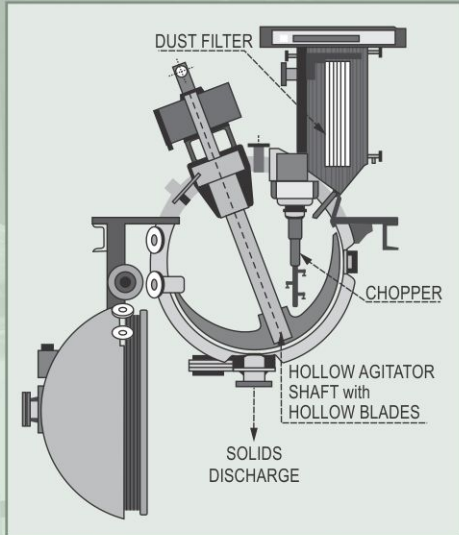




ASME "U" & "R" STAMP
AUTHORIZED MANUFACTURER



BEW Engineering Pvt. Ltd.
(A group company of Bifriends Engineering Works)

SPHERICAL DRYER

SPHERICAL DRYER

TECHNICAL DATA							
Model		BEW-SP 100	BEW-SP 200	BEW-SP 400	BEW-SP 1000	BEW-SP 2000	BEW-SP 4000
Total Volume	Lits	150	350	650	1500	3200	6500
Capacity (Working)		100	200	400	1000	2000	4000
Dimensions	L2	1000	1150	1300	1800	2400	2900
	L1	100	1200	1400	1800	2200	2600
	H1	900	900	900	1400	1700	1700
	H2	1800	1900	2050	2800	3500	4000
	H3	900	1150	1400	2100	3600	3200
	QD	700	900	1050	1400	1700	2100
	Gross Weight	Kgs	1500	2500	3000	8000	12000
Heat Transfer	M ²	1.5	3.5	3.5	6.4	9.4	16.5
Main Motor	KW	11	15	25	45	55	75
	RPM	4-40	4-40	4-30	4-18	4-18	4-15
Chopper Motor	KW	3.75	3.75	5.5	7.5	12	15
	RPM	1000	1000	1000	1000	1000	1000

NOTE : Design & Dimensions of above are subject to change without notice.

Function :

These dryers give drying, mixing and breaking effects simultaneously. Wet cake or slurry is fed through charging nozzle, while the agitator is rotating in clockwise direction. Vacuum is applied in the dryer and heating media is circulated in the jacket. Evaporation of moisture takes place under vacuum and vapors pass through the dust catcher into the condenser, where it is condensed and collected in the receiver. Dried material is discharged through discharge valve. A lump breaker can be provided to achieve good drying and disintegration effect.

Speciality :

The unique spherical design allows quick and complete discharge of material. In addition to this. It allows scraping and collection of the heel product too, which is a matter of great concern in Pharma products of high value and low volume. This improves the yield very significantly and makes every gram count. The high speed of agitation along with close running with the entire surface gives very good mixing and avoids product stagnancy, which in turn doesn't allow localized product charring. The high speed of mixing also increases drying efficiency very significantly.

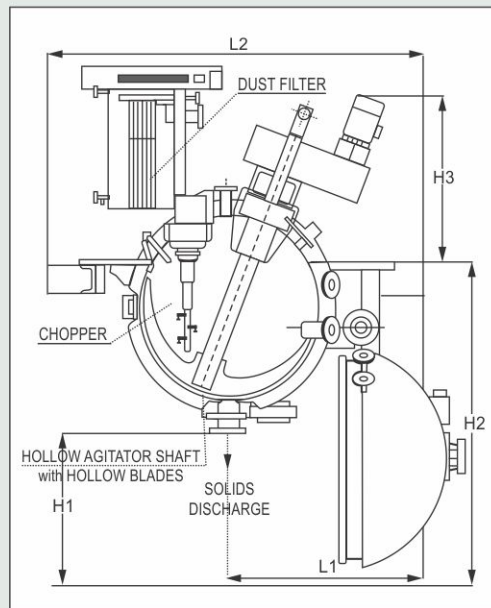
High speed choppers provide very good disintegration of products having lump forming tendency. This in turn helps drying efficiency.

The spherical shape and bottom most drain point also makes it very easy to clean and disinfect in very short time. This saved time certainly counts for increased production, especially with frequent product change over.

The quick detachable Bayonet and Super 'C' type hydraulic arrangements also facilitates ease and speed in opening and closing of the dryer especially without any laborious work. This is very useful for inspections, CIP, Product change over etc, thus drastically reducing the equipment downtime and labor requirement.

The spherical shape is ideal to sustain any pressure surges resulting out of product dusting or thermal decomposition of the product amongst all shapes and sizes.

The bottom most point discharge also permits the dry product to



be directly packed into convenient bags, drums or can be connected to powder transfer systems to discharge without loss of powder material. This machine can be completely integrated with isolation system so as to avoid and exposure of the user to the potent product thereby providing complete operator safety

SALIENT FEATURES :

- Total cGMP construction.
- Separation of machine into Clean room & Maintenance room possible, Hence suitable for Clean room applications.
- Multi functional and used for Drying, Mixing and Granulating.
- Fast, Easy & Thorough cleanable. CIP/WIP/SIP.
- Easy to Inspect.
- Ideally suitable for small batches due to complete product discharge. Hence yield is high.
- Suitable for High value, low volume product.
- Highly Efficient, hence short drying time.
- Heated agitator.
- Lump breaker can be employed.
- Contains Explosion pressure surges.
- Excellent reproducible result from pilot trials.
- Contained charging, discharging & sampling possible.
- Available from 100 Lits to 4000 Lits. working capacity.
- M.O.C.: S.S. Grades 300 series, 400 series, 904L. Duplex, Hastelloy, Titanium etc.
- Special Quick detachable Non bolting options of Super 'C' and Positive locking Teethed Bayonet arrangements are also available with automated hinge for ease and speed of operation.
- Complete automation with SCADA, PLC-HMI operation also available.

Application :

Drying of high value low volume API's, Chemicals, Pharmaceuticals, Bulk drugs, Pigments under vacuum.

PILOT PLANT AVAILABLE FOR TRIAL



BEW Engineering Pvt. Ltd.

(A group company of Bifriends Engineering Works)

Office & Factory : FE-10, MIDC, Phase-II, Manpada Road, Dombivli (East),

Dist. Thane - 421 204 Maharashtra (India) • Phone : 91-251-2873335/8

Website : www.filterdryer.com, www.bifriendsengg.com • E-mail: bifriends@bew.net.in