

Fact Sheet: MIPEX-816

System and process description

The MIPEX-816 is a vacuum dryer unit for small-batch production of crispy dried fruit and vegetable products. The unit consists of two drying chambers.

In the 1st drying chambers the predried raw-material (15-30% moisture content) to be treated is heated in a product-tray by means of microwaves. When a product-specific temperature is reached, which is know-how to be explored for each raw-material, the camber is getting 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 drying chamber which has a capacity of 16 product-trays. Here, the product continues to be dried in a vacuum with the aid of infrared heating to a residual moisture content of approx. 1-2% (depending on the product) and is then stabilised by cooling to a temperature below 25°C.

The process is under IP protection.

Schematic drawing



Plant dimensions

L/W/H: 4250 mm x 1650 mm x 3800 mm (approx.)

Capacity of final product

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

- average output per batch (approx.): 40 kg up to 3.5 batches/d
- average output/year (approx.): 40 t/y up to 1050 batches/y