



**ROSENMUND**

# Spherical Dryers

**Cleaned in a flash. Emptied completely.**

**The trendsetting spherical dryer range with top or bottom drive is the latest development of the proven Rosenmund dryers that achieve the highest performance standards. A versatile solution for drying, mixing and granulating.**

The easy cleaning and simple emptying are the most convincing features of the Rosenmund spherical dryer. Its simple structure, the spherical vessel and the slide ring seal above the product area make CIP/WIP cleaning and SIP sterilisation possible with a few spray balls or ARD nozzles. Cleaning fluids and dissolved product residues run out through the drain fittings at the lowest point of the vessel. Along with the slope in the direction of the outlet valve, this enables a complete and fast product discharge. The product outlet is a special ball valve that seals the vessel with minimum volume.

## Maximum mixing with the three-arm agitator.

The spherical dryer achieves a high degree of mixing via a three-arm agitator with a high rotational speed. By heating the agitator, the heat-exchange area can be increased further, thus improving heat transfer and preventing wet goods from being baked onto the hub and blades. These are the ideal prerequisites for short drying times and a reproducible drying results.

## High speed chopper reduces agglomerate formation.

To prevent the formation of agglomerates that avoid moisture from being removed from the product, an additional chopper will improve results in many cases. The vertically arranged chopper brings two decisive advantages: First of all, it helps to achieve consistent results that are practically independent of the filling volume. Secondly, no wet product is sprayed on parts of the walls that the agitator does not reach.

## Everything in view during inspection!

To allow quick inspection at any time, the top driven spherical dryer can be opened easily, by swivelling up the lower half of the sphere. This simple operation is achieved by a hydraulic part-turn actuator driving open a bayonet quicklock main flange, all at the touch of button! The dryer can be fixed to the ceiling, ideal for cleaning-room installations for product offloading.



Rosenmund Spherical Dryer with bottom drive 100 l



Rosenmund Spherical Dryer with top drive 100 l



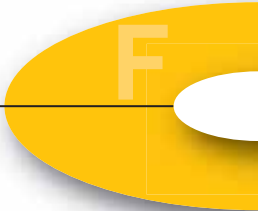
Rosenmund Spherical Dryer with top drive 1000 l



Rosenmund Spherical Dryer with top drive 1000 l



Rosenmund Spherical Dryer with top drive 1000 l



## Explosion pressure surges? No problem at all!

Since dryers are usually designed for vacuum operation, the risk of thermal decomposition or dust explosion requires them to be designed for higher pressures in many cases. The spherical shape with maximum volume and minimum surface is the ideal geometry for an explosion containing vessel. The ball valve will remain in the sealed position even if a power failure occurs, and it is a reliable component in this fail-safe principle. A construction that is resistant to explosion pressure surges is therefore easily accomplished!



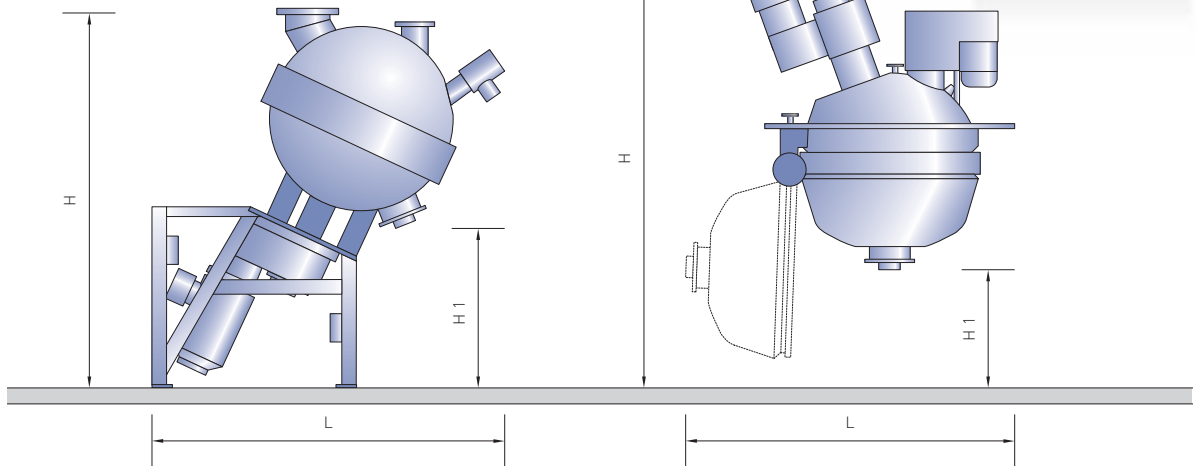
Rosenmund Spherical Dryer with top drive 100 l

## Important advantages at a glance:

- Drying, mixing and granulating.
- Fast and easy cleaning (CIP/WIP and SIP).
- Total product discharge.
- Short drying times.
- Reproducible drying result.
- Heatable agitator.
- Vertical chopper/lumpbreaker.
- Easy to inspect.
- Assembly in ceiling.
- Containment of explosion pressure surges.



Rosenmund Spherical Dryer  
with bottom drive 100 l



| Nominal volume l |       | Used volume l |       | Drive power kW |       | Empty weight approx. kg |       | Container D mm |       | H mm  |       | L mm  |       | H1 mm |       |
|------------------|-------|---------------|-------|----------------|-------|-------------------------|-------|----------------|-------|-------|-------|-------|-------|-------|-------|
| t. d.            | b. d. | t. d.         | b. d. | t. d.          | b. d. | t. d.                   | b. d. | t. d.          | b. d. | t. d. | b. d. | t. d. | b. d. | t. d. | b. d. |
| 25               |       | 25            |       | 4              |       | 500                     |       | 400            |       | 2500  |       | 1200  |       | 900   |       |
| 50               | 50    | 47            | 58    | 10             | 7,5   | 1200                    | 800   | 495            | 495   | 2600  | 2000  | 1350  | 1285  | 900   | 300   |
| 100              | 100   | 131           | 155   | 15             | 11    | 1500                    | 1300  | 695            | 695   | 2700  | 2455  | 1500  | 1700  | 900   | 895   |
| 200              | 200   | 204           | 230   | 20             | 18,5  | 1800                    | 1600  | 805            | 805   | 2800  | 3050  | 1650  | 1860  | 900   | 1115  |
| 300              | 300   | 283           | 320   | 22             | 22    | 1800                    | 1800  | 898            | 898   | 2900  | 3150  | 1950  | 2020  | 900   | 1225  |
| 400              | 400   | 427           | 457   | 30             | 37    | 3000                    | 2800  | 1030           | 1030  | 3450  | 3610  | 2000  | 2115  | 900   | 1390  |
| 600              | 600   | 675           | 722   | 33             | 45    | 4000                    | 3500  | 1200           | 1200  | 3850  | 3890  | 2225  | 2222  | 1050  | 1425  |
| 1000             | 1000  | 1009          | 1079  | 45             | 55    | 6000                    | 4400  | 1372           | 1372  | 4900  | 4165  | 2700  | 2330  | 1400  | 1460  |
| 2000             | 2000  | 1804          | 1929  | 55             | 75    | 8500                    | 7500  | 1665           | 1665  | 5900  | 4595  | 3250  | 2790  | 1700  | 1535  |
|                  | 4000  |               | 3733  |                | 90    |                         | 9500  |                | 2075  |       | 5640  |       | 3230  |       | 1900  |
|                  | 6000  |               | 5598  |                | 110   |                         | 12500 |                | 2375  |       | 6435  |       | 3760  |       | 2265  |

t. d. = top drive    b. d. = bottom drive