

# Bock Express

---

- Gravity **14.5 BLG**
- ABV **6 %**
- IBU **21**
- SRM **17.6**
- 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 **90 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 **17.9 liter(s)**
- Total mash volume **23.8 liter(s)**

## Steps

- Temp **63 C**, Time **10 min**
- Temp **66 C**, Time **10 min**
- Temp **72 C**, Time **70 min**

## Mash step by step

- Heat up **17.9 liter(s)** of strike water to **70.1C**
- Add grains
- Keep mash **10 min** at **63C**
- Keep mash **10 min** at **66C**
- Keep mash **70 min** at **72C**
- Sparge using **14.5 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Monachijski	3.5 kg (58.8%)	80 %	16
Grain	Strzegom Wiedeński	1.5 kg (25.2%)	79 %	10
Grain	Strzegom Karmel 150	0.5 kg (8.4%)	75 %	150
Grain	Strzegom Karmel 600	0.15 kg (2.5%)	68 %	601
Grain	Melanoidowy 80	0.3 kg (5%)	70 %	80

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Tradition	25 g	70 min	5.5 %
Boil	Tradition	20 g	20 min	5.5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Mangrove Jack's M84 Bohemian Lager	Lager	Dry	10 g	Mangrove Jack's

## Notes

- Z zestawu TwojBrowar.pl.  
*Aug 8, 2017, 9:48 AM*