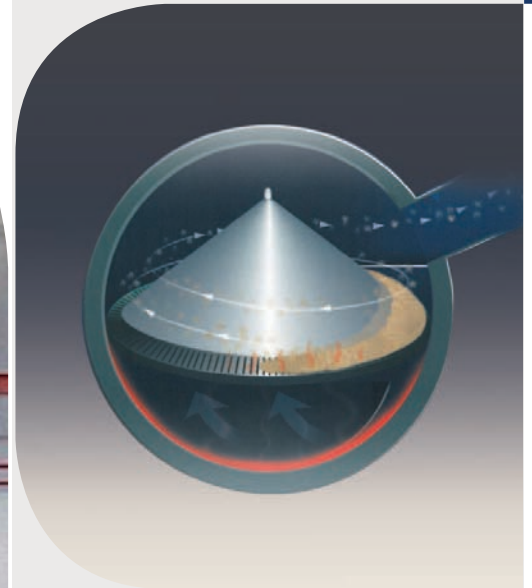
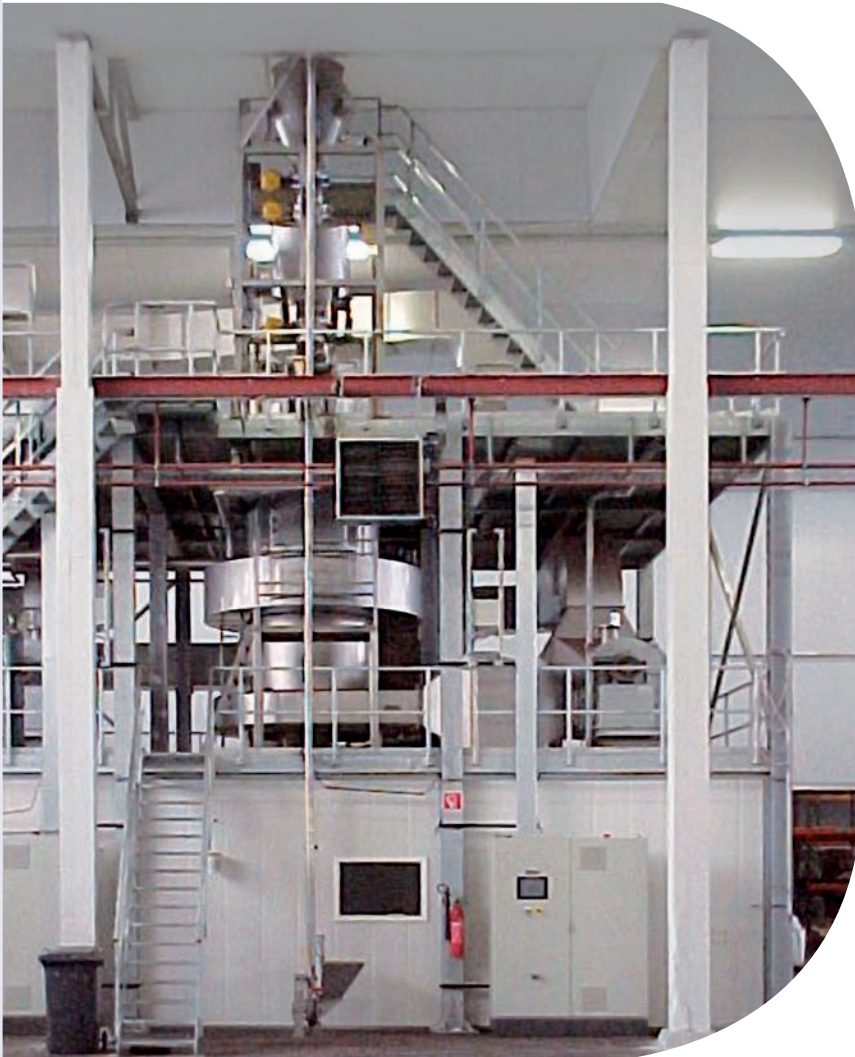


SPIRAL FLASH DRYER

Drying

Cooling



The Spiral Flash Dryer developed by Torftech is a highly efficient convective dryer which combines the advantages of a flash dryer with those of a fluidised bed. Short residence times combined with powerful turbulent flows ensure gentle product treatment, in addition to high evaporation speeds. Furthermore, it is possible to build exceptionally compact units thanks to the fast heat and mass transfer.

The Spiral Flash Dryer has further outstanding specifications: total absence of moving parts, easy maintenance, precise process control, and good thermal efficiency with heterogeneous products as well.

INGE Thermal processing solutions
TECSA

Working principle:

The product is fluidised by the drying air or gas injected at high speed through a blade ring. As the drying air is extracted it drags the dry product along.

The air movement in the drying chamber is toroidal and highly turbulent. The drying gas can be heated with combustion fumes.

Design Features:

- Capacities of a single unit range from 100 kg/h to more than 50,000 kg/h.
- Direct product feeding into the dryer, no intermediate storage is required.
- Compact construction resulting in: fewer thermal losses, less construction costs, and less civil works.
- Relatively short residence times.
- Easy access to processing chamber.
- Processing temperatures typically range from 80°C (heat-sensitive products) to over 600°C.
- Accurate control of moisture content and particle size.

Typical applications:

Powdery to fibrous bulk products, sludge, filter cakes, etc.



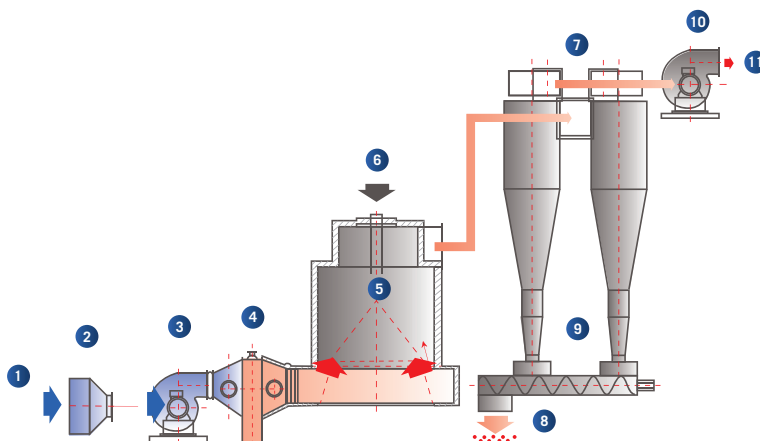
Food Industry

Starches

Products derived from corn, wheat, rice, soybeans and cereals

Highly efficient and compact equipment which combines the advantages of a flash dryer with those of a fluidised bed. Easy access to the processing chamber. Precise process control.

PFD OPERATION MODE OF A SPIRAL FLASH DRYER



- | | |
|------------------|-----------------------|
| 1. Air inlet | 7. Cyclones |
| 2. Inlet filter | 8. Dry product outlet |
| 3. Blower fan | 9. Discharge conveyor |
| 4. Heater | 10. Fumes fan |
| 5. Dryer | 11. Fumes outlet |
| 6. Product inlet | |



FREQUENT COMBINATIONS:

Cyclones, Combined Spiral Flash Dryer and Cooler, Multi-Chamber Cooler.