

Alfa Laval Alhop dry hopping system

Dry hopping

Introduction

Alhop dry hopping system is a stand-alone unit for breweries that accelerates and facilitates the dry hopping/cold hopping process.

Application

The Alhop unit covers the four main stages of the dry hopping process:

- Introduction of hop pellets
- Disaggregation
- Aroma and flavour extraction
- Separation of hop solids

The cross-flow based technology also allows for alpha acids recovery.

Benefits

- Enhanced yield and reduced use of hops
- Fast and efficient extraction rate owing to dynamic aditation
- High product throughput with no risk of clogging due to the cross-flow process
- Minimal introduction of hop solids into the tank enabling yeast harvesting
- Reduced product losses
- Automatic process and CIP
- Avoid hop creep
- Allows biotransformation

Working principle

After introducing hop pellets into the Alhop system, the hops get disaggregated in the beer and are kept homogenized by means of a cross-flow recirculation loop. The Alhop system is then continuously fed with feed beer, while dry-hopped beer discharges continuously through the designated strainer.

Once the extraction process is complete, the dry-hopped beer trapped in the system can be recovered by a concentration and diafiltration process.

To recover alpha acids, the hop slurry is washed off with deaerated water (DAW) until it becomes a pumpable suspension of hops in DAW.



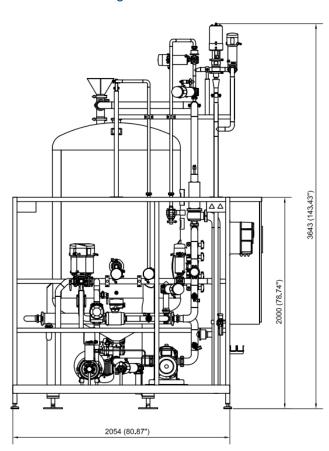
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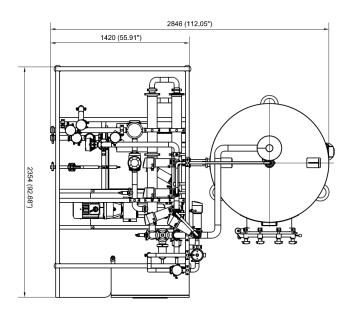
- CO² recovery after tank flush
- Spent hops handling
- CIP return pump
- Hops addition with conveyor

Technical data

Capacity range, hop pellets per batch in kg (lbs)	50 (110), 100 (220), 200 (440), 500 (1100)
Recirculation flow rate	15–200 hl/h
Processing time, recipe dependent	2-12 hours
Approximate dimensions depending on capacity, e.g. 200 kg (440 lbs) LxWxH in mm (in)	2850 (112) x 2350 (93) x 3650 (144)

Dimensional drawing





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