



## No.2105

## Puncture tester

There is a potential of breakage of a corrugated cardboard box when it hits another package during transportation. A JIS standard specifies the puncture strength considering such breakage. Puncture strength depends upon thickness and adhesion strength of corrugated board, as well as breaking strength and tearing strength of raw paper. So puncture strength is a characteristic suitable for evaluating the quality of corrugated board. Test principle: a right angle pyramid point affixed to the end of the pendulum moves with the pendulum; energy loss when the pyramid point breaks the specimen is read on the scale.

**Pyramid point:** 25.4mm high

**Scale:** A 50kg-cm, B 100kg-cm, C 200kg-cm, D 400kg-cm, E 24kg-cm

**Referential standards:** JIS P-8134-1998, TAPPI T-803, ISO 3036

**Outer dimensions:** 820 × 370 × 700mm

**Instrument weight:** 142kg



## No.2107

## Ply adhesion tester

The ply adhesion of paperboard is an important factor in process steps including printing, cutting and box making. This property has been evaluated by various test methods. This tester measures the ply adhesion of combination board. It is provided with a pair of chucks sliding in the horizontal direction. One end of specimen is connected to a pendulum that gives peeling load, and the chuck on the other side is linked with a driving device moving at a constant speed. First, peel the plies of specimen for a length of 20mm, and bend the peeled portions outward to form a T shape. Fix both ends of the peeled portions with the chucks, and gradually move the chuck by the motor. At positions about 20mm, 40mm and 60mm from the peeling start point, read the load on the scale.

**Chuck width:** 80mm

**Peeling speed:** 50, 100, 150mm/min. set by changing the gear

**Peeling load:** 100, 500, 1000g, set by changing the weight

**Referential standard:** J TAPPI 19-2-2000

**Power source:** 100/110VAC 50/60Hz 1A

**Outer dimensions:** 705 × 200 × 300mm

**Instrument weight:** 15.5kg