

Continuous flow rack dryers

Tasks

Forplan continuous flow dryers are used for all types of heat treatment as well as drying and baking processes. Using customer-specific automated conveyor systems, products on racks are subjected to a defined, controlled temperature process. Continuous flow dryers are designed for drying solvent-based varnishes and coating materials according to EN1539.

Principle of operation

The products which are continuously or intermittently fed into the continuous flow dryer are heated via an air-circulation volume flow and then uniformly kept at temperature. Circulating air is directly or indirectly heated via electric heating elements, gas or oil burners.

Hot air is conveyed through air ducts and evenly distributed across the useful space in order to obtain the required temperature accuracy. In the course of this, the air-circulation volume flow is directed at high speed onto the product, which results in optimal heat transfer and, as a result, fast and effective heating.

Advantages

- Temperature accuracy by high air-circulation volume flow
- Intensive heat transfer and fast product heating through targeted, turbulent convective heat transfer
- High energy efficiency with low insulation and exhaust leakage
- Defined temperature control via freely programmable and parameterisable control sequences
- Customer-specific conveyor systems and automation solutions for high throughput rates
- Carrying racks can be customised
- Sturdy construction for continuous industrial use

Examples of use

- General drying processes in surface technology
- Evaporation and baking of zinc flake coatings
- Tempering and heat treatment processes of plastic components
- Curing of adhesives and resins
- Heat treatment of aluminium components
- Preheating and curing of composite materials

Range of components

- General bulk materials
- Fasteners such as screws, nuts and rivets
- Stamped and bent parts
- Springs
- Plastic components
- Aluminium components
- Composite materials, adhesive substances and grouting compounds

