

Microbrewery Equipment specifications

Here' s a detailed specifications table for typical microbrewery equipment:

Component	Specifications
Brewhouse	<p>Capacity: 3 BBL - 30 BBL (Barrels)</p> <p>Configuration: 2-Vessel (Mash/Lauter Tun + Kettle/Whirlpool) or 3-Vessel (with separate Mash and Lauter Tuns)</p> <p>Material: Stainless Steel 304 or 316</p> <p>Heating Method: Electric, Steam, or Direct Fire</p> <p>Control System: Semi-automatic or fully automated PLC control with touchscreen interface</p>
Mash/Lauter Tun	<p>Volume: Corresponds to brewhouse capacity, typically 10-20% higher</p> <p>Rake System: Motorized with variable frequency drive (VFD)</p> <p>False Bottom: Stainless steel, removable</p> <p>Insulation: Polyurethane foam, 80-100mm thick for heat retention</p>
Kettle/Whirlpool	<p>Volume: Slightly higher than brewhouse capacity</p> <p>Heating: Steam jacketed or direct fire with burners</p> <p>Whirlpool: Tangential inlet for effective trub separation</p> <p>Insulation: Polyurethane foam, 80-100mm thick</p>
Fermentation Tanks	<p>Capacity: 1.5 - 2 times brewhouse capacity</p> <p>Material: Stainless Steel 304 or 316</p> <p>Cooling Jacket: Glycol jacket with multiple zones</p> <p>Pressure Rating: Designed for 1-2 bar operating pressure</p> <p>Features: CIP spray ball, racking arm, sampling valve, pressure relief valve</p>
Bright Beer Tank	<p>Capacity: Typically matches the brewhouse or fermenter capacity</p> <p>Material: Stainless Steel 304 or 316</p> <p>Cooling Jacket: Glycol jacket</p>

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	<p>Carbonation: Carbonation stone included</p> <p>Features: Pressure gauge, temperature probe, CIP spray ball</p>
Heat Exchanger	<p>Type: Plate heat exchanger</p> <p>Capacity: Sized to match brewhouse output</p> <p>Material: Stainless steel plates with gaskets</p> <p>Function: Rapidly cools wort from boiling to fermentation temperature</p>
Glycol Chiller	<p>Capacity: Sized according to the number of fermentation and bright tanks</p> <p>Refrigerant: Glycol-water mix</p> <p>Cooling Power: Varies based on system size; typically 2-5 HP for microbreweries</p>
Pumps	<p>Wort Pump: Stainless steel, sanitary design, typically 1-2 HP</p> <p>CIP Pump: Stainless steel, sanitary, with high flow rate for cleaning cycles</p> <p>Glycol Pump: Designed to circulate glycol through cooling jackets</p>
CIP (Clean-In-Place) System	<p>Components: CIP pump, spray ball, CIP tank (for cleaning solution)</p> <p>Material: Stainless steel for all contact surfaces</p> <p>Automation: Can be integrated with PLC control for automated cleaning cycles</p>
Control System	<p>Type: PLC with touchscreen interface</p> <p>Functions: Controls temperature, pump operations, heating elements, and provides real-time monitoring</p> <p>Emergency Stop: Integrated for safety</p>
Piping and Valves	<p>Material: Stainless Steel 304/316</p> <p>Fittings: Sanitary tri-clamp</p> <p>Valves: Butterfly, ball, and check valves depending on application</p> <p>Features: Sight glasses, flow meters for monitoring</p>
Grain Handling Equipment	<p>Grain Mill: Adjustable roller mill for crushing malt</p> <p>Capacity: 500-1000 kg/hr</p> <p>Material: Stainless steel or cast iron rollers</p>

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	Grain Hopper: For storing and feeding milled grain to mash tun
Keg Handling Equipment	Keg Washer: Semi-automatic or fully automated for cleaning kegs Keg Filler: Manual or automated system for filling kegs with beer Couplers: Compatible with standard keg types (D, S, U, etc.)
Packaging Equipment	Bottle Filler: Manual or semi-automatic for filling bottles Bottle Capper: Semi-automatic or automatic for sealing bottles Can Seamer: Semi-automatic or automatic for sealing cans
Filtration Equipment	Type: Plate filter, cartridge filter, or membrane filter Capacity: Sized to match brewhouse output Material: Stainless steel housing with replaceable filter elements
Miscellaneous Equipment	Hoses: Sanitary-grade, food-safe hoses for liquid transfer Flow Meters: Digital or mechanical, installed inline for accurate measurement Thermometers and Sensors: Digital, with remote monitoring capabilities
Installation Requirements	Space Needed: Typically 300-1000 sq. ft. depending on system size Utilities: Electrical (208-240V, 3-phase), water supply, drainage, steam supply (if steam-heated) Flooring: Non-slip, chemical-resistant, with proper drainage
Warranty and Support	Warranty: Typically 1-2 years on major components Support: Installation support, operator training, and after-sales service

This table provides an overview of the specifications for microbrewery equipment, covering the essential components, features, and requirements needed to set up and operate a microbrewery effectively.

