

# Chocolate factory

- Gravity **13.3 BLG**
- ABV **5.5 %**
- IBU **32**
- SRM **27.2**
- Style **Sweet Stout**

## 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 **16.7 liter(s)**
- Total mash volume **22.2 liter(s)**

## Steps

- Temp **68 C**, Time **60 min**

## Mash step by step

- Heat up **16.7 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Sparge using **14.2 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	4 kg (71.9%)	81 %	4
Grain	Strzegom Karmel 30	0.22 kg (4%)	75 %	30
Grain	Weyermann Caramunich 3	0.23 kg (4.1%)	76 %	150
Grain	Briess - Chocolate Malt	0.23 kg (4.1%)	60 %	690
Grain	special x	0.28 kg (5%)	70 %	350
Grain	Extra black	0.13 kg (2.3%)	65 %	1400
Grain	Płatki pszeniczne	0.47 kg (8.5%)	60 %	3

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	30 g	60 min	10 %

## Extras

Type	Name	Amount	Use for	Time
Flavor	wanilia	2 g	Secondary	14 day(s)
Flavor	łuska kakaowca	150 g	Secondary	14 day(s)
Flavor	laktoza	700 g	Boil	10 min