

Mroczna Pani 2

- Gravity **18 BLG**
- ABV **7.7 %**
- IBU **53**
- SRM **36.4**
- Style **Foreign Extra Stout**

Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **5 %**
- Size with trub loss **10.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **12.7 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **10.7 liter(s)**
- Total mash volume **14.2 liter(s)**

Steps

- Temp **68 C**, Time **60 min**
- Temp **76 C**, Time **10 min**

Mash step by step

- Heat up **10.7 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **10 min** at **76C**
- Sparge using **5.6 liter(s)** of **76C** water or to achieve **12.7 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-------------------------------|----------------|-------|------|
| Grain | Weyermann - Pale Ale Malt | 2 kg (56.3%) | 85 % | 7 |
| Grain | Weyermann - Smoked Wheat Malt | 1 kg (28.2%) | 81 % | 6 |
| Grain | Weyermann - Carafa III | 0.2 kg (5.6%) | 70 % | 1024 |
| Grain | Oats, Flaked | 0.15 kg (4.2%) | 80 % | 2 |
| Grain | Weyermann - Chocolate Wheat | 0.2 kg (5.6%) | 74 % | 788 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-----------------|--------|--------|------------|
| Boil | Magnum | 15 g | 60 min | 12.8 % |
| Boil | Northern Brewer | 20 g | 20 min | 8.8 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|----------------------|------|-------|--------|------------|
| Danstar - Nottingham | Ale | Slant | 150 ml | Danstar |