

FLASH DRYER / SPIN FLASH DRYER

Flash Drier offer an effective and efficient method of removal of surface or onbound moisture from a feed product. Flash Driers are pneumatic driers having very low residence time within the equipment, thus flashing off the moisture from the feed. They are used for efficient drying of moist powders, Slurries, filter cakes, granules, etc. They operate on varying throughput rates from few hundred kilograms per hour to hundreds of tons per hour. Low temperature dehumidified air could be used for heat sensitive products to hot gases with temperature upto 500 - 600 deg. C. for temperature resistant products.

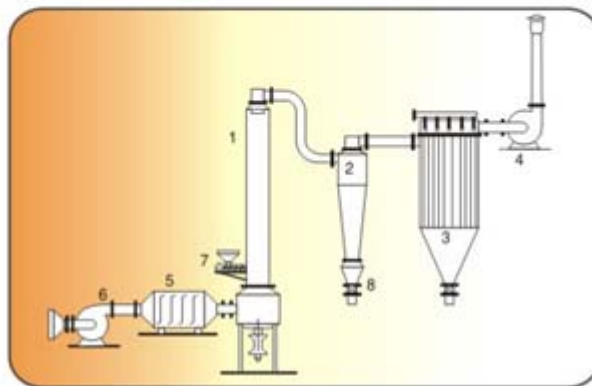
Hot air which is the drying media and subsequently the conveying media, is produced through a direct or indirect hot air generator. Various fuel options could be employed from solid fuels like wood, coal, lignite, etc. to liquid fuels like LDO, HSD, Furnace oil, etc. to gaseous fuels like coal gas, LPG, etc. or electrically operated heaters.

Flash Drying equipment comprises of the feeding section normally a screw feeder, rotary valve, vibratory feeder, etc. which feeds the wet product in a controlled fashion into the throat of the flash drier, where it is mixed with hot air produced by a hot air generator or heat exchanger. While conveying the product upward in the drying column, moisture is evaporated out and the dried product is separated from the air by primary separation devices like cyclone separators, and secondary devices like bag filters, scrubbers, electrostatic precipitators, etc. before being discharged from the system.

Simple Flash Driers cannot handle wet cake which is a slimy paste or gelatinous in nature. For drying of these type of products, specially designed disintegrators are incorporated with normal flash driers which disintegrate the product simultaneously while drying and dried product is conveyed to the separation devices by hot air. These driers are termed as SPIN FLASH DRIERS.



FLASH DRYER



SPIN FLASH DRYER

1. Spin Flash Duct
2. Cyclone
3. Bag Filter
4. Exhaust Fan
5. Heat Exchanger
6. Delivery Fan
7. Screw Conveyor
8. Rotary Valve