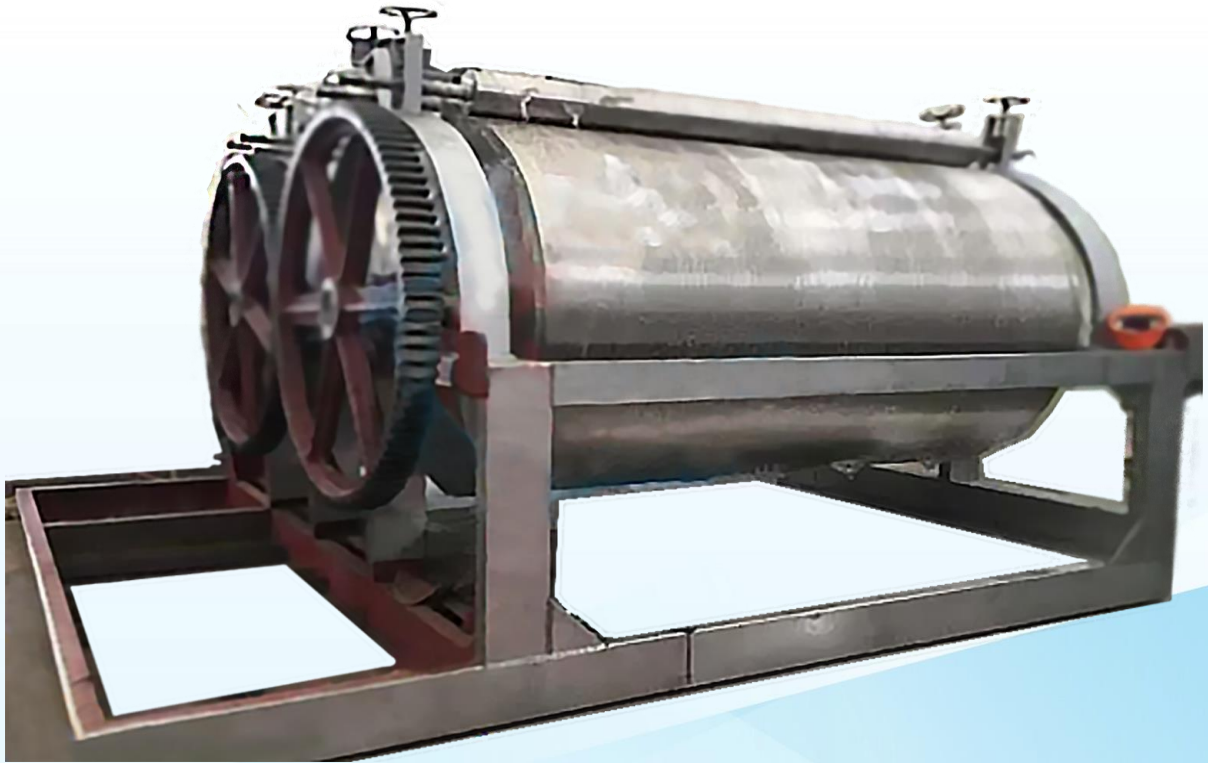




DOUBLE DRUM DRYER



PRINCIPLES OF OPERATION :-

GEM Double Drum Dryers convert molten liquid or pasty feeds into solid dried particles. Two identical drums are installed next to each other and the material is fed from the top into the gap between the drums. A thin layer of molten feed forms on the outside surface of the rotating drums. The Inner Surface of the drums are heated with steam or hot water. This results in heating of the drum and removes the excess moisture from the molten feed which after scraping results in a dried powdery product.

The material dried is collected through a chute or a conveyor. The speed of the drum can be controlled through a VFD. The capacity of the dryer depends on the material of the product, the temperature of the product, the dip level of the drum in the molten feed and by the temperature of the drying medium/drum.

CONSTRUCTION :-

DRUM :-

The material of the drum could be Mild Steel, or any grade of Stainless Steel with or without Hard Chrome plating. The surface of the drum is machined and ground. The drums rotate on antifriction self-aligning ball / roller bearing with standard Housing.



SCRAPPER :-

The Scrapper Knife scrapes off the solidified material from the surface of the drum. The material of construction of the Scrapper knife is usually Stainless Steel or Phosphor Bronze. They are designed to ensure uniform pressure against the drum over the full length. The pressure of the knife is controlled by an adjustment screw.

HOOD (OPTIONAL) :-

To prevent toxic vapours, the dryer/flaker is equipped with a totally enclosed hood with vapour outlets on top.

DRIVE :- Heavy duty drive is designed for smooth, continuous and trouble free running. V-pulley or variable speed arrangement can also provided for optimum performance.

STANDARD SIZES (DRUM DIMENSIONS) :-

DIMENSIONS : (mm)	600	1000	1000	1250	1250	1250	1500
LENGTH : (mm)	1000	1250	2000	2000	2500	3000	3000
GROSS AREA : (mm)	2.00	4.00	6.00	8.00	10.00	12.00	14.5

TYPICAL APPLICATIONS :-

Typical applications include materials that require low temperature drying or heat sensitive materials can be dried effectively. Also, solutions containing solvents can be dried with complete recovery of solvent in a continuous manner.

- Acid Voilet
- Sodium Salt of BDSA
- Sodium Sulphate
- ETP Sludge generated in molasses based distillery / yeast industries.
- Homogenised Milk
- Zirconium Hydroxide
- Fruit Concentrates
- Industrial waste water (distilleries, breweries, bio-ethanol, bakers yeast, pharmaceutical, chemicals and others) to achieve Zero Liquid Discharge (ZLD)
- Magnesium Carbonate
- Yeast
- ETP Sludge generated in chemical / Pharmaceutical Industries
- Sulphur Black
- Baby Food
- Fatty / Condensed Milk
- Brewer's yeast, distiller's yeast, baker's yeast, microbial cell and related products
- Slurry or solution of organic and inorganic materials
- Plant and animal extract Dye Others

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