

## Foreign Extra Stout

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- Gravity **16.8 BLG**
- ABV **7.1 %**
- IBU **43**
- SRM **33.8**
- Style **Foreign Extra 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 **2.57 liter(s) / kg**
- Mash size **18 liter(s)**
- Total mash volume **25 liter(s)**

### Steps

- Temp **64 C**, Time **45 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **1 min**

### Mash step by step

- Heat up **18 liter(s)** of strike water to **72.6C**
- Add grains
- Keep mash **45 min** at **64C**
- Keep mash **30 min** at **72C**
- Keep mash **1 min** at **78C**
- Sparge using **14.3 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	5 kg (71.4%)	81 %	4
Grain	Caraaroma	0.4 kg (5.7%)	78 %	400
Grain	Jęczmień palony	0.3 kg (4.3%)	55 %	985
Grain	Carafa	0.3 kg (4.3%)	70 %	664
Grain	Strzegom Monachijski typ I	0.5 kg (7.1%)	79 %	16
Grain	Płatki owsiane	0.5 kg (7.1%)	60 %	3

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Challenger	40 g	60 min	7 %
Boil	Fuggles	40 g	60 min	4.5 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Danstar - Nottingham	Ale	Dry	11 g	Danstar