

PDC - Double Cone Mixer

Introduction:



The PerMix PDC series Double Cone Mixers are one type of Tumbler Mixers, which perform the mixing by turning the vessel around the shaft. They are unique mixers suitable for rapid and uniform mixing of free flowing dry powders, granules and crystals. With the simplest structure among all mixers, they are featured for low investment, easy operation, discharging without residual, quick cleaning, and simple maintenance.

PerMix Double Cone Mixers provide a gentle high-flowing mixing process for solids/solids in a proportion of up to 1:100.000 with the possibility of using an intensifier bar to enhance the mixture, and solids/liquids in powder or granulate form with different specific weights.

Advantages:

Compared with other types of mixing equipment, PerMix PDC series Double Cone Mixer is able to provide the following advantages:

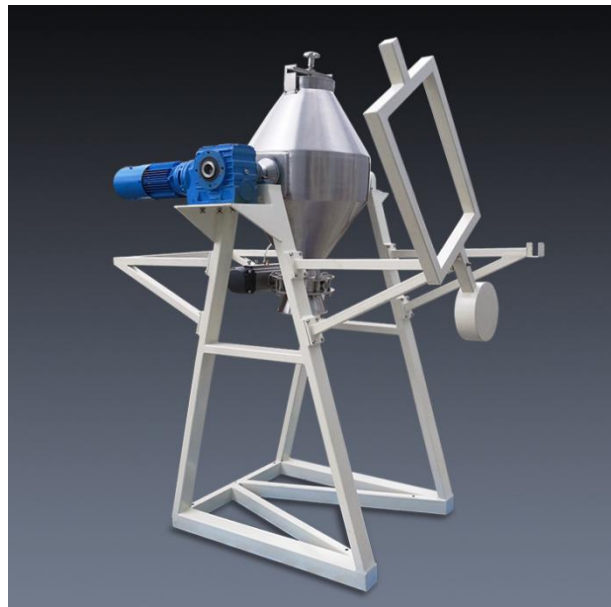
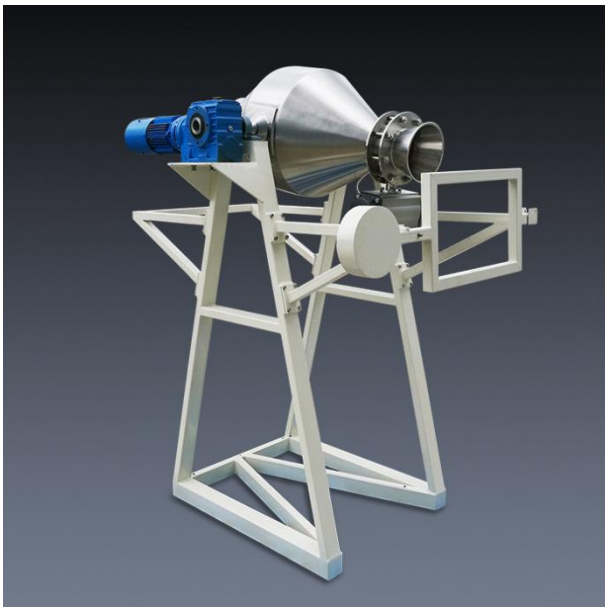
- Minimized distortion to the materials due to absence of any moving blades
- No contamination due to the closed area by only stainless steel walls
- Especially suitable to mix powders or granules which are temperature sensitive, easily oxidizable, crystallized, volatile, poisonous or with irritating smell
- Many options are available, such as side chopper, variable speed, automatic stop in discharge position, air operated valve, touch screen operating panel, safety fence, etc.

How It Works:

The PerMix PDC series Double Cone Mixer has a chamber made up by two cones. Powders and granules are fed into the Double cone chamber either manually or by a vacuum conveyor. A gear motor drives the chamber to roll in 360 degrees. This multi-dimensional motion makes the powders and granules inside tumbling up and down and colliding to each other all the time, and achieve uniform mixing in short time.

A safety barrier or enclosure is often mounted in the front of or surrounding the Double Cone Mixer, supplying the safety function to stop the mixer immediately when the barrier or enclosure is open, and prevent the mixing vessel to run when the barrier or enclosure is not closed.

Features & Options:



The simplicity of design of the PerMix PDC series Double Cone Mixer allows a low initial cost, easy maintenance and simple operation. They can be supplied with a variety of options, including but not limited to:

- Full stainless steel construction for hygienic requirement
- Internal choppers
- Vacuum/Drying execution with heating jacket, vacuum pump, dust filter, condenser, etc
- Special spray unit

- Safety fence
- Mobile trolley
- PLC control & touch screen
- Detachable vessels

Applications:

PerMix PDC series Double Cone Mixers are widely used in pharmaceuticals, colors, plastics resins, food products, ceramic glazes, metal powders, cosmetics, detergents, insecticides, explosives materials, and a lot of others:

- Food

Breakfast Cereals, Enzymes, Flavours, Herbs, Minerals, Nutraceuticals, Seasonings, Spices, Tea Mixes, Tobacco, Vitamin Mixes

- Chemicals

Agrochemicals, Ceramic Powders, Detergents, Drugs, Dyestuffs, Leather Auxiliaries, Metal Powders, Pigments, Plastic Granules, Plastic Pellets, Plastic Powders, Textile Assistants

- Pharmaceuticals

Active Agents, Biological Solids, Carcinogenic Substances, Concentrated Active Ingredients, Generics, Intermediate Products, Sterile Products, Toxic Substances

Specifications:

Model	Total, Liter	Working, Liter	Power, kW	Length, mm	Width, mm	Height, mm	Operation Height, mm
PDC-5	5	3	0.25	800	500	660	750
PDC-15	15	7	0.37	600	430	1,265	1,335
PDC-45	45	20	0.55	850	620	1,540	1,650
PDC-100	100	50	0.75	1,100	810	1,620	1,950
PDC-200	200	100	1.1	1,400	1,020	2,100	2,280
PDC-300	300	150	1.5	1,600	1,160	2,320	2,530
PDC-500	500	250	2.2	1,630	1,070	2,600	2,600
PDC-700	700	350	3	1,820	1,200	2,770	2,770
PDC-1000	1,000	500	4	2,100	1,350	2,985	2,985
PDC-2000	2,000	1,000	5.5	2,620	1,350	2,145	2,280
PDC-3000	3,000	1,500	7.5	2,990	1,550	2,440	2,600
PDC-4000	4,000	2,000	11	3,280	1,680	2,685	2,850
PDC-5000	5,000	2,500	15	3,530	1,810	2,890	3,070

1. All specifications are as accurate as is reasonably possible, but they are not binding.
2. Customized sizes are available against request.
3. PerMix reserves the right to modify the design without notice.

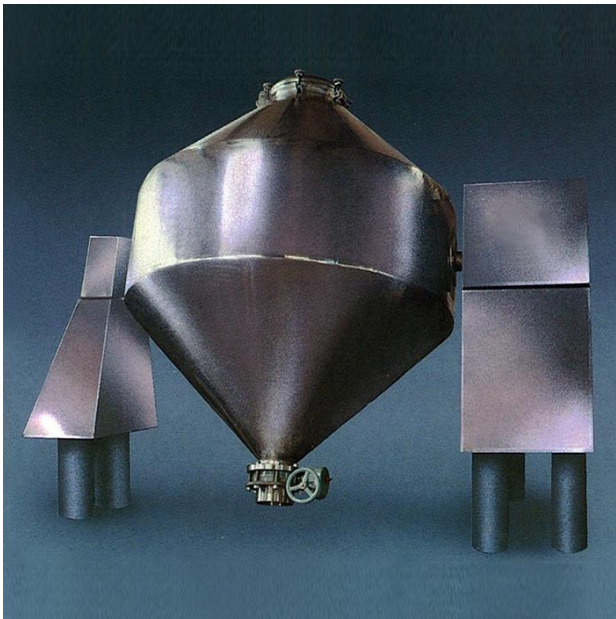
Gallery:



PDC-100 Mixer with Safety Fence



PDC-100 Mixers



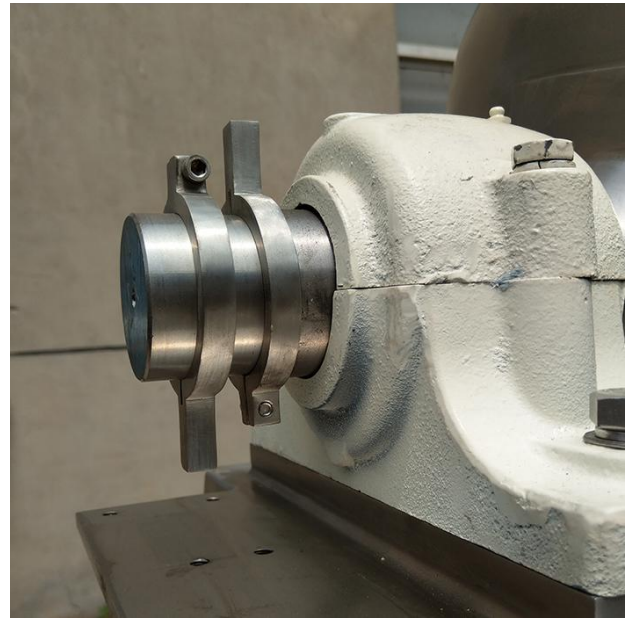
PDC-4000 Double Cone Mixer



PDC Mixer in All Stainless Steel



Interior View of PDC Mixer



Positioning Sensors for PDC Mixer



Mixing Vessel of Double Cone Mixer



Feeding Port (Manhole) of PDC Mixer