

Blichmann 2-Vessel Nano Pilot Brewery

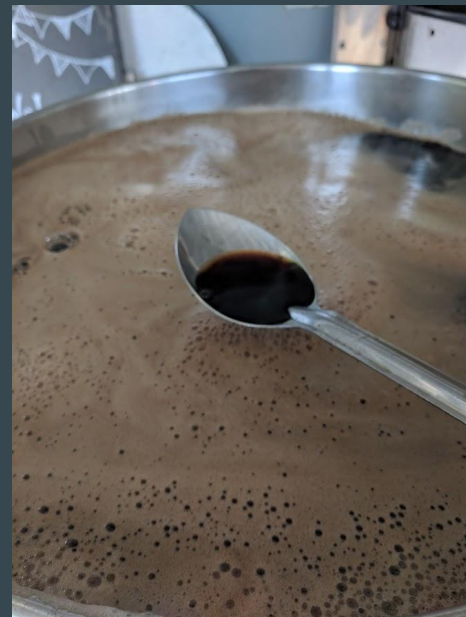
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Minimum Steel, Maximum Possibilities

Requirements

Needed the smallest alternative to my 30-gallon group brewing system that would fit the following criteria:

1. Batch size needed be 6-7 gallons
2. Electric, 120V throughout
3. Stainless Steel construction
4. RIMS System (Recirculating Infusion Mash System)
5. Could utilize Blichmann components that I owned
6. Minimized hose changing and the associated mess
7. Could accommodate from 1.030 to 1.100+ gravities
8. Could fit on a small stainless steel cart



30-gallon System

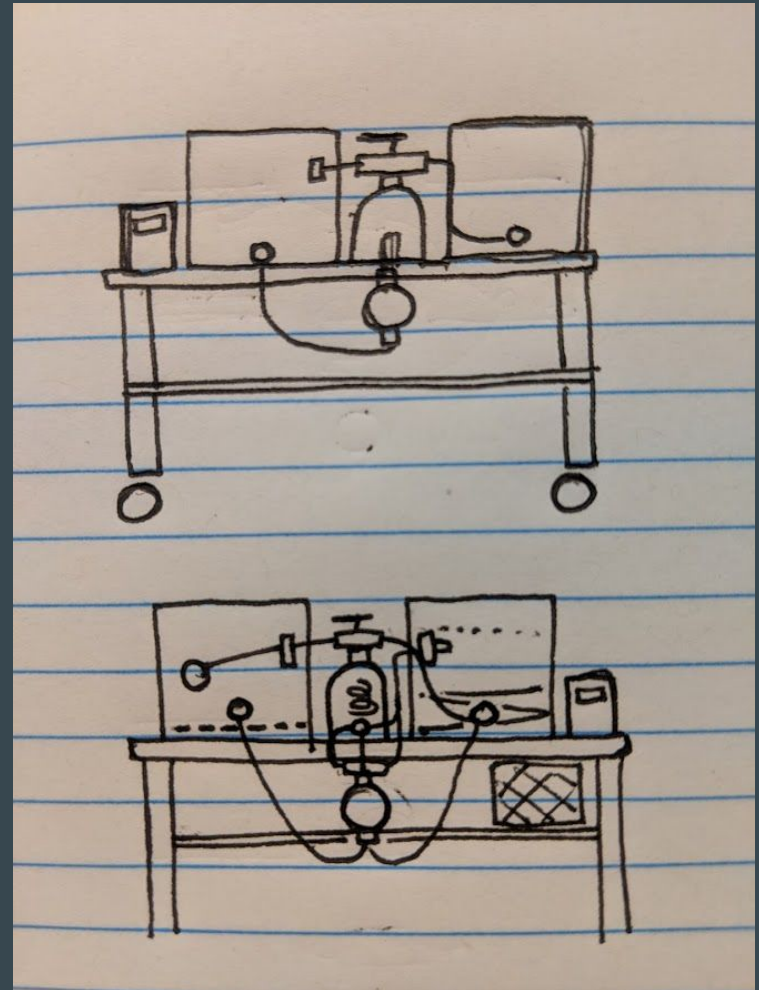
Inspiration

- Blichmann 1BBL 2-Vessel
- Pilot brewing system
- Needs access to hot liquor



Planning

- Which components were essential?
- Which were not essential?
- Which paths for work?
- How could I avoid hose changes?
- Where would components go?
- How would RIMS Rocket mount?
- How would I chill?
- How would it affect efficiency?
- Draw up potential configurations...

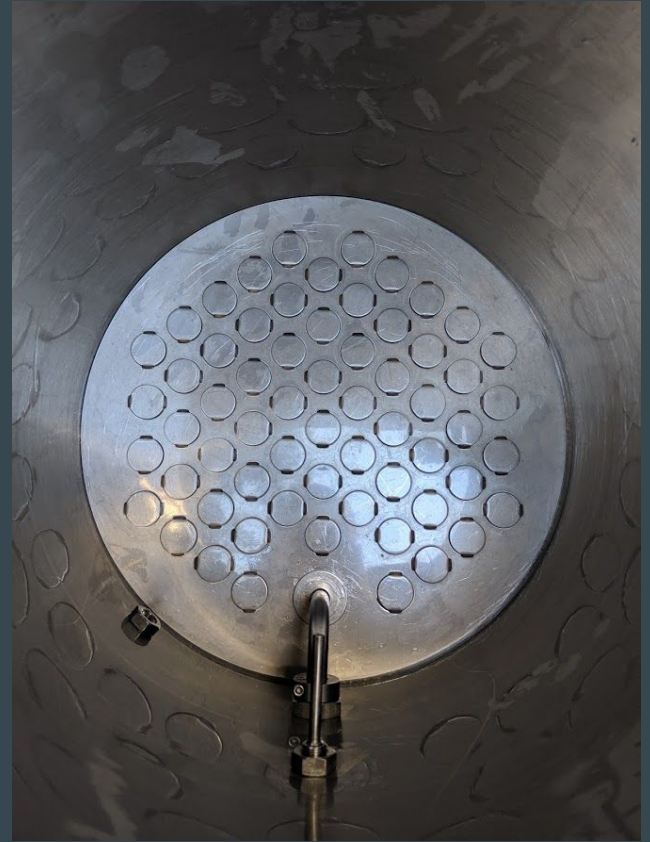


Final Components

1. Blichmann 10-gallon mash tun
2. Blichmann 120V 10-gallon electric boil kettle, whirlpool and racking arms
3. Blichmann RIMS Rocket
4. Blichmann Riptide Pump
5. Blichmann 12V Power Control Module
6. Stainless steel cart
7. Stainless steel 3-way valve
8. Stainless steel immersion chiller
9. Silicone tubing and other fittings
10. **NO Hot Liquor Tank** (decided to use sous vide to heat hot liquor in pot or bucket to save space)
11. **NO Stuck Mash Alarm** (this is a risk, may add an alarm at some point)

Mash Tun

- Blichmann false bottoms work wonderfully
- Built like a tank
- Easy to clean



Boil Kettle

- No scorching with the Boil Coil
- Added whirlpool arm assembly
- Rotating racking arm for trub/hops separation
- Heats wort from mash to boil in ~30mins
- Would be faster at 220V...
- But 120V is more convenient



RIMS Rocket

- No scorching
- Easy to clean
- Mountable 3-way valve
- Installs into table



Riptide Pump

- Easy to clean
- Virtually silent
- Stainless head



Power Control Module

- PID Controller
- Automated temp control
- Used for both mash and boil
- New version has mash profiles



Temperature Sensor (Control Module)

- Sensor for PID feedback loop
- Sits 6" from RIMS Rocket
- Similar location to Blichmann Pilot



Stainless Steel Cart

- Big enough to hold the equipment
- Custom laser cut by Nando
- RIMS Rocket mounts into top surface



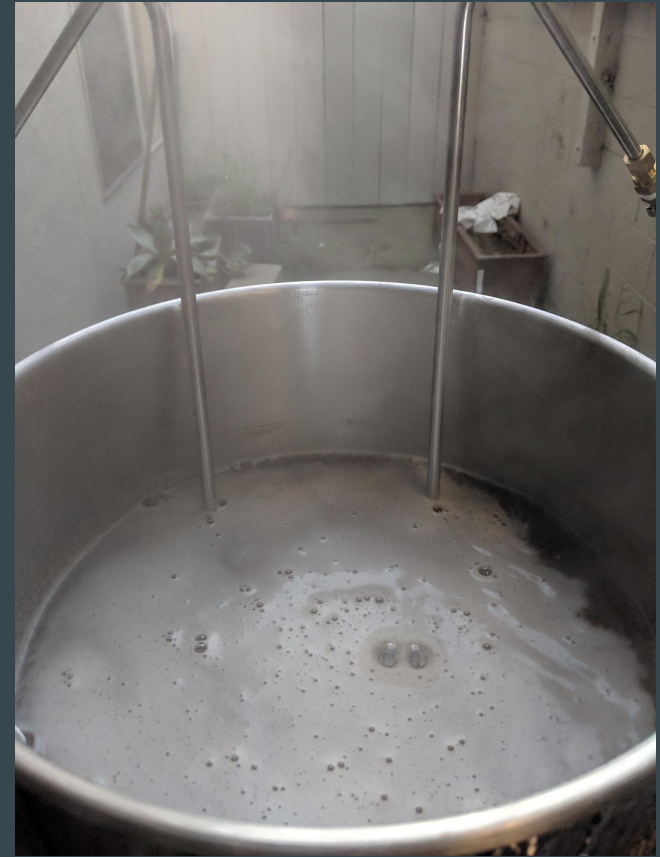
3-Way Valve

- Stainless steel
- ½" NPT threaded
- One position for RIMS mashing
- Other position for diverting to kettle

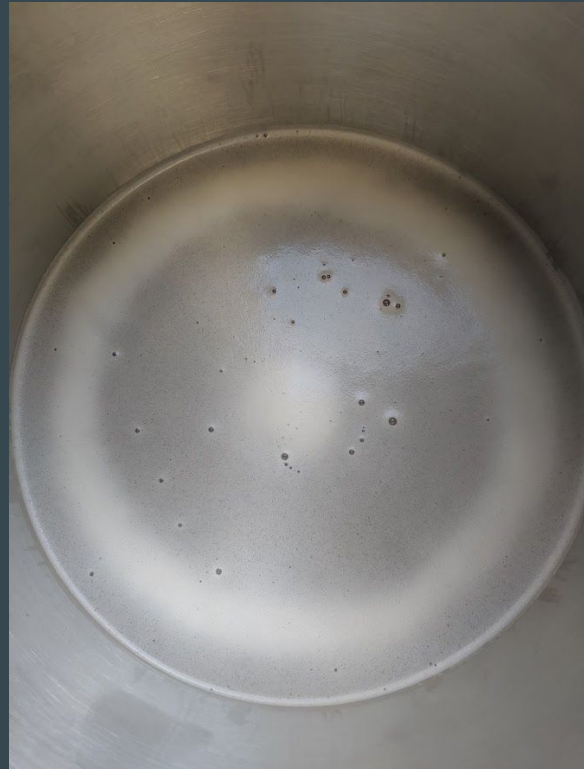


Immersion Chiller

- Fits perfectly inside Boil Coil
- Chills fast with whirlpool arm
- 50' length
- Easy cleaning



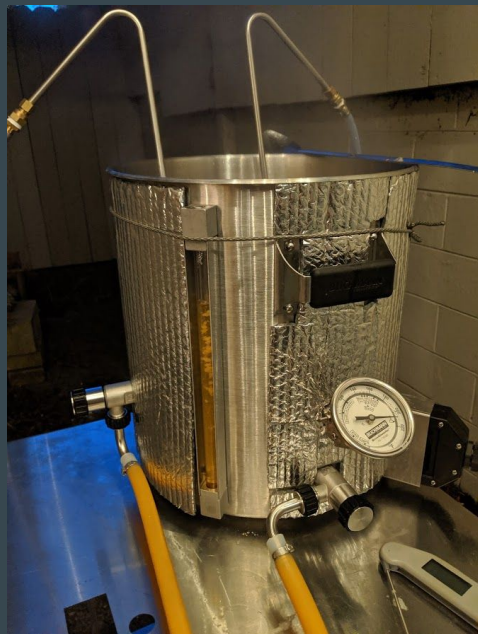
Action Shots



Action Shots



Action Shots



Cheers!

