- Gravity 18.2 BLG
- ABV 7.8 %
- IBU 42
- SRM 17 • Style Old Ale

Batch size

- Expected quantity of finished beer 20 liter(s)
- Trub loss 5 % ٠
- 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 80 %
- Liquor-to-grist ratio 3.5 liter(s) / kg ٠
- Mash size 24.5 liter(s) .
- Total mash volume 31.5 liter(s)

Steps

- Temp 55 C, Time 1 min
 Temp 66 C, Time 90 min
- Temp 76 C, Time 1 min

Mash step by step

- Heat up 24.5 liter(s) of strike water to 60C
- Add grains
- ٠ Keep mash 1 min at 55C
- Keep mash 90 min at 66C •
- Keep mash 1 min at 76C
- Sparge using 8.9 liter(s) of 76C water or to achieve 26.4 liter(s) of wort

Fermentables

Туре	Name	Amount	Yield	EBC
Grain	Pale Ale Best	5.5 kg (78.6%)	80 %	6
Grain	Special X Best	0.2 kg (2.9%)	75 %	350
Grain	Cara aroma (red)	0.2 kg (2.9%)	78 %	50
Grain	Carahell Best	0.2 kg (2.9%)	75 %	30
Grain	Melanoidin BESTMALZ	0.2 kg (2.9%)	75 %	71
Grain	Carafa II Best	0.1 kg (1.4%)	65 %	1100
Grain	Oats, Flaked	0.6 kg <i>(8.6%)</i>	80 %	2

Hops

Use for	Name	Amount	Time	Alpha acid
First Wort	Marynka	40 g	60 min	9.1 %
Boil	East Kent Goldings	20 g	15 min	5.7 %
Aroma (end of boil)	East Kent Goldings	20 g	5 min	5.7 %

Yeasts

	1_	I_		
Name		Form	Amount	Laboratory
	- 71			,

Wyeast - 1728 Scottish Ale	Ale	Slant	200 ml	Wyeast Labs
Scottish Alc				