

ciemny maniek

- Gravity **19.6 BLG**
- ABV **8.6 %**
- IBU **44**
- SRM **73.8**
- Style **Foreign Extra Stout**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.4 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **10.2 liter(s)**
- Total mash volume **13.6 liter(s)**

Steps

- Temp **66 C**, Time **75 min**
- Temp **76 C**, Time **10 min**
- Temp **72 C**, Time **5 min**

Mash step by step

- Heat up **10.2 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **75 min** at **66C**
- Keep mash **5 min** at **72C**
- Keep mash **10 min** at **76C**
- Sparge using **19.6 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Liquid Extract	WES ekstrakt słodowy jasny	1.5 kg (22.4%)	80 %	---
Adjunct	laktoza	0 kg	--- %	---
Grain	Strzegom pszenica prażona	0.3 kg (4.5%)	70 %	1000
Grain	Jęczmień palony	0.3 kg (4.5%)	70 %	985
Grain	słód czekoladowy	0.3 kg (4.5%)	--- %	1200
Grain	Casle Malting Whisky Nature	2 kg (29.9%)	85 %	4
Liquid Extract	ekstrakt słodowy ciemny Bruntal	1.5 kg (22.4%)	90 %	621
Grain	Słód pszeniczny Bestmalz	0.5 kg (7.5%)	82 %	5
Adjunct	Strzegom Czekoladowy ciemny	0.3 kg (4.5%)	68 %	1200

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Chinook	40 g	60 min	13 %

Aroma (end of boil)	Chinook	10 g	5 min	13 %
Dry Hop	Chinook	50 g	---	13 %

Yeasts

Name	Type	Form	Amount	Laboratory
FM53 Voss kveik	Ale	Slant	300 ml	FM

Extras

Type	Name	Amount	Use for	Time
Spice	laska vanili	1 g	Secondary	7 day(s)
Flavor	płatki dębowe burbon macerowane	25 g	Secondary	7 day(s)