AWA Medium Fluter

- *Control your temperature +/- 2 degrees farenhiet*
- *Control your roll speed within 1 tenth of a RPM*
- *No messy, time consuming lubrication required*
- *100% maintenance free*

TAPPI Test Method T 809 om-82

Test Specimen

A Test Specimen shall be cut .5" x 6.0". The 6" dimension shall be in the machine direction of the medium.

The AWA Medium fluter

evaluates the crush resistance of corrugating media. From this value, a formula has been developed that enables the operator to predict the flat crush resistance of corrugated combined board.

The AWA Medium Fluter is available in standard A, B and C flute profiles and also modified A, B, and C flute profiles for heavier weight media. Other profiles are available on request.

Equipment Needed for Testing

- AWA Medium Fluter
- Rack and Comb
- 3M Double Coated Scotch tape #400 DC-3/4" wide.
- A suitable compression tester with rigidly fixed and parallel platens. The platens of the tester should be covered with crocus cloth in such a way that the cloth will not slop on the platens. Strips of double coated Scotch tape, carefully applied to the crocus cloth so that no ridges are formed, will serve to hold the crocus cloth in place on the platens. The cloth should be changed after each 2,000 tests. The crocus cloth eliminates leaning corrugation failures.
- A .5" x 6.0" AWA Sample Cutter used to cut the test specimen.

Conditioning

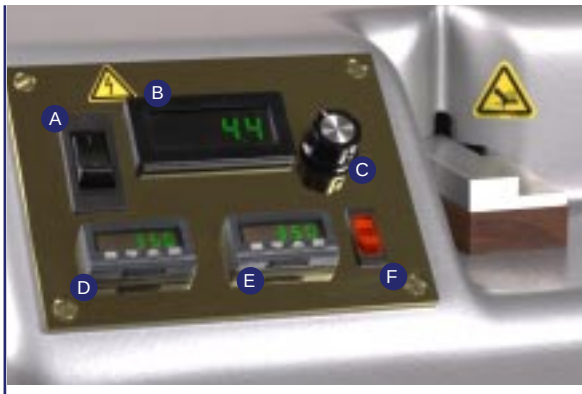
Whenever possible, the samples shall go through the standard conditioning cycle (TAPPI T 402 om-82). Samples should be tested immediately after fluting and applying tape.

At mills where samples are taken directly off the paper machine and tested, the moisture content will frequently vary from standard conditions of 7 1/2 - 8% moisture. If accurate values are desired, samples of each day's production should be saved and conditioned before testing.

Procedure

1. Heat the fluting rolls to 350° F. The amber light will go out when the instrument is heated and ready following that, the amber light will flash on and off as the heating element maintains a constant temperature.
2. Feed a .5" x 6.0" sample into the slot on the left side of the instrument. Align the bottom of the sample flat on the sample guide. Center the fluted sample on the fluted rack.
3. Place the comb over the fluted sample firmly into the flutes of the rack. Roll the comb over the sample to form onto the rack.
4. Firmly hold the sample in the rack and apply a 5" stirp of tape, adhesive side down on the exposed flute tips. Carefully slip the comb out of the flutes.
5. Remove the single face specimen directly from the rack without damaging the flutes.
6. Place the sample in the compression tester with the flutes up.

The specimen is then tested and is comparable to the flat crush sample. *Excessive handling will affect the moisture content. Do not drop or bend the comb teeth.*



A. Power Switch

When this switch is activated, it will supply power to the solid-state relays in the heating circuit. The switch will supply power to the heater switch and turn on the cooling fan motor and D.C. drive motor.

B. Rate Indicator

R.P.M. of fluter rolls is displayed.

C. Control Potentiometer

Regulates fluter roll drive motor output speed.

D. Pid Control

Controls heat on number one heater (left side)

E. Pid Control

Controls heat on number two heater (right side)

F. Heat Switch

Supplies power to PID Controllers; will light when activated.

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