

# **Horizontal Ribbon Mixer**

## **Instructions**

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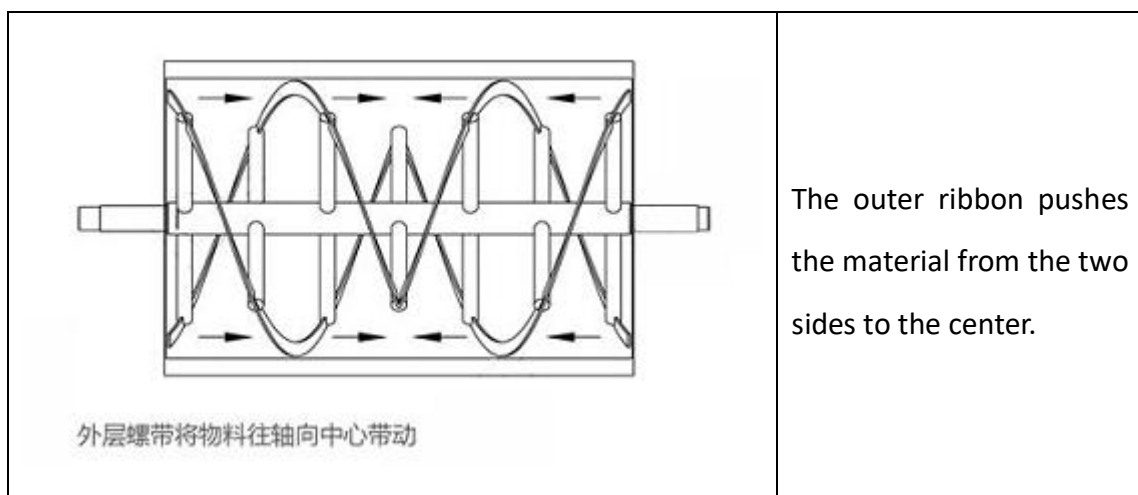
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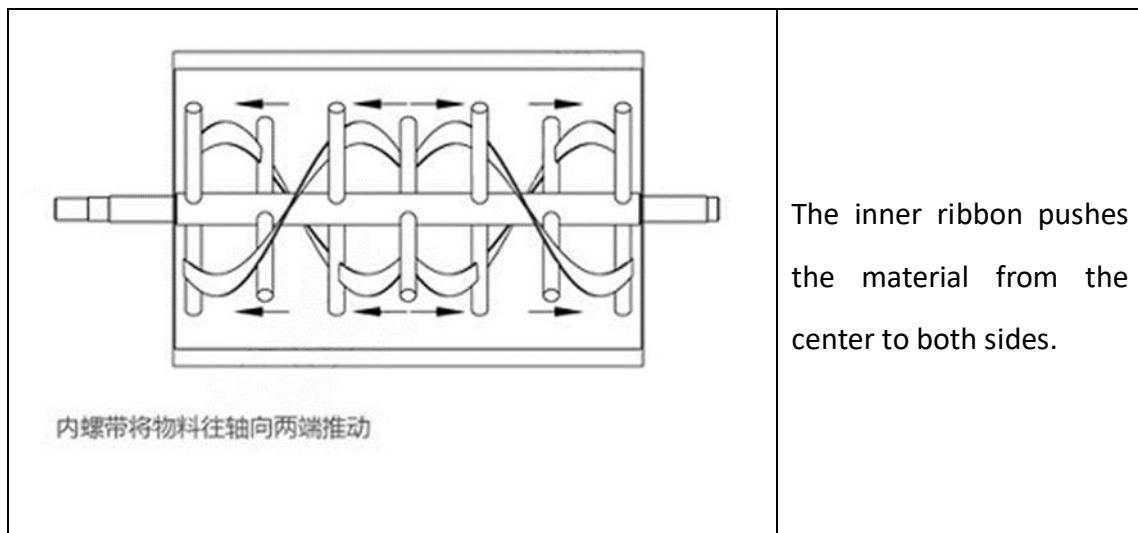
## 1. General Introduction

The Horizontal Ribbon Mixer can be used to mix all kinds of powder products. It consists of U-Shape tank, spiral and drive parts. The design is unique, and the operation is quite simple. It is a new type of mixing equipment with the characteristics of high efficiency, high uniformity, high crushing, low energy consumption and low contamination. The blender with dual ribbon structure design. Outer ribbon makes the material move from the sides to the center of the tank and the inner ribbon push the product from the sides to the convective mixing.

It is widely used in food, medicine, chemical, plastics, dyes and cosmetics industries. Our mixers also featured with fast mixing, no mixing blind area, stable running, convenient use, easy maintenance etc.

### Working principle:

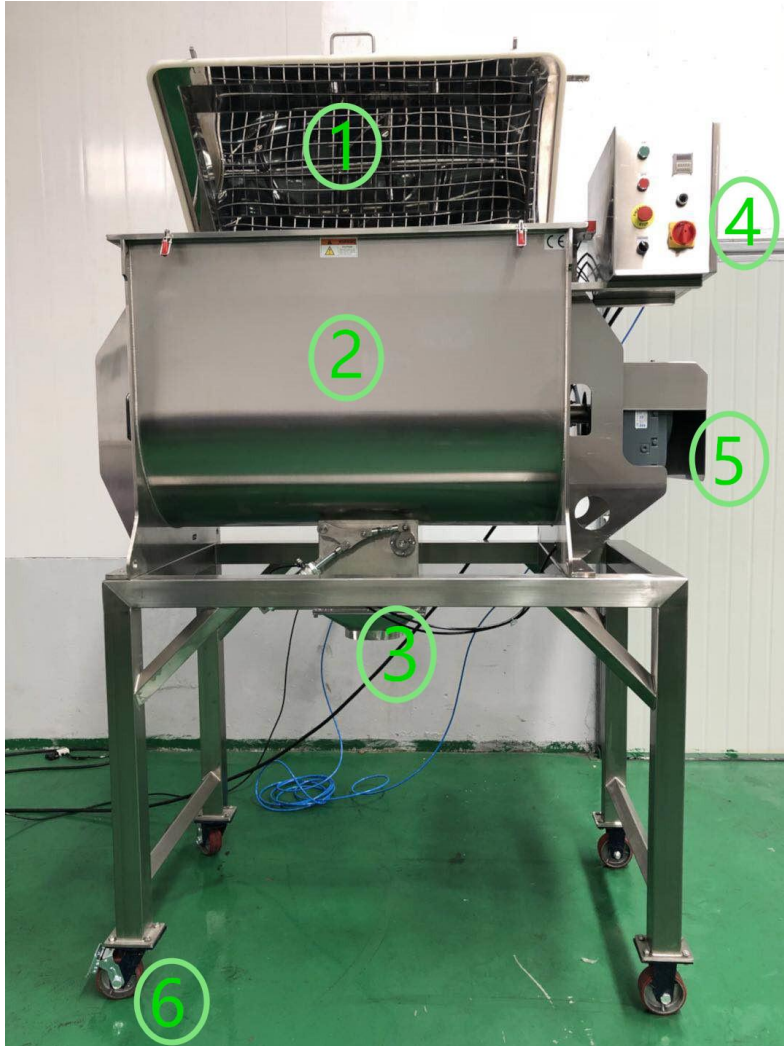




## 2. Specification

Model	TDPM 100	TDPM 200	TDPM 300	TDPM 500	TDPM 1000	TDPM 1500	TDPM 2000	TDPM 3000	TDPM 5000	TDPM 10000
Capacity (L)	100	200	300	500	1000	1500	2000	3000	5000	10000
Volume (L)	140	280	420	710	1420	1800	2600	3800	7100	14000
Loading rate	40%-70%									
Length (mm)	1050	1370	1550	1773	2394	2715	3080	3744	4000	5515
Width (mm)	700	834	970	1100	1320	1397	1625	1330	1500	1768
Height (mm)	1440	1647	1655	1855	2187	2313	2453	2718	1750	2400
Weight (kg)	180	250	350	500	700	1000	1300	1600	2100	2700
Total Power (KW)	3	4	5.5	7.5	11	15	18.5	22	45	75

### ***3. View of the whole machine***



**Note:**

- 1) mixer lid
- 2) mixer U-shape hopper
- 3) electric cabinet & control Panel
- 4) pneumatic valve
- 5) motor and gearbox
- 6) castors

#### ***4. Preparation before operation***

All the products have been tested and inspected strictly before the shipment. But the loose and wear of the components maybe caused in the process of transportation. Please check carefully for outer packing and surface of the machines when arrival to make sure that all parts are in place and the machine can work normally.

- 1) **Fixing** casters or footed glass. the machine should be put on a **flat** ground.



**Caster**



**footed glass**

- 2) Make sure that power supply and air supply is well matched as per request.

Note: Make sure the machine is **well-grounded**, there is ground wire in the electric cabinet, but since the casters are insulated, one ground wire is needed to connect with caster and fixed on ground.



*Note: The ground wire is fixed on the position marked with green circle.*

3) Making a thoroughly clean for the mixing tank before production.

4) Switching the power on.

5) Switching the main power switch to the ON position.



6) Rotating emergency stop switch clock wisely to open the power supply.



7) Pressing the "ON" button



to check whether the ribbon rotate

normally and the direction is correct.



8) Connecting air supply.

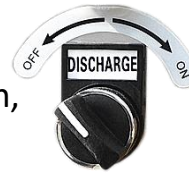
9) Connecting air tube to 1 position.



(In general, air

pressure 0.6 pa is ok, pulling 2 position up to turn right or left to adjust air pressure if need)

- 10) Switching the discharge switch to on position, to check if the discharge valve work normally.



## 5. Operation & Setting

- 1) Switching the power on.
- 2) Switching the main power switch to the ON position.
- 3) Rotating emergency stop switch clock wisely to open the power supply.



- 4) Setting mixing time on the timer (that is the time of mixing. H: Hours

M: Minutes S: Seconds)



- 5) Pressing the "ON" button to start mixing, the mixing will stop automatically when the time is up.



- 6) Switching the discharge switch to on position (during this process the mixing motor can be started to keep the materials easier to get out of the bottom).



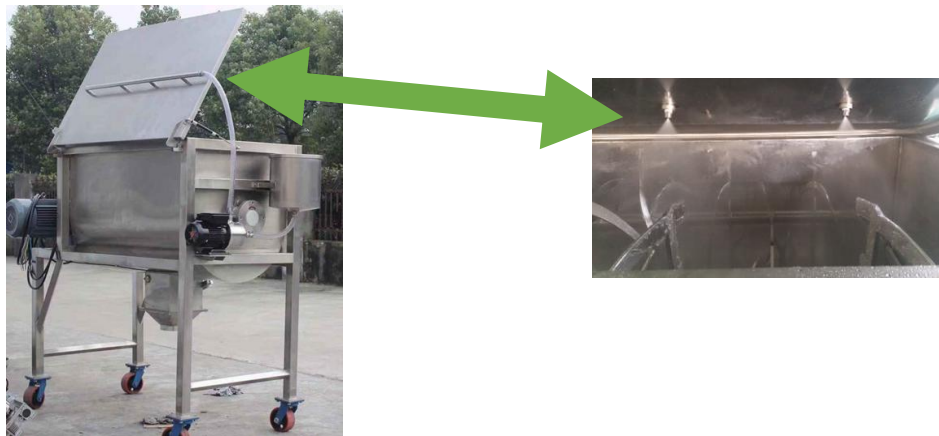


- 7) Switching the discharge switch to off position to close the pneumatic valve when mixing is completed.
- 8) About the products with big density (more than  $0.8\text{g/cm}^3$ ), we suggest feeding batch by batch after the mixer starts. it may burn down the motor if it starts after full loading.

## **6. Optional Functions**

### **1) Spray system**

It consists of pump, nozzles and hopper. a small amount of liquid can be mixed with powder materials with this system.



### **2) Double jacket cooling or heating function**

The mixer also can be designed with the function to keep cold or heat. Add one layer outside the tank and put into medium into the interlayer

to get the mixing material cold or heat. Usually use water for cool and hot steam of use electrical for heat.



## **7. Attentions**

- 1) please close the discharge valve before mixing.
- 2) please cover the lid in order to prevent the product splashing during the mixing which may cause damage and accident.
- 3) The main shaft should be rotated in the regulated direction not in the reverse direction.
- 4) The current of the thermal protection relay should be matched with the motor rated current otherwise may cause damage to the motor.





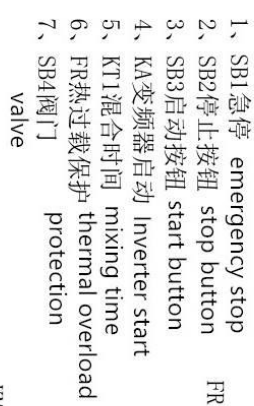
- 5) If there are some abnormal noises occur during the mixing process like metal crack, friction; please stop the machine immediately to check the problem and fix them before starting again.
- 6) The mixing time can be set 1-15 minutes. Customers can set the mixing time as per request.
- 7) The lubricating oil (model: CKC 150) should be changed periodically. (please take away the black rubber)



- 8) Cleaning the machine regularly.
  - a) Please cover the motor, reducer and control box with plastic sheet and wash with water.

b) Drying the water droplets by air blowing.

9) Changing packing gland periodically. (video will be sent to your email if you need)





3) TDPM100/200, powder supply: 220V,3P

