

Jack Hammer

- Gravity **16.6 BLG**
- ABV **7 %**
- IBU **150**
- SRM **6.1**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22 liter(s)**
- Boil time **80 min**
- Evaporation rate **10 %/h**
- Boil size **27.2 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **21 liter(s)**
- Total mash volume **28 liter(s)**

Steps

- Temp **65 C**, Time **75 min**

Mash step by step

- Heat up **21 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **75 min** at **65C**
- Sparge using **13.2 liter(s)** of **76C** water or to achieve **27.2 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Briess - Pale Ale Malt	7 kg (100%)	80 %	7

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Centennial	25 g	60 min	10.5 %
Boil	Columbus/Tomahawk/Zeus	30 g	50 min	15.5 %
Boil	Centennial	50 g	30 min	10.5 %
Boil	Columbus/Tomahawk/Zeus	18.75 g	30 min	15.5 %
Boil	Centennial	50 g	10 min	10.5 %
Boil	Columbus/Tomahawk/Zeus	25 g	10 min	15.5 %
Dry Hop	Amarillo	100 g	4 day(s)	9.5 %
Dry Hop	Citra	100 g	4 day(s)	12 %
Dry Hop	Simcoe	100 g	4 day(s)	13.2 %

Yeasts

Name	Type	Form	Amount	Laboratory
Wyeast - American Ale	Ale	Liquid	200 ml	Wyeast Labs