Stout II

- Gravity **12.6 BLG**
- ABV **5.1 %**
- IBU **40**
- SRM **38.1**

Batch size

- Expected quantity of finished beer **38 liter(s)**
- Trub loss **5 %**
- Size with trub loss **39.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **7 %/h**
- Boil size **45.6 liter(s)**

Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **30.1 liter(s)**
- Total mash volume **38.7 liter(s)**

Steps

- Temp **67 C**, Time **40 min**
- Temp **72 C**, Time **30 min**
- Temp **76 C**, Time **0 min**

Mash step by step

- Heat up **30.1 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **40 min** at **67C**
- Keep mash **30 min** at **72C**
- Keep mash **0 min** at **76C**
- Sparge using **24.1 liter(s)** of **76C** water or to achieve **45.6 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	6 kg *(69.8%)*	80 %	5
Grain	Weyermann - Carafa I	0.5 kg *(5.8%)*	70 %	690
Grain	Chocolate Thomas fawcet	0.5 kg *(5.8%)*	60 %	1100
Grain	Jęczmień palony	0.6 kg *(7%)*	55 %	985
Grain	Płatki jęczmienne	1 kg *(11.6%)*	85 %	3

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Challenger	80 g	60 min	7 %
Aroma (end of boil)	Fuggles	50 g	15 min	4.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
US 05	Ale	Slant	250 ml	---