

# Alfa Laval SCANDI BREW® Yeast propagation plant

# Yeast propagation

# Introduction

For batch-wise or continuous propagation of yeast culture. The propagation plant requires inoculation with laboratorypropagated yeast at each propagation. Inoculation via Carlsberg Flask is foreseen.

#### Application

For yeast propagation under sterile conditions within the brewing industry for the purpose of renewing the yeast supply.

#### Design

The SCANDI BREW<sup>®</sup> Yeast propagation plant consists of a specially designed and manufactured propagation vessels with a unique top plate design comprising all the necessary equipment for complete hygienic operation such as pressure regulator, pressure relief valve, anti-vacuum valve, level probe and aeration lance with air dissolver or for larger tanks sanitary hollow shaft mixer. The plant is pre-assembled and dry tested before dispatch.

Working capacities are customized.

Degree of automation ranges from semi-automatic to fully automatic.

# **Benefits**

- Aeration device for unstressed yeast with maximum vitality and viability
- All process valves and fittings are uniquely designed for propagation
- Low energy consumption
- A reliable and safe supply of uninfected, freshly propagated yeast
- Easy operation and well proven technology
- Flexibility for propagation of different strains of yeast when needed.

# Working principles

After CIP and steam sterilisation, the propagation vessel is filled with hot or cold wort. Wort is then sterilised by means of the heating jacket on the cone and thereafter cooled by means of the cooling jacket on the cylindrical part. Before inoculation, the wort is aerated with sterile air. The vessel is hereafter inoculated with pure yeast culture from a Carlsberg Flask under sterile and aseptic conditions.



During propagation, temperature is maintained at a set level and the propagating yeast is aerated according to the particular strains requirement.

When the yeast has reached the required cell concentration, it is pitched into an intermediate fermenter or directly into a wort transfer to a fermenter.

**Cleaning:** Before any operation or transport all lines are flushed with water and steam sterilised. The plant is cleaned from an integrated or external CIP plant.

**Mounting:** The plant is pre-assembled and dry tested before dispatch. It is marked for easy assembly at the brewery according to enclosed manuals.

**Maintenance:** The valves should be checked, and gaskets changed at regular intervals. The filter insert is to be replaced every 2 years, as a minimum.

# Options

- Integrated CIP plant
- Carlsberg Flask
- Hygienic yeast mixer
- Steam reduction station

#### **Dimensional drawing**

Dimensions m (inches): L 5 (196) x W 3 (118) x H 5 (196)



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