

## #12 Rauchbock

- Gravity **16.6 BLG**
- ABV ---
- IBU **29**
- SRM **20.1**
- Style **Traditional Bock**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18.3 liter(s)**
- Total mash volume **24.4 liter(s)**

### Steps

- Temp **52 C**, Time **15 min**
- Temp **67 C**, Time **10 min**
- Temp **71 C**, Time **50 min**

### Mash step by step

- Heat up **18.3 liter(s)** of strike water to **57.3C**
- Add grains
- Keep mash **15 min** at **52C**
- Keep mash **10 min** at **67C**
- Keep mash **50 min** at **71C**
- Sparge using **13.1 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	2 kg (32.8%)	81 %	4
Grain	Monachijski	2 kg (32.8%)	80 %	16
Grain	Casle Malting Whisky Nature	1 kg (16.4%)	85 %	4
Grain	Biscuit Malt	0.4 kg (6.6%)	79 %	45
Grain	Melanoiden Malt	0.3 kg (4.9%)	80 %	39
Grain	Strzegom Karmel 150	0.2 kg (3.3%)	75 %	150
Grain	Caraaroma	0.2 kg (3.3%)	70 %	400

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Sybilla	25 g	20 min	3.5 %
Aroma (end of boil)	Saaz (Czech Republic)	20 g	5 min	4.5 %
Boil	Iunga	20 g	50 min	11 %

### Yeasts

Name	Type	Form	Amount	Laboratory
FM31 Bawarska Dolina	Lager	Liquid	30 ml	---

### Extras

Type	Name	Amount	Use for	Time
Fining	mech	5 g	Boil	20 min