

## Stout 12,2

- Gravity **12.1 BLG**
- ABV ---
- IBU **30**
- SRM **29.8**
- Style **Dry Stout**

### Batch size

- Expected quantity of finished beer **1000 liter(s)**
- Trub loss **5 %**
- Size with trub loss **1050 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **1265 liter(s)**

### Mash information

- Mash efficiency **88 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **726.3 liter(s)**
- Total mash volume **933.8 liter(s)**

### Steps

- Temp **68 C**, Time **30 min**
- Temp **72 C**, Time **30 min**
- Temp **76 C**, Time **10 min**

### Mash step by step

- Heat up **726.3 liter(s)** of strike water to **74.9C**
- Add grains
- Keep mash **30 min** at **68C**
- Keep mash **30 min** at **72C**
- Keep mash **10 min** at **76C**
- Sparge using **746.2 liter(s)** of **76C** water or to achieve **1265 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale	150 kg (72.3%)	80 %	5
Grain	Viking Monachijski typ II	30 kg (14.5%)	79 %	22
Grain	Czekoladowy Crisp	10 kg (4.8%)	--- %	1000
Grain	Jęczmień palony Fawcett	17.5 kg (8.4%)	--- %	985

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka 2016	1650 g	60 min	8.2 %

### Yeasts

Name	Type	Form	Amount	Laboratory
FM13 Irlandzkie Ciemności	Ale	Liquid	1500 ml	Fermentum Mobile

### Extras

Type	Name	Amount	Use for	Time
Herb	Mięta świeża	750 g	Boil	5 min