

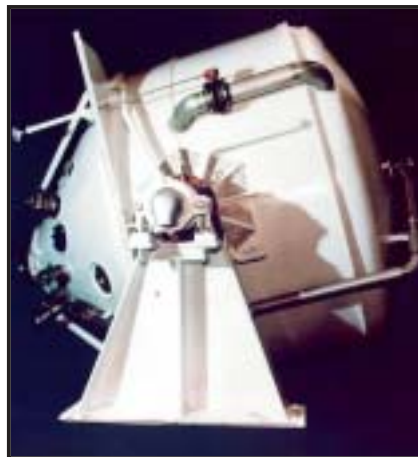
## Double Cone Vacuum Dryers

- ☑ Dust free operation
- ☑ High Vacuum Operation
- ☑ Minimum attrition of product
- ☑ Low temperature drying
- ☑ Solvent recovery



The Double Cone Vacuum Dryer is completely jacketed, and heat transfer fluid (either hot water or oil, steam or vapour) is circulated throughout the jacket. The unique conical shape assures direct contact between the material and the heated surface so that heat is transferred rapidly by conduction.

As the dryer rotates, the rapid and thorough intermixing of the entire batch brings every particle in contact, time and again, with the heated surface for more rapid heat conduction. This permits high speed drying without raising the drying temperature to the danger-point of the material being processed.



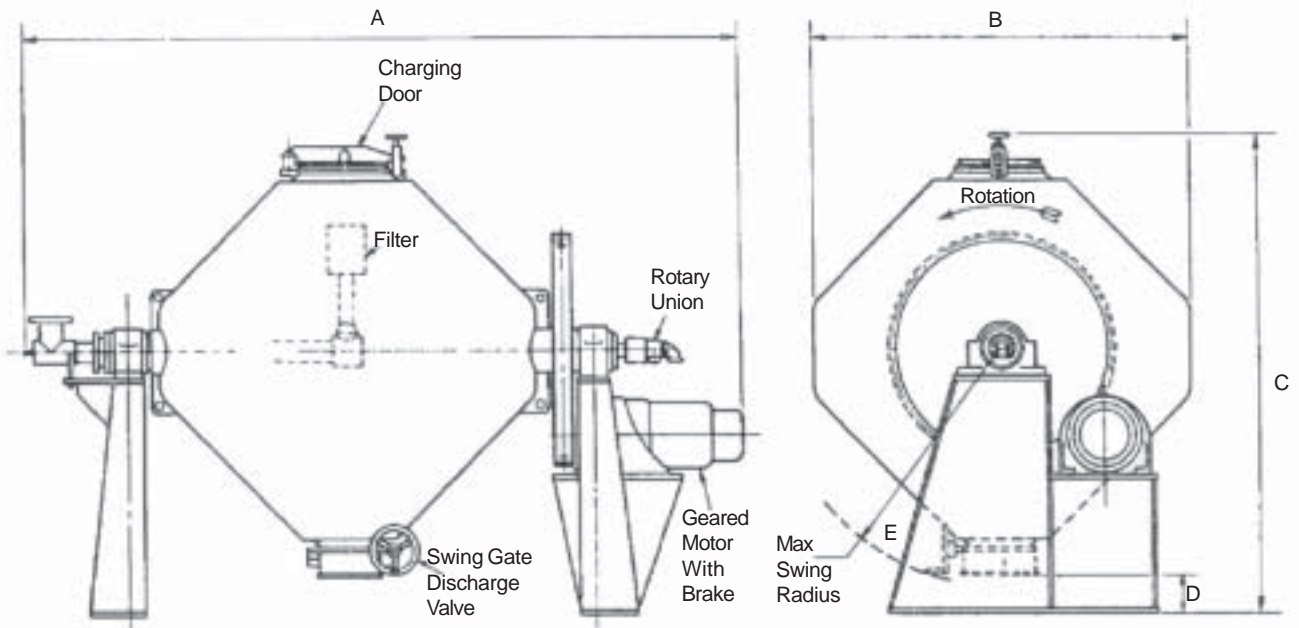
The most important effect of this thorough blending and interfolding is maintaining uniform temperature throughout the batch. This prevents recondensation because there are no cold spots, and it contributes to the speed of drying and elimination of caking.

Finally, a high vacuum is maintained to draw off the moisture under these ideal conditions of material in motion.

Easy to keep clean - the interior of the dryer consists only of the smooth side walls through which the heat is transferred to the product. The thorough mixing and blending action is obtained by the unique shape of the drying compartment. Intersections of cylinders and truncated cones are obtuse angles, so no material is trapped. There are no internal scrapers, ploughs, scoops or vanes to trap and hold material while it

cakes or prevents uniform warming and drying. The dryer may be easily cleaned for minimum process delay during change of products or of colours.

It is practical to use one dryer for many different reagent-grade chemicals of highest quality. All bearings of the dryer are external to the drying compartment and there is no possibility of contamination from the lubricant.



Diameter		Maximum Operating Capacity	Charging Door Diameter	Discharging Door Diameter	A	B	C	D	E
Ft	ins								
1' 6"	0.46	28.3	152	101	1.47	0.69	0.90	177	0.43
2' 0"	0.61	70.8	203	101	1.65	0.79	1.03	177	0.53
2' 6"	0.76	141.6	203	152	1.94	0.91	1.19	177	0.61
3' 0"	0.91	246	203	152	2.26	1.12	1.34	177	0.66
3' 6"	1.07	388	406	203	2.44	1.17	1.54	203	0.81
4' 0"	1.22	575	406	203	2.79	1.32	1.80	254	0.88
4' 6"	1.37	821	406	203	2.97	1.47	1.91	228	0.99
5' 0"	1.52	1132	406	254	3.38	1.65	2.25	241	1.07
6' 0"	1.83	1962	406	254	3.96	1.91	2.50	203	1.24
6' 9"	2.06	2795	406	254	4.16	2.25	2.80	216	1.37
7' 6"	2.29	3735	406	305	4.61	2.41	3.13	228	1.54
8' 0"	2.44	4635	406	305	4.84	2.56	3.26	228	1.62
9' 0"	2.74	6600	406	305	5.27	2.89	3.58	177	1.83
9' 6"	2.89	7750	457	305	5.72	3.15	3.88	228	1.91
10' 0"	3.05	9050	457	305	6.10	3.30	4.06	203	2.01
10' 6"	3.20	10500	457	305	8.50	3.45	4.23	203	2.11

A Breaker Bar can be fitted to break down materials which are agglomerated, balled up or fed as lumps. Drying times are reduced as the lumps are broken down and evaporation is improved. Processing is simplified with mixing, granulation and drying being handled in one operation.



Mitchell Dryers design and supply a wide range of equipment:

- Rotary Dryers
- Conveyor Band Dryers
- Flash Dryers
- Stoves & Cabinets
- Vacuum Shelf
- Vacuum Pan

Mitchell designs are backed by a comprehensive test centre.

## Mitchell Dryers Limited

Denton Holme  
Carlisle  
Cumbria  
CA2 5DU  
England



LEADERS IN DRYING TECHNOLOGY

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Tel : (01228) 534433  
Fax : (01228) 633555

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