



SCANDI BREW® Single vessel yeast propagation plant

Yeast propagation

Application

For batch-wise propagation of yeast culture under sterile conditions with the purpose of renewing the yeast supply. The single vessel propagation plant requires inoculation with laboratory-propagated yeast at each propagation. Inoculation via Carlsberg Flask is foreseen.

Construction

The plant consists of a specially designed and manufactured propagation vessel with a unique top plate comprising all the necessary equipment for complete sanitary operation such as pressure regulator, pressure relief valve, anti-vacuum valve, level probe and aeration lance with air dissolver or for larger tanks hollow shaft mixer. The plant is pre-erected in the workshop and dry tested before dispatch, making local erection very easy and simple. The plants are only supplied as turnkey modules.

Standard working capacities up to 100 hl working volume. The plant can be supplied with an integrated CIP-station.

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

Operation

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 brew in a fermenter.



Benefits

- *Aeration device for unstressed yeast with maximum vitality and viability*
- *All process valves and fittings are uniquely designed for propagation*
- *Lower investment cost compared to multi vessel plants*
- *A reliable and safe supply of uninfected, freshly propagated yeast*
- *Easy operation and well proven technology*
- *Flexibility for propagating different strains of yeast when needed*
- *Batch process to match one brew without internal plant transfers*

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-erected and dry tested before dispatch.

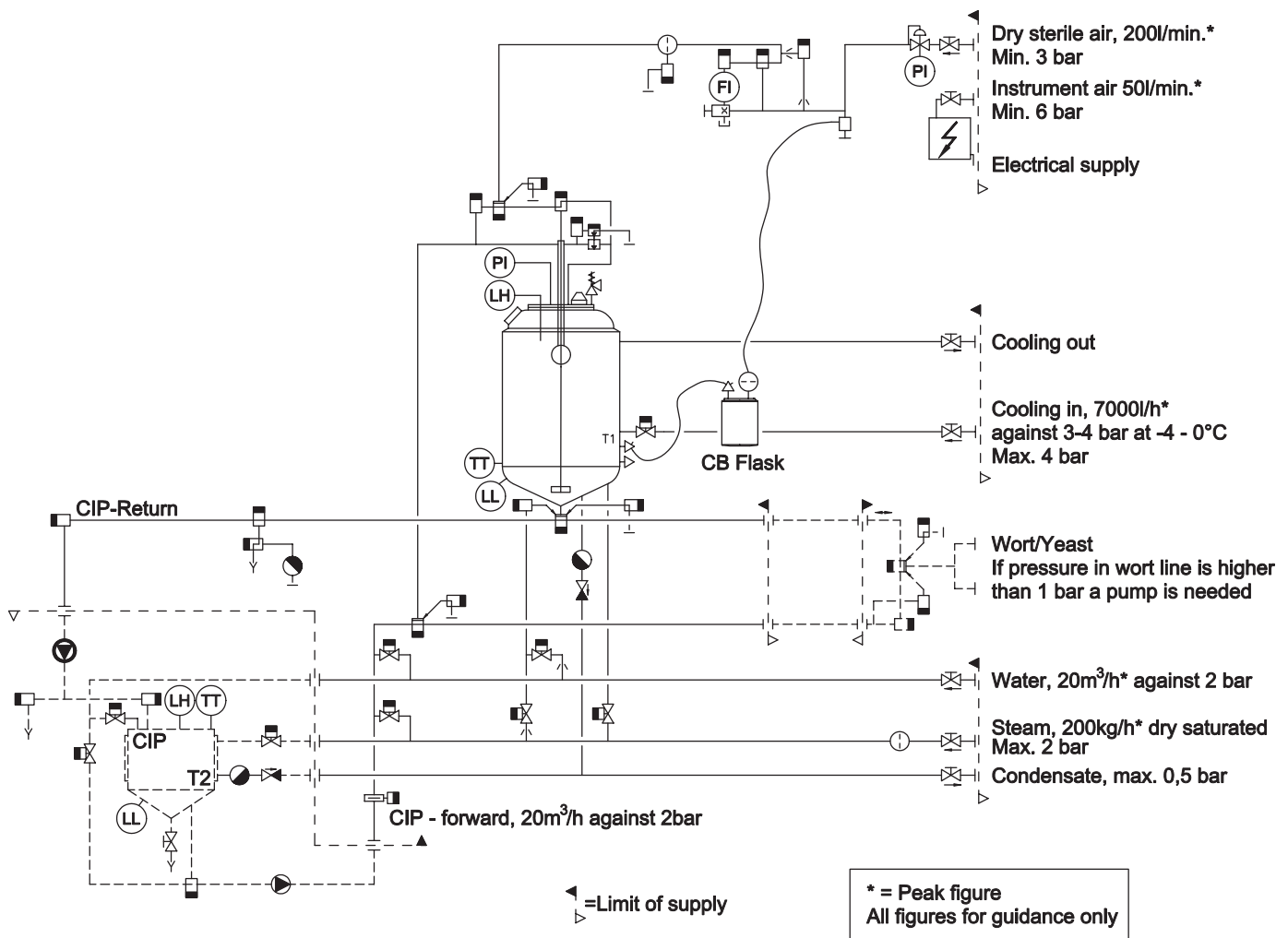
It is marked in our workshop for easy assembly at the brewery according to enclosed manuals.

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.

Extra Equipment

- Integrated CIP plant
- Carlsberg Flask
- Hygienic yeast mixer
- Connection to wort line by flow panel or mix-proof valve
- Pitching pump for in-line dosing
- Equipment for intermediate fermenting vessel
- Steam reduction station
- Additional filters for sterile filtration of air



How to contact Alfa Laval

Contact details for all countries are continually updated on our website. Please visit www.alfalaval.com to access the information direct.