

Fact Sheet: PEX-3210

System and process description

The PEX-3210 is a vacuum drying plant for the continuous production of crispy dried fruit and vegetable products. The unit consists of four chambers. The PEX-3210 is designed for industrial scale productions. In the 1st chamber the predried raw-material (15-30% moisture content) to be treated is heated in a tray by means of microwaves. When a product-specific temperature is reached, the treatment chamber is evacuated. The product is expanded by the steam that is now released below the atmospheric boiling point within the tissue. After a product-specific holding time for vacuum and corresponding temperature, the tray with the material to be dried is pushed into the 2nd chamber. Here, the product continues to be dried in a vacuum with the aid of infrared radiation to a residual moisture content of approx. 1-2% (depending on the product). After about half of the drying time, the product carrier is moved to the 3rd chamber. When the drying time has elapsed, the product is stabilised by cooling in the 4th chamber and then discharged.

The process is under IP protection.

Schematic drawing



Plant dimensions

L/W/H: 6700 mm x 4700 mm x 3800 mm (approx.)

Capacity of final product

All mass balances shown are based on an apple cube with 10 mm edge length and an input residual moisture content of 16-18%.

- average output (approx.): up to 20 kg/h
- average output (approx.): up to 140 t/y