Koźlak

- Gravity **15.4 BLG**
- ABV **6.5 %**
- IBU **25**
- SRM **13.8**
- 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 **18.9 liter(s)**
- Total mash volume **25.2 liter(s)**

Steps

- Temp **65 C**, Time **30 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **1 min**

Mash step by step

- Heat up **18.9 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **30 min** at **65C**
- Keep mash **30 min** at **72C**
- Keep mash **1 min** at **78C**
- Sparge using **12.7 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	3.5 kg *(55.6%)*	80 %	4
Grain	Strzegom Monachijski typ II	2 kg *(31.7%)*	79 %	22
Grain	Special B Malt	0.3 kg *(4.8%)*	65.2 %	315
Grain	Biscuit Malt	0.2 kg *(3.2%)*	79 %	45
Grain	Viking Melanoidynowy	0.3 kg *(4.8%)*	75 %	60

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Hersbrucker	35 g	60 min	3 %
Boil	Marynka	15 g	60 min	10 %

Yeasts

Name	Type	Form	Amount	Laboratory
Saflager W 34/70	Lager	Slant	250 ml	Fermentis