

Milk Powder Production Line

Production Line Description

Refer to milk powder, there are two types: one is full-fat milk powder , the other is skimmed milk powder .

for these two types of milk powder is also very different . normally , our design is based on request.

The milk production line can be applied to the production of various liquid milk, such as fresh milk, flavor milk, yoghurt beverage, yoghurt and lactobacillus beverage.

This small production line (300L/H-1000L/H) is characterized by reasonable design, compact and handsome layout, effective energy saving and simple operation and maintenance. Especially it can be employed in new product development equipments of small production enterprises and experiment and internship equipments of scientific research institutions and junior colleges.







Processing description

The line is mainly composed of water & powder mixer, double segment plate-type heat exchanger, high speed mixing tank, plate sterilizer (95° C, 300S, 125° C, 15S), heat preservation tank, homogenizer (25MPa), fermentation tank, high position tank, rotor pump and self-priming pump, spray drying, sifter and so on.

Detailed processing introduction

1. Water Treatment section:

Sand filter, Activated carbon filter, Water softener, Precision filter, Reverser osmosis filter, Electrical control system, UV filter, Water storage tank

2. Milk Receiving Section

Out door storage tank, Milk weight tank, Milk receiving tank, Temporary storage tank, Duplex filter, Milk Separator, Plate heat exchanger, Milk Storage Tank

3. Mixing Section

Hot water tank, Plate heat exchanger, Square high speed emulsification tank, Water-powder mixer, Mixing tank, Oilcan, Pipeline flow meter, Duplex Filer, Homogenizer

4. Concentration Section

Three-efficiency concentrating tower, Balance tank, Double sealed circulating pump, The single sealing health pump, Cooling water pump, Self-priming pump, Water ring vacuum pump, Cooling tower

5. Drying section

Concentrated milk tank, High-pressure pump, Spray-drying tower, Fluidized bed, Electric sieve, Milk powder groove

6. Packing Section

7. CIP Cleaning Section

Acid tank, Alkali tank, Hot water tank, Pleat heat exchanger, Cleaning pump

8. Compressor

Air compressor, Air filter, Air dryer, Air storage tank

9. Boiler section

Horizontal boile, Steam tank

10. Refrigeration section

Refrigeration machine, Ice water tank, Cooling tower, Ice water pump, Pipeline centrifugal pump



All the equipments and pipelines touching materials are made of stainless steel SUS304.

As to let customer control every data easily , normally , our control system is made with PLC +HMI .and main electrical components are from international brand.

The automatic control system of production line adopts German SPAIRAX SARCO pressure release valve, regulating valve and Danish TEMPRESS temperature transmitter which has the functions of high temperature alarm, low temperature influence and CIP automatic cleaning.

Other components besides the USA LOWARA hot water pump, such as control valve, meter and fittings, all employ the first-rate domestic equipments, ensuring that the production line control is accurate and stable and the output materials meet the requirements of the technological parameters.