

DYNAPITCH™

Yeast pitching

Application

DYNAPITCH™ is a process module for accurate and automatic pitching of yeast into cold wort prior to fermentation. The pitching operation is based on in-line volumetric measurement of yeast and/or viable measurement of yeast (optional).

Working Principle

In DYNAPITCH™, yeast is pitched according to the reading from the yeast flow meter and data input by the operator i.e. pitching rate, concentration in yeast slurry and amount of wort to be pitched. The unit automatically calculates and pitches the required amount of yeast.

Equipped with analyser instrument (optional), the concentration of the yeast slurry is measured by an in-line yeast monitor. Together with the yeast flow meter, this ensures that the correct amount of yeast is pitched.

For the purpose of measurement, a dead or non-viable yeast cell is defined as not possessing an intact (or complete) cell wall. Therefore, there is no build-up of charge across the cell wall and thus is not measured by the instrument.

The DYNAPITCH $^{\text{TM}}$ module is fully automatic with a PLC controlling the plant operation.

Some of the relevant process data displayed:

- Actual and set point pitching values
- Yeast line flow rate and pressure
- Controller settings
- Alarm status
- Accumulated yeast amount
- Selected yeast type
- Viable yeast cell concentration (optional)

Two modes of operation are possible:

- 1. "BATCH PITCHING" where yeast is batch pitched into the wort during a period of the wort run.
- 2. "CONTINUOUS PITCHING" where yeast is pitched continuously during the complete wort run. For this mode, a flow meter in the wort line is necessary. (Optional)

Basic Unit

The unit is self-contained and factory preassembled on a frame. In compliance with food industry regulations, all components in contact with the process liquids are made of stainless steel with heat resistant seals. It is designed for CIP.



Benefits

- Automatic pitching
- Up to 5 yeast strains can be handled
- Static mixer
- Special double seat valve
- Compact and sanitary design
- Viable in-line yeast measurement

Technical Data

Capacity ranges, hl/h: D3 - 200 to 400

D4 - 400 to 600 D5 - 600 to 1000 D6 - 1000 to 1200

Yeast conc. range:

106 to 2 x 109 cells/ml

(depending on cell size)

Repeatability deviation:

< + 2% with analyser

Pitching rates:

8 to 30 x 106 cells/ml wort

Dimensions (mm)

L = 1.6 m W = 0.8 m H = 1.8 m

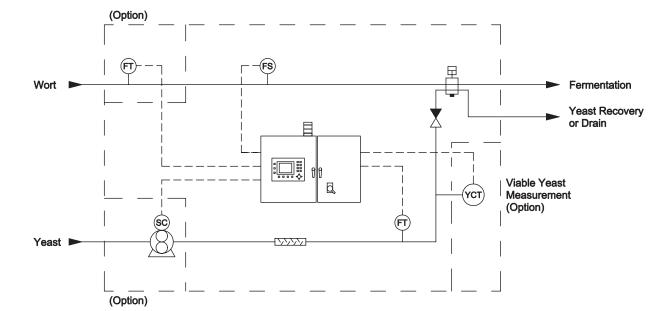
Weight: approx. 350 kg

Optional Equipment

- Yeast pitching pump
- Wort line flow meter
- Frequency controller for yeast pump
- \bullet Wort aeration system AEROPITCH $^{\!\scriptscriptstyle{\text{TM}}}$

(see separate PD leaflet)

- Communication with other control systems
- Pitching based on viable yeast measurement



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