

# RIBBON BLENDER

Ribbon blenders, also known as ribbon mixers, are widely used in industries such as pharmaceuticals, chemicals, food processing, and more, for the blending and mixing of dry powders, granules, or pastes. Here is an overview of the utilization of ribbon blenders and the associated process:

### Loading:

The materials to be blended are loaded into the ribbon blender. The material is typically added through the top of the blender, and care is taken to distribute it evenly.

### Mixing Process:

Once the materials are loaded, the ribbon blender is activated. The mixing process begins as the agitator, consisting of inner and outer helical ribbons, rotates. The rotation of the ribbons moves the materials in multiple directions, creating a fluidized mixing action.

### Blending Time:

The blending process continues for a predetermined period, allowing the materials to mix thoroughly. The blending time may vary depending on the specific requirements of the blending process and the characteristics of the materials being blended.

### Optional Features:

Some ribbon blenders may include additional features to enhance the blending process. These features can include adjustable baffles or spray bars that aid in the dispersion of liquids or additives for more uniform blending.

### Material Discharge:

After the blending process is complete, the ribbon blender is stopped. The blended material can be discharged from the blender through an outlet or discharge valve located at the bottom. The discharge is typically controlled manually or automatically.

### Cleaning and Maintenance:

After use, the ribbon blender is thoroughly cleaned to remove any residual material and ensure proper hygiene. Routine maintenance tasks, such as inspecting ribbons, checking bearings, and lubricating components, are also performed as needed.



It is important to note that the specific utilization and process of a ribbon blender may vary depending on the manufacturer, model, and the specific requirements of the blending process. However, the ribbon blender's helical ribbons and fluidized mixing action provide efficient and uniform blending of dry powders, granules, or pastes, making it a valuable equipment for blending applications in various industries.

### Technical Specifications Table:-

SPECIFICATION	DESCRIPTIONS
CAPACITY	50 - 10,000 LTRS
MATERIAL OF CONSTRUCTION	STAINLESS STEEL/ MILD STEEL
MIXING SPEED	30- 60 RPM
MOTOR POWER	2- 30 HP
AGITATOR TYPE	DOUBLE HELICAL RIBBION
DISCHARGE VALVE	PNEUMEATIC/ MANUAL
TROUGH SHAPE	U- SHAPED
TROUGH COVER	PROVIDED
LOADING TYPE	TOP LOADING
MIXING TIME	10- 30 MINUTES
DRIVE TYPE	GEARBOX /DIRECT DRIVE
OPERATING TEMPERATURE	UPTO 120°C
CONTROL PANEL	PROVIDED WITH NECESSARY ELECTRICAL & SAFETY CONTROLS
OPTIONAL FEATURES	JACKETED TROUGH, VARIABLE SPEED DRIVE , PLC CONTROL, DUST COLLECTOR