

## No.2100-I

## Flute tester (vertical roll type)

When using corrugated board for packaging material, structural quality study includes checking of characteristics such as flat crush strength, end crush strength, ply bond strength and corrugated medium strength. This tester is developed as a pre-processing device for collecting samples for testing those characteristics. It can form specimens as wide as 100mm.

It works in the following mechanism. On a corrugating machine, pre-heated corrugating medium is threaded through corrugating rolls (gear-shaped) heated to  $177 \pm 5^\circ\text{C}$  under a certain pressure, during which process corrugation is performed. The specimen formed is fixed in a rack using a ten-pin cantilever apparatus and then attached to the rack with double-faced adhesive tape to form one-sided corrugated board. A crush tester is used to compress the specimen and then the maximum load is measured.

**Flute rolls:** Flute A 200mm in diameter, 110mm wide

**Roll speed:** 1.5 to 9m/min. variable

**Linear pressure:** 0 to 13kg/cm variable

**Flute roll temperature:**  $177 + 5^\circ\text{C}$

**Temperature adjustment:** provided with temperature controller, with non-contact sensor

**Referential standards:** J.TAPPI No.29-2000, TAPPI T-809om-99

**Power source:** three-phase 200/200V 50/60Hz 20A

**Outer dimensions:** 820 x 490 x 550mm

**Instrument weight:** 123kg



## No.2100-II

## Flute tester (horizontal roll type)

This tester is developed as a pre-processing device for collecting samples for CMT testing. It works in the following mechanism. On a corrugating machine, pre-heated corrugating medium is threaded through corrugating rolls (gear-shaped) heated to  $177 \pm 5^\circ\text{C}$  under a certain pressure, during which process corrugation is performed. The specimen formed is fixed in a rack using a ten-pin cantilever apparatus and then attached to the rack with adhesive tape to form one-sided corrugated board.

**Flute rolls:** Flute A 228mm in diameter, 80mm wide

**Roll speed:** 0.5 to 10m/min. variable

**Linear pressure:** 10 to 390N/cm (at width 12.7mm)

**Flute roll temperature:** max  $180^\circ\text{C}$

**Temperature adjustment:** provided with temperature controller

**Referential standards:** ISO 7263-1994

**Power source:** Single phase 200/220VAC 50/60Hz 15A

**Outer dimensions:** 620 x 390 x 600mm

**Instrument weight:** 75kg

