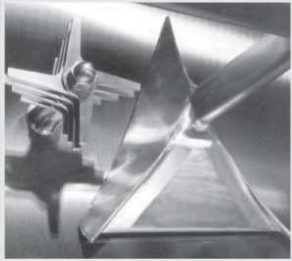




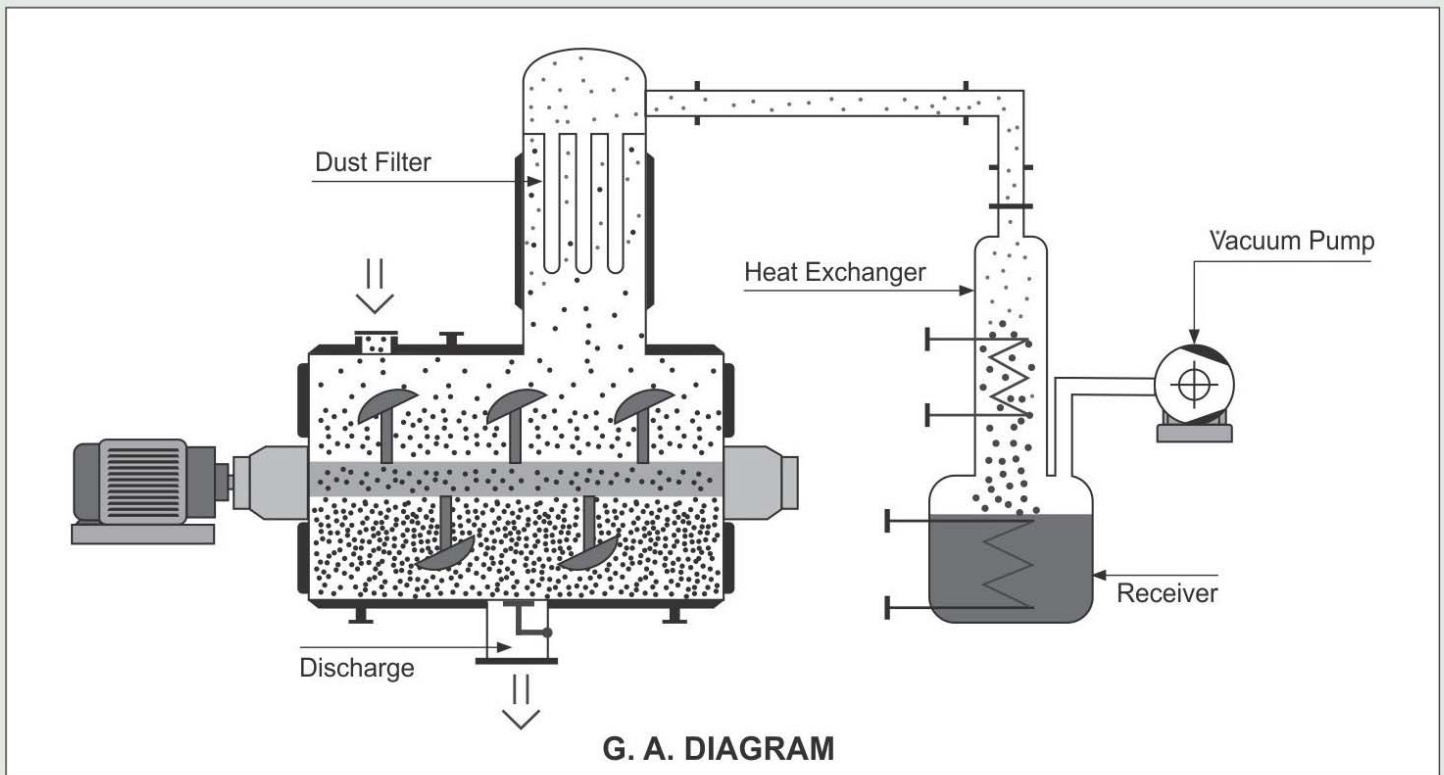
ASME "U" & "R" STAMP
AUTHORIZED MANUFACTURER



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

PLOUGH SHEAR MIXER DRYER

PLOUGH SHEAR MIXER DRYER



Plough Shear Mixer

This is the horizontal single shaft plough shear mixer which is based on the principle of mechanical fluidization of the product. The particular shape, position and rotation speed of the mixing tools create a centrifugal vortex motion, which allows the products to be projected in a three dimensional way and to merge with each other. This ensures that components with a different particle size and bulk density are perfectly blended and mixed with high precision within the shortest possible time. This machine specifically suitable for lump forming products or little viscous products.

Dryer

This can be used as dryer with heating jacket provision. The product is heated by the jacket (operated with hot water, steam or thermal oil) and the product moisture is thereby evaporated. A horizontal shaft along the longitudinal axis of the dryer drum is equipped with shovels for mixing & drying the product. This ensures that the product is heated evenly and "moist material" is brought continuously into contact with the heated wall. This guarantees efficient drying.

High Efficiency Mixing & Kneading Tool

The mixer can be transformed in a "High Efficiency Mixer" by incorporating this type of tool.

Mixing Shovels

During a drying process, mixing shovels not only mix the product homogeneously but also transport the product to the inside wall of the dryer to ensure effective heat transfer. There are different types of shovels for different products depending on their density, viscosity etc. Extra provision can be made such as liquid injector, shaft heating, sampling device etc.

Choppers

The dryer can be equipped with one or more choppers (high speed blades rotating on the inside wall of the dryer drum) to disintegrate the agglomerates and lumps in the product. The choppers are positioned in the drum in such a way that product is constantly conveyed towards them by the shovels. Dryers can be retrofitted with choppers.

Dust Filter

A vertical filter with filter elements is mounted on the dryer drum to clean the vapors. When the vapors pass through the filter elements, dust particles are retained. The filter is cleaned by periodic bursts of N₂ gas/air through the filter elements. Particles caking the filter drop back into the dryer and are returned to the process. For easy exchange the filter elements can be mounted on a plate which can be removed from the filter housing when required.

PLOUGH SHEAR MIXER DRYER

Salient Features

- High quality mixing
- Easy maintenance
- Custom built to suit customer requirements.
- Available in various grades of Stainless Steel, Hastelloy and Carbon steel.
- Jacketed construction available for heating and cooling applications.
- Can be offered for vacuum application.
- Flush discharge valve (Pneumatic, Hydraulic operated) for easy operation.
- Can be completely automated with PLC based operation.
- Reduced mixing time
- Hygienic design

Application

- Very effective and useful in pharmaceutical, chemical and food industries.
- Bulk Powder processing like dry / wet mixing / drying / cooling
- Solid Liquid Mixing
- Homogenizing
- Blending
- Granulation
- Multiple Phase Reaction
- Drying & cooling.

SPECIALISED CIP DESIGN (RETRACTABLE SHAFT)

The design is modified to suit specific CIP purpose essential in Pharma industry.

Here the entire shaft can be retracted out of the main shell using guides, so that the equipment can be thoroughly cleaned for batch change over. The shaft is specially designed in Cantilever shape and can be provided with a Mechanical seal with close tolerances. Choppers can be employed in this design too.

APPLICATION FIELD

- Pharmaceuticals
- Cosmetics
- Chemicals
- Food products
- Paints & Varnishes
- Adhesive
- Fertilizers
- Soaps and Detergent
- Dyes and intermediates
- Fly ash
- Refractory material
- Brake lining and Industrial Gaskets
- Cocoa and Sweets
- Glass Industries
- Mill Product
- Coke and Coal recycle
- Waste Disposal, Recycle and Management
- Pesticides
- Cement
- Ceramics & Clay
- Plastics and PTFE
- Leather Chemicals
- Animal Feed
- Building Materials
- Battery Masses
- Electrode Masses
- Fire extinguishing Powder
- Sintered Metal
- Explosive Material

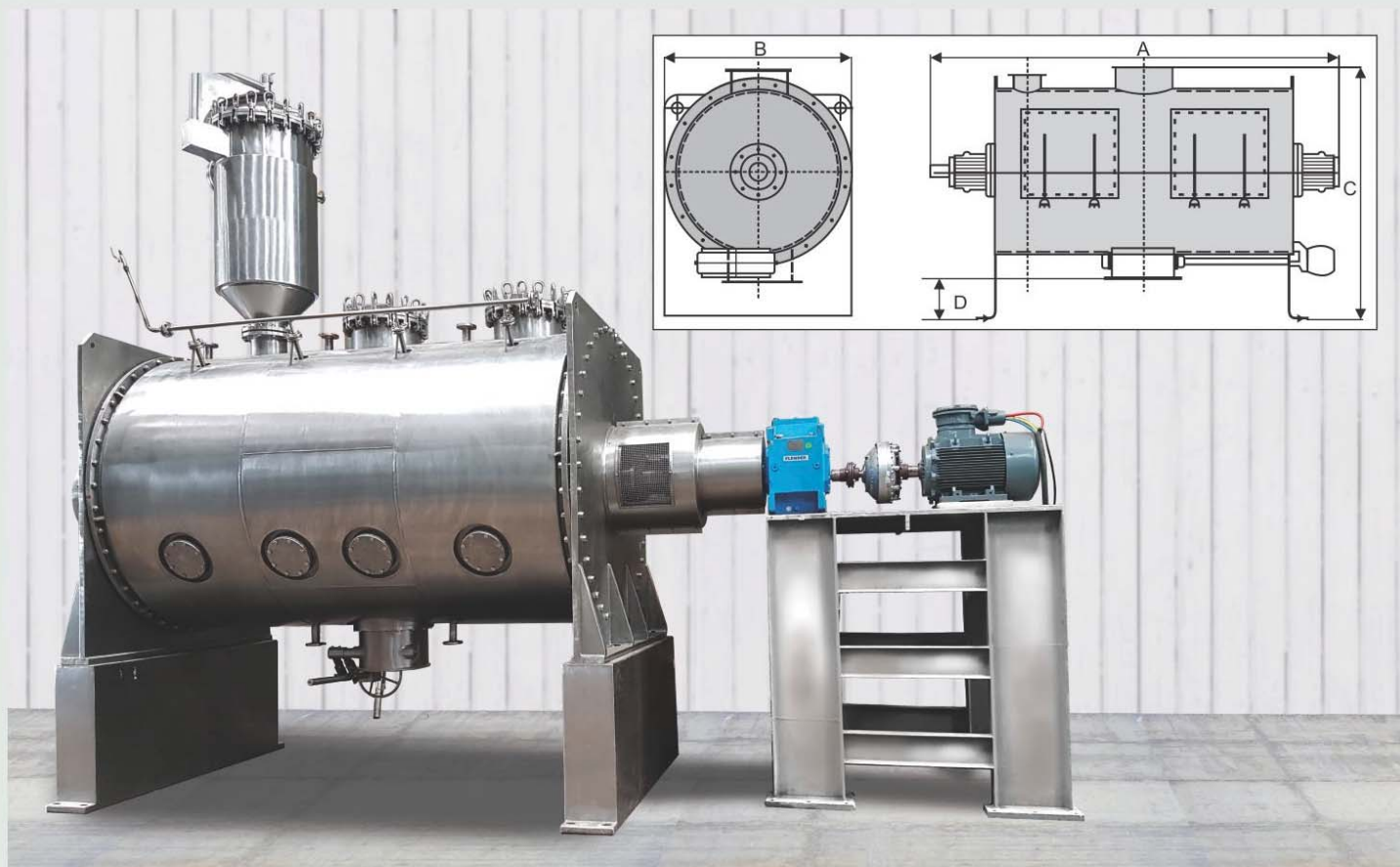


Blade -Type Chopper



Mixing & Kneading Tool

PLOUGH SHEAR MIXER DRYER



TECHNICAL DATA FOR PSMD							
Model No.	Total Volume (Lits)	Working Volume (Lits)	Overall Dimensions (mm)				Power (H.P.)
			A	B	C	D	
BEW-PSMD - 1	100	50	2250	650	1400	400	3
BEW-PSMD - 2	200	125	2350	750	1500	400	5
BEW-PSMD - 5	500	250	2600	900	1600	400	10
BEW-PSMD - 10	1000	500	3900	1050	1750	300	15
BEW-PSMD - 15	1500	750	4500	1150	1850	300	20
BEW-PSMD - 20	2000	1000	5550	1250	2000	300	20
BEW-PSMD - 30	3000	1500	6250	1350	2200	300	25
BEW-PSMD - 40	4000	2000	6800	1450	2300	200	30
BEW-PSMD - 50	5000	2500	7550	1500	2400	200	40
BEW-PSMD - 60	6000	3000	8250	1750	2500	200	40
BEW-PSMD - 80	8000	4000	8450	1800	2700	200	50
BEW-PSMD - 100	10000	5000	10000	1850	2800	200	60
BEW-PSMD - 120	12000	6000	10400	1950	3100	200	75
BEW-PSMD - 150	15000	7500	11100	2200	3500	200	100
BEW-PSMD - 200	20000	10000	11650	2700	4100	200	130
BEW-PSMD - 250	25000	13000	12000	3000	5300	200	200
NOTE : Design & Dimensions of above are subject to change without notice.							

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),

Office & Factory : E-19, MIDC, Phase II, Manpada Road, Bemburda (E)
Dist. Thane - 421 204 Maharashtra (India) • Phone : 91-251-2873335/8

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