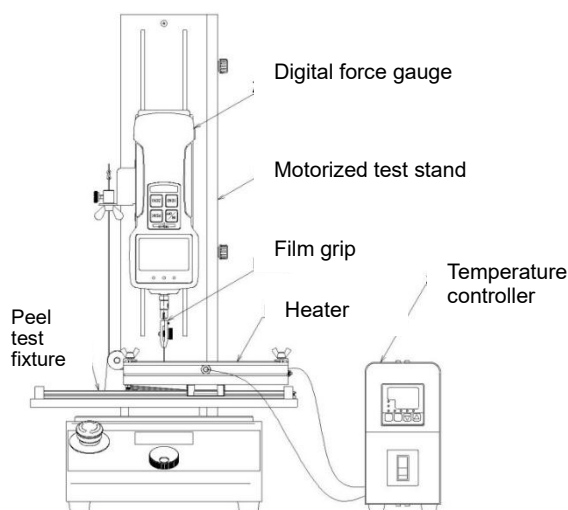
A function is available for additional installation at cost, for the Force Recorder Next series.

- The statistic, such as average value, is automatically calculated and converted to unit of adhesive strength after each measurement by entering sample width and other required details before measurement.
- Some pre-registered standards, such as ISO 29862:2007, are installed in the measurement conditions for easy configuration according to the individual requirements.

NOTE: An internet connection is required at all times to use all functions on the IMADA connected. For software online downloads, a purchase of a download card is required with a prior user/product registration on IMADA connected. Product registrations are limited for Next Series products (e.g. ZTA/ZTS Series with firmware version 5.00 or later). If the PC cannot be connected to the Internet, please use the CD version graphing software, Force Recorder series. Some specifications differ between the Force Recorder Next series and Force Recorder series. Please refer to the individual specification sheets for details.

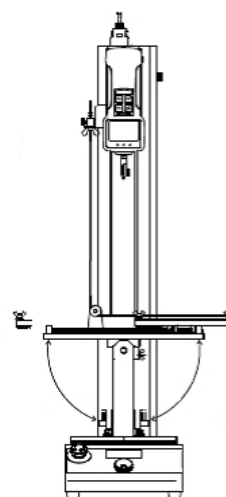
### Customized Application

#### 1. Adjustable temperature



A heater is integrated in the table and enables you to adjust temperatures from room temperature to 300 degree by the external controller.

#### 2. Adjustable peel angle



Enables you to adjust the peel angle freely from 0 to 180 degree.

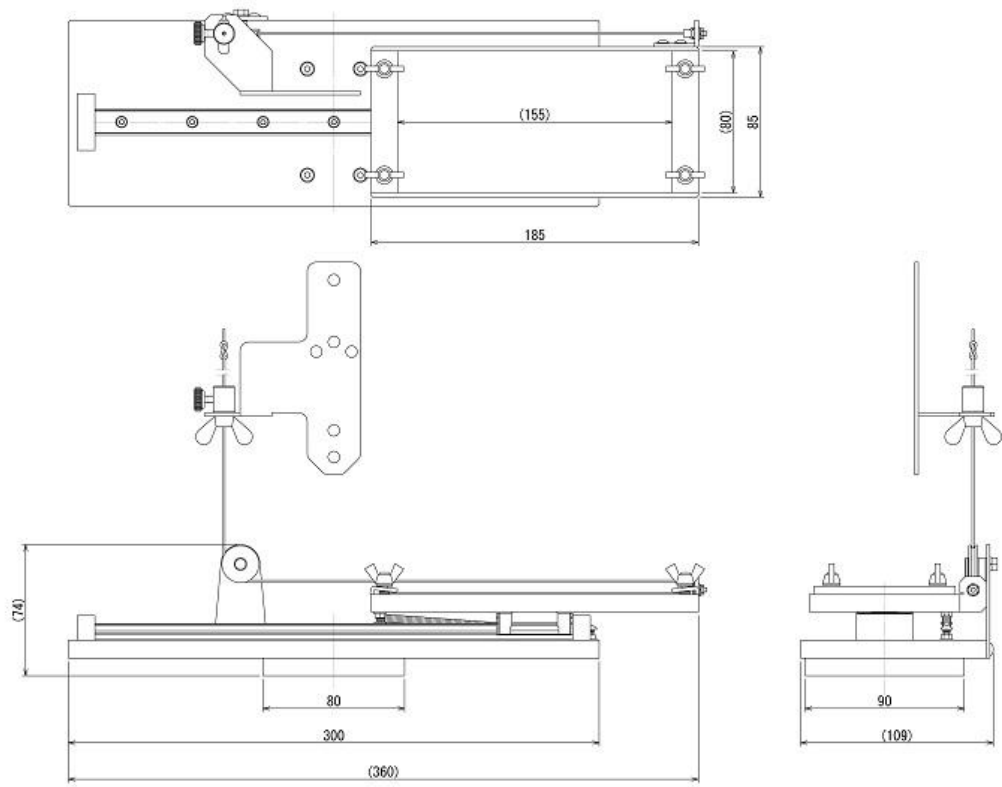
#### 3. According to standard

- ISO /IEC 10373-1:2006 Identification cards-Test methods-Part 1: General characteristics (IDT) (Partly)  
(Corresponding Japanese standard: JIS X6305-1:2010)
- IEC 249-1:1982 Base materials for printed circuits. Part 1: Test methods (Partly)  
(Corresponding Japanese standard: JIS C6481:1996)

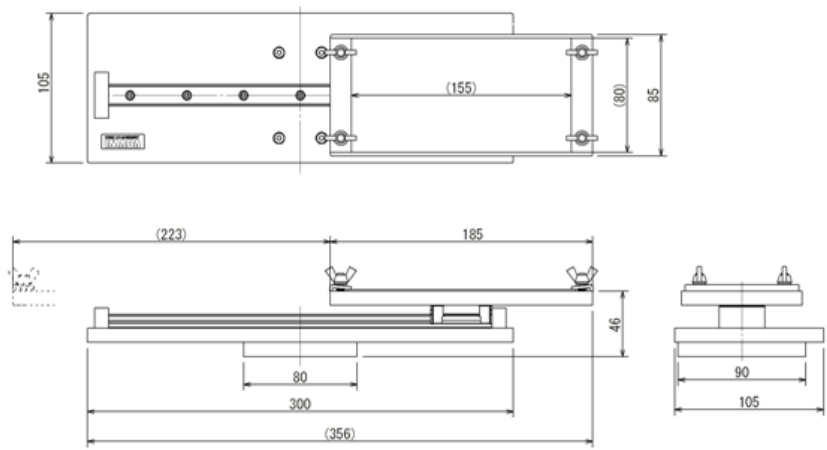
\*Contact us for details.

**[Dimensions]**

**P90-200N**



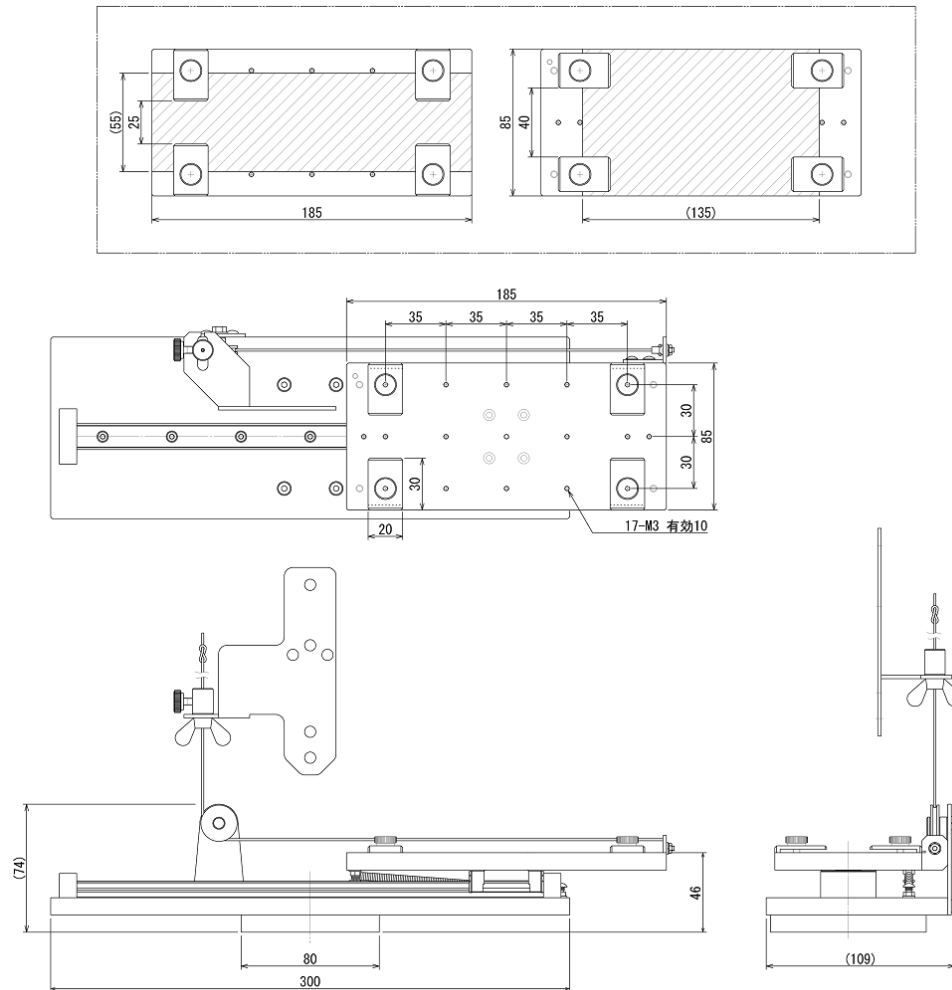
**P90-200-EZ**



Unit: mm

## [Dimensions]

### P90-200N-BB



Unit: mm

## [Cautions]

- Information in this document is subject to change without prior notice.
- This document is product descriptions and handling precautions, and do not guarantee various characteristics or safety.
- This product is designed for force measurement purpose only.
- Do not copy and use this content without authorization.
- A force gauge (sold separately) is required to use this product.
- Some samples may not be suitable to measure with this product.

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