

# **Accelerated-aging Testers for Laminated Woods**

For Vacuum-Pressure Soak Test and Steaming Test
Least time consuming method for evaluating the adhesive properties.
We offer three types of testers to meet your requirements.



# Multi-purpose testing equipment for the vacuum-pressure soak test and the steaming test.

The multi-purpose accelerated-aging tester which is capable to perform not only the vacuum-pressure soak test but also the cyclic steaming test of structural laminated lumber or plywood, which is carried out in accordance with JAS (Japanese Agricultural Standards), ASTM (American Society for Testing Materials), ISO/IEC etc.

The large time shortening from the conventional continuous boiling test can be expected.

The chamber material is stainless steel, and the lid clamping system adopts the safe and sure eyebolts mechanism.

In addition, since the over-heat prevention device of heater, the over-pressure prevention device and the pressure safety valve are mounted, it is the equipment with high safety.

## Vacuum-pressure tester with easy operation

Testing equipment suitable for the vacuum-pressure soak test of the structural laminated lumber, which is performed in accordance with JAS, ASTM, ISO/IEC etc. It operates automatically from a vacuum process to a pressure process by easy operation setup.

A water-ring vacuum pump and a reciprocating compressor are used for a vacuum-pressure generating system to enhance reliability.

In addition, it equips with the pressure safety valve, the pressure safety device, the door opening/closing safety device, etc. for higher safety.





#### Compact steaming tester

Testing equipment suitable for the cyclic steaming test of plywood that is performed according to JAS, ASTM,ISO/IEC etc.

If compared with a continuous boiling test, it is a compact testing equipment with which large time shortening and a reliable test result are obtained.

The chamber material is stainless steel, and the lid clamping system adopts the safe and sure eyebolts mechanism.

In addition, an over-pressure prevention device, a pressure safety valve and a boil-dry protection device etc.

are equipped for higher safety.





## ■Specifications

| Срос                        | iications     |  |                          |   |  |
|-----------------------------|---------------|--|--------------------------|---|--|
| MODEL                       |               | TOPC-305Ⅲ  Vacuum-pressure test Steaming test                                    |                          | TO-506H   | PC-305Ⅲ  |
| Outer dimensions(mm)        |               | 1200W x 550D x 1010H   |                          | 895W x 1172D x 1535H  | 750W x 550D x 1050H  |
| Effective chamber size (mm) |               | 300Ф x 340D  |                          | 500Ф x 650D   | 250Ф x 340D  |
| Weight (approx.)            |               | 150 kg   |                          | 500 kg  | 100 kg   |
| Power source                |               | AC200V, Single phase, 15A  |                          | AC200V, 3-phase, 15A  | AC200 / 220 / 230 / 240V,<br>Single phase, 15A   |
| Working pressure range      |               | vacuum : -0.084MPa, pressure : 0.19~0.539MPa                                     | pressure : 0.19~0.490MPa | vacuum : -0.085MPa<br>pressure : 0.51MPa  | 0.019~0.49MPa  |
| Working temperature range   |               | -  | 105∼158°C                | _   | 105~158°C  |
| Pressure control system     |               | 2-point control  | _                        | 2-point control   | _  |
| Test humidity range         |               | -  | _                        | _   | 100%RH only  |
| Temperature control system  |               | _  | PID control              | _   | PID/SSR  |
| Timer                       |               | 999.9 hr. count-up timer   |                          | 99hr 59min. count-up timer  | 0.1~999.9 hr   |
| Continuous test time        |               | _  | _                        | _   | 500 hr.  |
| Process control system      |               | _  | _                        | Programmable controller   | _  |
| Vacuum system               |               | Water-ring vacuum pump   | _                        | Water-ring vacuum pump  | _  |
| Pressurization system       |               | Reciprocating compressor   | _                        | Reciprocating compressor  | _  |
| Working gas                 |               | Air  | _                        | Air   | _  |
| Working water               |               | Demineralized water  |                          | Demineralized water   | _  |
| Instrument-<br>ation        | Pressure      | Analog   | _                        | Analog  | Analog   |
|                             | Temperature   | -  | Digital                  | _   | Digital  |
|                             | Timer         | Digital  | _                        | Digital   | Digital  |
|                             | Cycle counter | Digital  | Digital                  | Digital   | _  |
| Heating system              |               | _  | 3kw sheathed heater      | _   | _  |
| Lid clamping system         |               | By eyebolts  |                          | Clutch type door with ratchet handle  | By eyebolts  |
| Pressure vessel standard    |               | Small pressure vessel  |                          | 2nd class pressure vessel   | Small pressure vessel  |
| Material                    | Chamber       | Stainless steel SUS304   |                          | SUS304  | SUS304   |
|                             | Lid           | Stainless steel SUS304   |                          | SUS304  | SUS304   |
|                             | Top panel     | Stainless steel SUS304   |                          | _   | SUS304   |
| Safety devices              |               | Safety valve, Pressure switch, Low water cut off device, Leakage breaker, Fuses, |                          | Safety valve, Pressure switch, Low water cut off device, Leakage breaker, Fuses, Door safety, device, | Safety valve,<br>Pressure switch,<br>Low water cut off<br>device, Leakage<br>breaker, Fuses, |
| Supplied accessories        |               | Power cable x 1, Heater cover x 1,<br>SS Wier Basket x 1                         |                          | Power cable x 2,<br>SS Specimen basket x 1,<br>Cart x 1   | Power cable x 1, Drain hose x 1,<br>Heater cover x 1,<br>SS Wier Basket x 1                  |

## ■Optinal accessories for PC-305Ⅲ









Wier basket Safety lid cover

Temperature recorder Auto starter

Specifications and appearance are subject to change without notice due to continuous product improvement.



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