

## Directory

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## Attention of security

### 1. Security marks

There are some safety precaution and important notes when using the equipment, in order to prevent accidents and dangerous, please observe the following narration of danger, warning and note.



#### **Danger:**

This show that if failure to comply, the operator may be harmed.



#### **Warning:**

This show that if failure to comply, it may damage the equipment.



#### **Attention:**




This shows that the project may affect the test result and quality.



#### **Note:**

This project show that auxiliary stated in the operation.

### 2. In this instrument, the following signs show attention and warning:

	Warning sign	This mark indicates the need to reference manual.
	Dangerous voltage symbol	This mark indicates danger high voltage.
	Ground protection mark	This shows the ground terminal of the instrument.



## 1. Overview

### Usage:

Concora Medium Fluter (hereinafter referred to as the instrument) is developed and researched according to national standards, using the advanced components, supporting components, and single-chip microcomputer, with reasonable structure and functional design. Various parameters are included in the standard set, like adjust, display, memory and other functions. Suitable for making corrugating wave for flat crush strength of corrugating medium (ie, corrugating medium paper laboratory fluter), in line with standard QB1061, GB/T2679.6 and ISO7263. It is an ideal testing equipment for paper mills, research, quality inspection agencies and other departments.

### Standard:

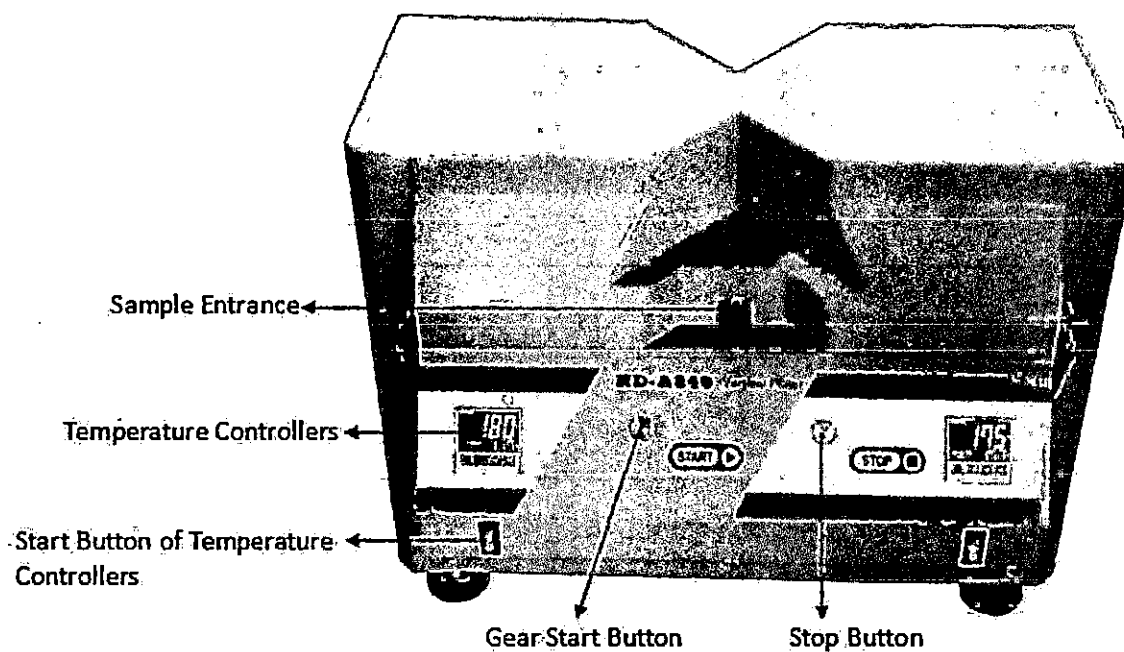
QB1061、GB/T2679.6、ISO7263、TAPPI T809

### Main specification:

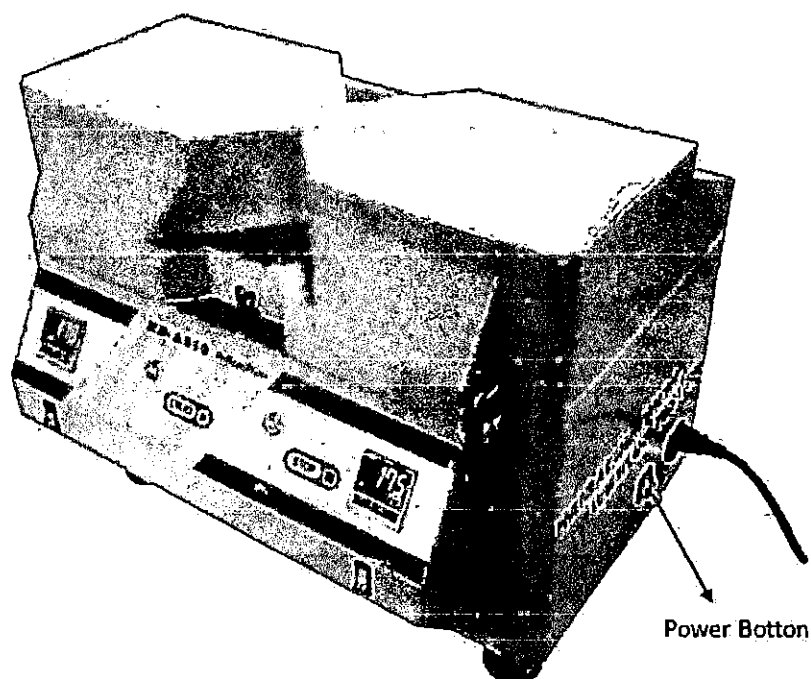
Working speed	4.5 r/min
Temperature display resolution	1 °C
Adjustable temperature range	Room temperature~200 °C
Working pressure adjustable range	(49~108) N
Standard working temperature	175±8 °C
Spring tension	100±10 N
Dimensions	Approx.564X377X330mm
Weight	About 38kg

## 2. Equipment Instruction

### 2.1 Structure(Picture 1-2):

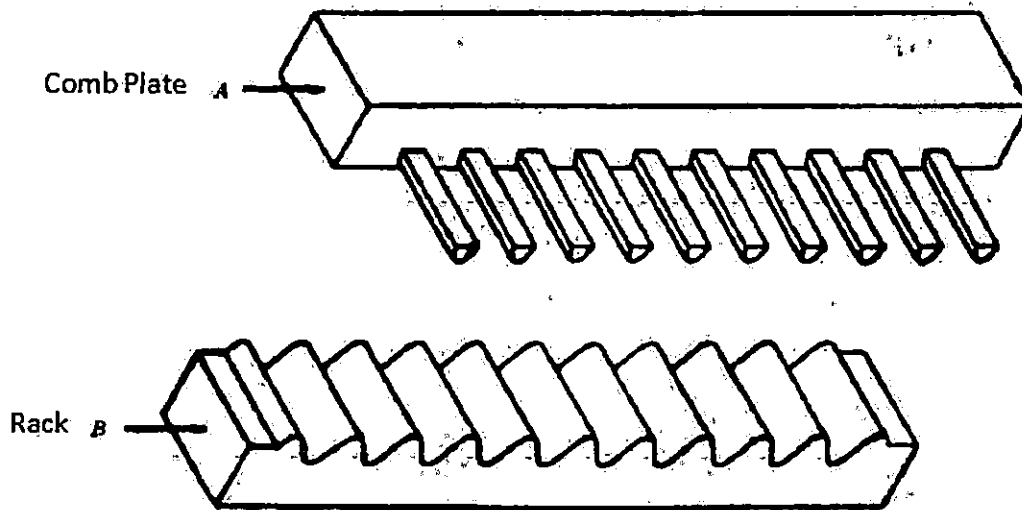


(Picture 1)



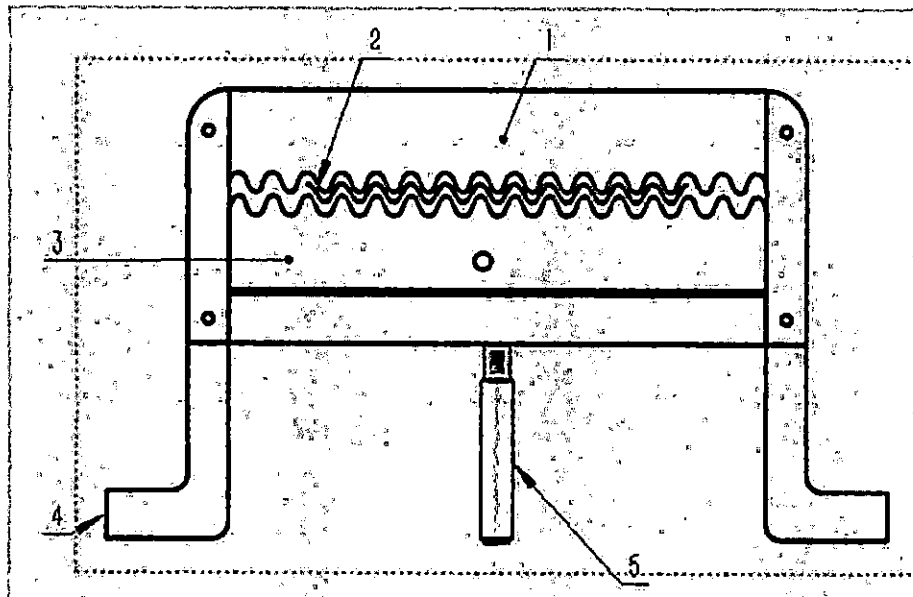
(Picture 2)

## 2.2 Flat crush strength of Corrugating medium (CMT Fixture Picture 3):



(Picture3)

## 2.3 Corrugated crush strength of Corrugating medium(CCT Fixture Picture 4):



### Description:

1. Pedestal
2. Test Sample
3. Sliding Block
4. Handle
5. Adjusting Knob

(Picture4)



### 3. Equipment Installation

3.1.Power: 1phase 220V, 50HZ



**Danger:**

■Error range of the input voltage is  $\pm 10\%$  , and ensure that the machine should be properly grounded to prevent damage to the machine leakage.

3.2. Operating environment conditions: Room temperature  $15^{\circ}\text{C} \sim 30^{\circ}\text{C}$ , Humidity  $< 85\% \text{RH}$

3.3. This instrument should be placed on the level work table and have enough space to operate.

3.4.The power line should connect the ground and install power switch

### 4. Operate practices

#### 4.1 Sampling

Prepare a sample with special sampler to cut the sample  $12.7\text{mm} \times 152\text{mm}$  under standard atmospheric conditions, the long side is the longitudinal direction of the sample. Number of samples should be taken to ensure that can measure 10 valid data.

#### 4.2 Temperature setpoint setting

Instrument in the normal state, press " $\blacktriangle$ " key or " $\blacktriangledown$ " key to enter the setpoint setting mode, then the next row digital tube with a decimal point is flashing, press " $\blacktriangle$ " key, " $\blacktriangledown$ " key or " $\blacktriangleleft$ " button to modify the settings, press "SET" button to save and exit, if no buttons are pressed, it will automatically exit the setting mode after about 3 seconds and return to normal monitoring state.(The factory setting is:  $175^{\circ}\text{C}$ , absence of exceptional circumstances, without modification.)

#### 4.3 Flat crush strength of Corrugating medium

##### 4.3.1 Preparation of sample

heating to  $(175 \pm 8)^{\circ}\text{C}$  (starting from the heating to a temperature of  $175^{\circ}\text{C}$  takes about 30min) when the instrument displays the temperature measured value is stable, then insert the

sample into the two vertical gap between fluted round (the entrance flute of the sample), barring the sample.

Place the fluted sample on the gear rack, Then comb the pressure on the specimen. With a long tape about 120mm tape (width at least 16mm, strong adhesion requirements to make sure not unglued during the testing process). Put it well along the top of the corrugated paper, Press firmly affixed with steel. Carefully remove the comb, take out the specimen, thus there are 10 corrugated samples.

**4.3.2** According to product standards, do crush test immediately or after treatment of temperature and humidity, and then test. If the sample is compressed immediately after fluted. The time from fluted to exert pressure should be less than 15s. If do the treatment of the sample temperature and humidity after fluted. 23°C, 50% relative humidity for 30min or at 20°C, 65% relative humidity for 60min.

#### **4.3.3 Testing**

When do compressed test, the sample is placed in the middle of compression tester under the platen, not with the tape facing up, and then begins to compress, read the value when the crushed sample is exposed the most vigorously. The force value is flat crush strength of the sample, showed in “N”. During the compression process, If any skewed sample or specimen disengaged from any point of the tape are found, the record will be discarded

#### **4.3.4 Calculation**

Taken 10 valid data, and calculate its arithmetic mean value of the measurement results, and the level of pressure index

Test results can be expressed in the following forms:

$$CMT_0 = 350N$$

$$CMT_{30} = 250N$$

CMT means corrugated paper test, while the footnote shows the time from compression to compression, expressed in minutes.

### **4.4 Corrugated crush strength of Corrugating medium**

#### **4.4.1 Preparation of sample**

heating to  $(175 \pm 8)^\circ\text{C}$  (starting from the heating to a temperature of  $175^\circ\text{C}$  takes about 30min) when the instrument displays the temperature measured value is stable, then insert the sample into the two vertical gap between fluted round (the entrance flute of the sample), barring the sample.

Place the fluted sample on the gear rack, Then comb the pressure on the specimen. With a long tape about 120mm tape (width at least 16mm, strong adhesion requirements to make sure not unglued during the testing process). Put it on CCT holder, “Adjusting Knob” make rack of Sliding block close the sample, and make the sample vertical.



**4.4.2** According to product standards, do crush test immediately, or after treatment of temperature and humidity, and then test: If the sample is compressed immediately after fluted: The time from fluted to exert pressure should be less than 15s. If do the treatment of the sample temperature and humidity after fluted. 23°C, 50% relative humidity for 30min or at 20°C, 65% relative humidity for 60min.

#### **4.4.3 Testing**

When do compressed test, the sample is placed in the middle of compression tester under the platen, not with the tape facing up, and then begins to compress, read the value when the crushed sample is exposed the most vigorously. The force value is flat crush strength of the sample, showed in “N”. During the compression process, If any skewed sample or specimen disengaged from any point of the tape are found, the record will be discarded

#### **4.4.4 Calculation**

Taken 10 valid data, and calculate its arithmetic mean value of the measurement results, and the level of pressure index

Test results can be expressed in the following forms:

$$CCT_0 = 350N$$

$$CCT_{30} = 250N$$

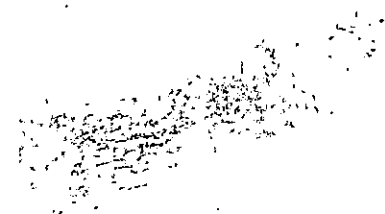
CCT means corrugated paper vertical compressive strength test, while the footnote shows the time from compression to compression, expressed in minutes.

#### **\*\*Attention\*\***

Neither the CMT test nor the CCT test can be repeated because the shape of the paper due to pressure or the vertical state may have changed, the result of the test will not be accurate if test again.

### **4.5 Instrument parameters settings**

(Parameters has been set before leaving factory. No special circumstances, please do not modify. be modified when get the permission of the manufacturer, or else thus causing malfunction, manufacturers will not warranty or repair.)





## 5. Maintenance

The operator should be familiar with the use manual, strict adherence to rules, the non-specialist staff are not free to operate and the repair instrument. And do the following maintenance work:

5.1 When test is completed, you should turn off the instrument, and keep equipment clean to prevent the dust, vapor intrusion machine, to prevent fouling generate. And cover should be added for long time no use

5.2 Instrument unused for a long time, Every once in a while to be energized preheating to expel moist, the best is to do some sample testings.

5.3 If have equipment failure, please ask professionals to check and repair, do not use when it is not good

5.4 After instrument running for some time, it should be coated with an appropriate amount of grease on the motor drive gear.

5.5 Carefully protected fluted wheel, kept clean, can not touch, can not scratch the surface.

5.6 Do periodic verification, maintaining the instrument excellent technical condition. And the cycle is generally one year.

## 6. Quality Assurance

### 1、 Quality assurance items

The guarantee period is one year (consumer goods are not included)

### 2、 the main quality warranty maintenance certificate

1) Please keep this guarantee letter, if you lost it, please connect with us in a month.

2) If this guarantee letter has been altered or it has no our stamp, it is useless.

### 3、 The following conditions need to pay reasonably even in the assurance period.

1) Natural reasons

2) Operating mistakes

3) Voltage is not fit for our operation instruction

4) Repack it without our guides



- 5) Damaged for borrowing to others
- 6) Damaged for authorized machine modification
- 7) Damaged for authorized calibration
- 8) Authorized transshipment mistake
- 9) Serve for long distance area

#### **4、Attentions**

1. Where the original in Dongguan, Shenzhen installation of our products, if the product moved to outside Dongguan, Shenzhen-area use, whether or not within the effective warranty period, the transportation and travel expenses of the service personnel should be paid by the client.
2. All customers outside of Guangdong province, whether or not in the warranty period, the service of transportation and travel expenses paid by the customer.
3. The apparatus try not to be used in the following situations:
  - (1) Vibration, rocking the occasion.
  - (2) Direct sunlight.
  - (3) Hot, dusty, damp places.
  - (4) To ensure safe, AC supply of the machine should be well grounded.
  - (5) Do not use strong solvents (such as: benzene, nitro oil) washing machine.
  - (6) Do not inject water and debris into the machine, prevent damage to electrical components and electrical shock.
  - (7) Instrument displays the disassembly and debugging can only be measured by the State Department approved the units and the company, other people not allowed to overhaul.

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[illegible]

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