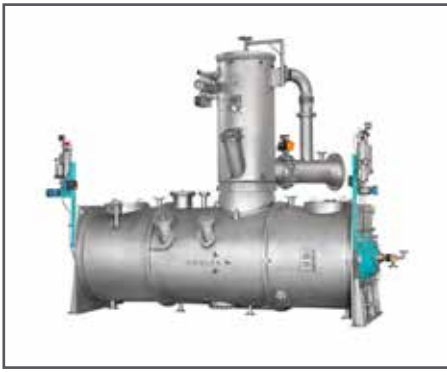


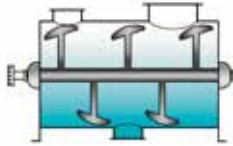
VACUUM SHOVEL DRYER DRUVATHERM® TYPE VT



- Intensive mixing prevents temperature and moisture gradients in the product
- High heat transfer means more effective drying
- Gentle thermal treatment of the product under vacuum
- Multiphase process (mixing, granulating, drying, cooling)
- Economical solvent recuperation



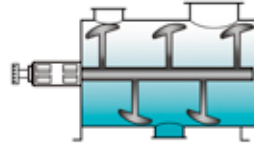
VT Standard



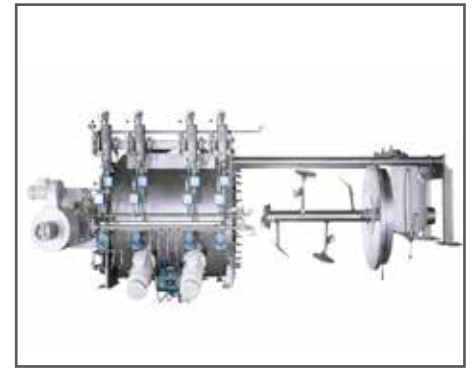
Total volume 130 l - 55000 l
Mixing shaft held on both sides



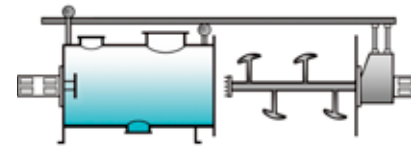
VT - E



Total volume 5 l - 2400 l
Mixing shaft held on one side

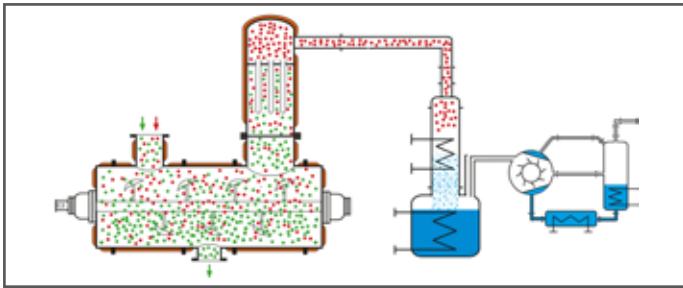


VT - A



Total volume 300 l - 8000 l
Mixing shaft held on both sides; removable

Machine Types



Configuration of a Vacuum Drying Unit

Range of Application

- End and intermediate pharmaceutical products
- Chemicals
- Recycling
- Different types of sludge
- Moulding, friction and fibre compounds
- Dyestuffs
- Plastics (fibre polymers)
- Agrochemicals
- Chemical specialities

DRUVATHERM® Shovel Dryer VT

Lödige DRUVATHERM® Shovel Dryers are batch-process vacuum dryers. The main shaft with shovels is regulated by frequency converter to achieve an optimal adjustment to the process. The special mixing elements rotate in the cylindrical drum, which is equipped with a heating/ cooling jacket, and generate a three dimensional movement of the product (mechanically generated fluid bed). The resultant frequent contact of particles with the heat transfer surface reduces the drying times to a minimum.

Mode of Operation

The product movement creates an intensive contact of individual product particles with the heated wall of the machine and at the same time treats the product as gently as possible. Rotating choppers, installed inside the drum, provide additional dispersion during possible product transition phases and are available as an option. Fine particles in the solvent vapours are collected by a pneumatically cleaned filter mounted on the machine and are returned to the product bed for drying.