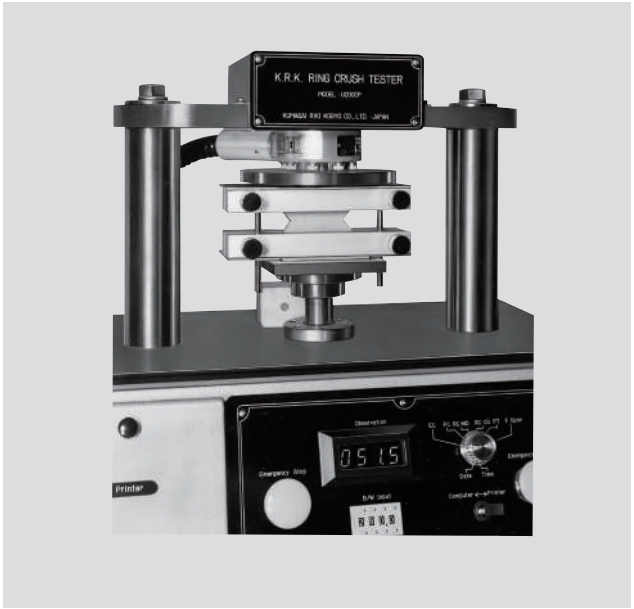
No.2096
Circular sample collector

This device is designed to quickly collect circular samples such as those described below. It provides precise cutting, preventing sampled sheets from being crushed or from having uneven cut edges. A double-edged razor is installed, which can be replaced easily.

1. Samples for a delamination test with an area of 19.36cm² and a diameter of 60.7mm (for a Mullen high-pressure tester) center hole diameter 34.9mm
2. Samples for a flat crush test with an area of 32.2cm² and a diameter of 64mm
3. Samples for a basis weight test with an area of 100cm² and a diameter of 112.8mm

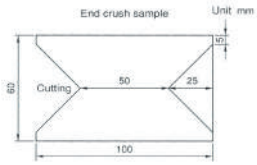
Outer dimensions: 83 to 135mm in diameter, 120 to 136mm high
Instrument weight: 3kg

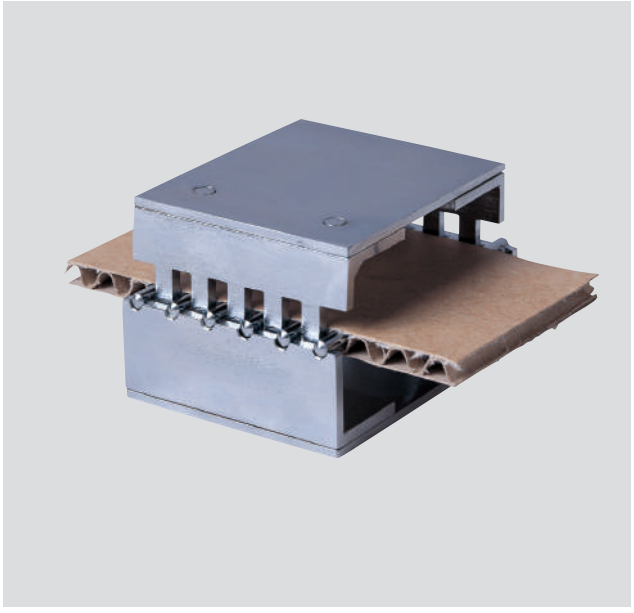


No.2097
Column compressor (end crush tester)

This tester measures the vertical compression strength of a corrugated board sheet, and is also referred to as an end crush tester. A corrugated board sheet is erected straight and load is applied on it. As the load increases, the maximum load is measured that is reached before the side surfaces of the corrugated board sheet is buckled. The strength perpendicular to the corrugated section is a characteristic value correlated to the pressure-withstanding capacity of the corrugated board case and also has a correlation with the ring crush characteristic of the raw paper. Measurement is performed on a specimen collected with a cutter for end crush tests (No. 2134) that is set into a crush tester along with this attachment.

Referential standard: JIS Z-403-2, ISO-3035
Outer dimensions: 170 x 90 x 80mm
Instrument weight: 0.9kg





No.2098
Ply bond tester (pin adhesion tester)

In double-faced corrugated board, two liners are securely bonded to the corrugated medium, providing the strength of a structure. This adhesive strength is tested as follows. Two pin apparatuses are inserted between threads of the corrugated medium and the liner. One of the pin apparatuses is inserted from one side, and the other, from the opposite side, forming a U shape, on both sides of the specimen. This specimen is set onto the crush tester's compression plate to read the value of the adhesive strength. This is referred to as the double-faced pin adhesion test method, and you can observe that the pin apparatus on the side with weaker adhesion strength comes off first. In the single-faced pin adhesion test method, every other pin on a pin apparatus is inserted between a flute and the liner to measure adhesion strength.

Measurement attachments:
double side pin, flute A 50 x 50mm flute B 30 x 80mm
single side pin, flute A 50 x 80mm flute B 50 x 80mm
Referential standards: JIS Z-0402-1995, TAPPI T-821
Outer dimensions:
double side A 50 x 60 x 20mm B 77 x 69 x 19mm
single side A 77 x 67.5 x 20mm B 77 x 49 x 19mm
Instrument weight: 0.5kg