

Container Mixer CB-series



PMS Container Mixer®, which is normally known as intermediate bulk container (IBC) mixing system, is a mixing system that is widely used within pharmaceutical manufacturing process. This type of mixer can be used as storage, transport, and mixing vessel, which reduces the complication of the conventional mixing processes that require a number of containers for the whole process.

Theory of Operation

PMS Container Mixer's mixing system is the optimal solution for applications that require high levels of product purity or those involving hazardous, corrosive, or toxic ingredients, since the container completely sealed mixing chamber, providing an fundamentally safe, emission-free processing environment.

While mixing, a well-secured container is rotated in a supporting frame around diagonal axis. The angular arrangement and rotation allows the product to be mixed within three-dimensional environment, without using any moving mixing tool (Tumbling System). This mechanism allows the mixing process to be done with very low shear force. As a result, the product characteristics remain almost unchangeable. In addition, the speed of the rotation can also be adjusted. Therefore, the process can be adapted to match various product characteristics, including granulated substances.

Before mixing, the container will be placed horizontally into mechanical clamp. Then the container will be lifted by the pneumatic (for medium size) or hydraulic (for large size). After mixing, the container with mixed product will be moved down and remove. The new container can be placed immediately. This allow increasing capacity when compare to conventional tumbling system.

Application:

- Pharmaceuticals: Powder, Granules, Pellets, Herbal Medicine
- Cosmetics: Face powder, Body powder
- Food: Seasoning, Health food, Flavor, Candy, Additives, Confectionery, Spices, Sugar, Salt, Starch
- Agricultural: Animal Feed, Premix, Pesticides, Fertilizers
- Chemical: Plastic powder, Polyester chips, Pigments and Color concentrates, Dyes, Resins
- Other: Metal powders, Paints, Detergents, Mineral

Benefit:

- cGMP compliance
- Reduce contamination
- Concurrent production
- Reduce damage for granulated or agglomerated products
- Uniformly blending
- Wide range of blending volume
- Easy to operate, clean and maintain
- Safe and Clean working environment

Technical Data:

		CB 10V	CB 30V	CB 100V	CB 200V	CB 300V
Total Volume (liter)		19	57	170	366	520
Working Capacity (liter)		11	34	102	219	312
Driving Unit (KW)		0.55	0.75	3.0	5.5	7.5
Speed (RPM)		0-50	0-40	0-30	0-25	0-25
Overall Dimension (mm)	W	450	600	1,4	1,6	1,6
	L	1,065	1,42	2,47	3,1	3,1
	H	800	800	1,1	1,3	1,3

		CB 500V	CB 600V	CB 800V	CB 1000V	CB 1200V
Total Volume (liter)		870	1,034	1,374	1,7	2,05
Working Capacity (liter)		522	620	824	1,02	1,235
Driving Unit (KW)		7.5	9.2	11	15	15
Speed (RPM)		0-22	0-22	0-18	0-18	0-16
Overall Dimension (mm)	W	1,8	1,8	2	2	2
	L	3,88	3,88	4,3	4,3	4,3
	H	1,6	1,66	1,7	1,84	2,08

Standard:

All contact parts made of stainless steel SUS 316
One set of agglomerate breaking device, made of stainless steel SUS 304
Clamping device to hold container with driving shaft
Variable Speed, non-explosion proof geared motor
Electrical control box with semi-automatic control system and safety devices
Safety guard located in front of the machine