

## Application

The step dryer was especially designed for gentle drying of PET flakes. It is suitable for the separation of surface moisture from granulated plastics. Depending on



temperature, size und structure of the material it is possible to achieve a surface moisture of approx. 1– 2 percent of the material weight.

## Function

Through the pre-wash screw the flakes / water mixture is fed to the dryer. Inside the dryer the material is taken by a specially designed paddle rotor which transports the material through the cascade screen cage. In the beginning of the drying process there is only a slight acceleration of the material. Due to the diameter enlargement, the acceleration increases from step to step in order to spin-off the water particles. The special rotor and screen cage configuration ensures a gentle treatment of the material flakes, the fines are reduced to a minimum.

By airstream the dried material is discharged through an tangential discharge channel. The separated water and fines are discharged through the lower housing. A continuous cleaning device circuits around the outside of the screen cage and the inner wall of the housing.

## Construction characteristics

- Housing, rotor and screen cage are made of stainless steel
  - continuous cleaning device
- small mechanical strain, therefore less fines
  - low maintenance effort
  - optional screen cage design:
    - 1.) round ( for gentle material handling) or
    - 2.) polygonal ( for better cleaning results)

## Mechanical cleaning

The mechanical clearing is done by rubber strips which are mounted to two cleaning brackets which circuit around the screen cage. The outside of the screen cage and the inner wall of the housing are continuously cleaned. The cleaning brackets are driven by a gear motor.



## Various dryer types

### T 9/5:

Main drive : 18,5 kW  
Cleaning : 0,55 kW  
Throughput rate: up to 0,5 to/h

### T 15/5:

Main drive: 37 kW  
Cleaning : 0,75 kW  
Feed-screw: 2,2 kW  
Throughput rate: up to 2,2 to/h

### T 12/5:

Main drive: 30 kW  
Cleaning: 0,75 kW  
Feed screw: 2,2 kW  
Throughput rate: up to 1,2 to/h