

Bock

- Gravity **16.8 BLG**
- ABV **7.1 %**
- IBU **29**
- SRM **17.1**
- Style **Traditional Bock**

Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **29 liter(s)**

Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **21 liter(s)**
- Total mash volume **28 liter(s)**

Steps

- Temp **63 C**, Time **30 min**
- Temp **72 C**, Time **40 min**

Mash step by step

- Heat up **21 liter(s)** of strike water to **70.2C**
- Add grains
- Keep mash **30 min** at **63C**
- Keep mash **40 min** at **72C**
- Sparge using **15 liter(s)** of **76C** water or to achieve **29 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Wiedeński	2 kg (28.6%)	79 %	10
Grain	Strzegom Monachijski typ I	3 kg (42.9%)	79 %	16
Grain	Strzegom Monachijski typ II	1 kg (14.3%)	79 %	22
Grain	Strzegom Karmel 150	0.3 kg (4.3%)	75 %	150
Grain	Viking melanoidynowy	0.5 kg (7.1%)	75 %	60
Grain	Strzegom Karmel 600	0.2 kg (2.9%)	68 %	601

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	20 g	60 min	12 %
Boil	Tradition	35 g	20 min	5.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
Oslo	Ale	Slant	50 ml	---