

Standard Operating Procedure for BrewMaster 3000

## Reference Number: SOP-BM3000-01

## Version: 1.0

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# 1. Scope and Applicability:

This SOP covers the operation, maintenance, and safety procedures for the BrewMaster 3000, suitable for use in commercial breweries and advanced home-brewing setups.

# 2. Method Summary:

The BrewMaster 3000 employs a semi-automated brewing process, integrating temperature control, ingredient mixing, fermentation monitoring, and sanitation protocols.

# 3. Definitions:

- Wort: The liquid extracted from the mashing process during brewing.  
- Sparging: The process of rinsing milled grains to extract sugars.

# 4. Health & Safety Warnings:

- Caution against exposure to high temperatures and steam.  
- Precautions for handling brewing ingredients to prevent allergic reactions.

# 5. Personnel Qualifications/Responsibilities:

Operators must have basic brewing knowledge and safety training, responsible for ingredient preparation, system operation, and maintenance.

# 6. Equipment and Supplies:

The BrewMaster 3000, fermentation tanks, grain mill, hops and grains, yeast, water filtration, and cleaning agents.

# 7. Detailed Procedure Steps:

A step-by-step guide from ingredient preparation to final product storage.

# 8. Data and Records Management:

Maintaining logs of brewing sessions including ingredient batches and quality control results.

# 9. Quality Assurance/Quality Control:

Routine calibration of sensors, system sanitation, and product quality checks.

# 10. References:

- 'The Brewer's Handbook' by Ted Goldammer  
- 'Understanding Brewing Science' by Dr. Michael Mosher

# 11. Administrative Procedures:

Overview of procedures for supply ordering, brewing scheduling, and inventory management.

# 12. Criteria/Checklists:

Checklists for supply ordering, equipment checks, and post-brewing cleanup.

# 13. Version Control:

Annual review or upon significant changes to the BrewMaster 3000, with documentation of updates.