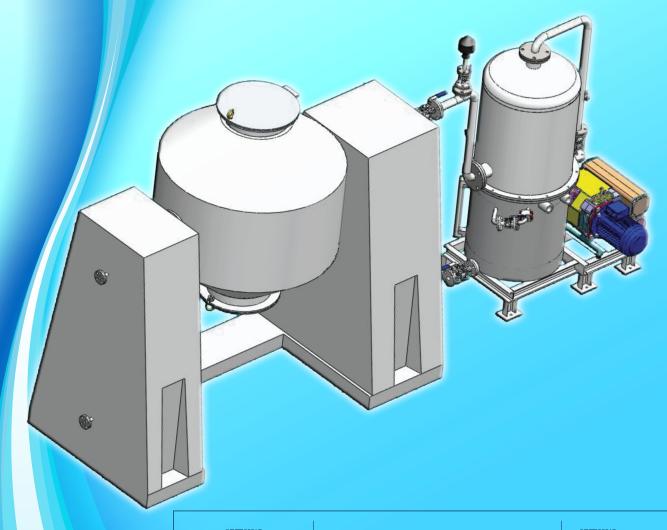
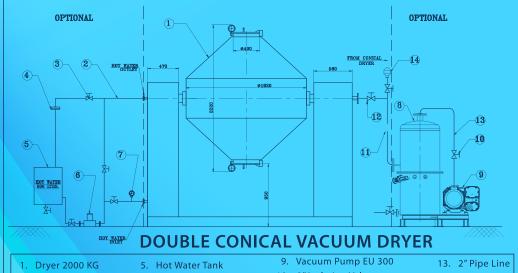


# **Orion Conical** Vacuum Dryer





- 2. 1" Ball Valve
- 3. 1" Pipe
- 4. 1" Flange
- 6. Water Pump
- 7. Pressure Gauge 3" Dial
- 8. Condenser
- 10. 2" Isolation Valve
  - - 14. Breather
- 11. 2" Vacuum Line 12. 2" System Valve

## **Orion Conical Vacuum Dryer**

#### **DESCRIPTION**

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 throughout 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 ragent-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.



Double Cone Vacuum dryers are available from 100 Ltr. capacity to 5000 Ltr. capacity in SS 304, 316, 316L and carbon steel. Special alloy materials are available on request. All units can be supplied with a variable speed drive.

#### **UPGRADES**

- Filter plate assembly to allow the removal of bulk liquid from a solid-liquid mix
- Enlarged feed tube
- Custom vacuum tube assembly designed for increased evaporation rates.
- Custom jacket assembly to improve heat transfer
- Powder feed/discharge system

For further details please contact:

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