

Ciemny Wdowiec

- Gravity **16.6 BLG**
- ABV **7 %**
- IBU **32**
- SRM **31.5**
- Style **Robust Porter**

Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **31.7 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **25.8 liter(s)**
- Total mash volume **34.4 liter(s)**

Steps

- Temp **68 C**, Time **80 min**

Mash step by step

- Heat up **25.8 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **80 min** at **68C**
- Sparge using **14.5 liter(s)** of **76C** water or to achieve **31.7 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------------|----------------|-------|------|
| Grain | Strzegom Pale Ale | 5 kg (58.1%) | 79 % | 6 |
| Grain | Strzegom Monachijski typ II | 0.5 kg (5.8%) | 79 % | 22 |
| Grain | Strzegom Czekoladowy ciemny | 0.6 kg (7%) | 68 % | 1200 |
| Grain | Strzegom Pilzneński | 2.5 kg (29.1%) | 80 % | 4 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|------------|--------|--------|------------|
| Boil | Challenger | 35 g | 60 min | 5.1 % |
| Boil | Challenger | 25 g | 5 min | 5.1 % |
| Boil | Fuggles | 30 g | 5 min | 4.5 % |
| Boil | Chinook | 15 g | 60 min | 12.7 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------------|------|--------|--------|-------------|
| Wyeast - Irish Ale | Ale | Liquid | 200 ml | Wyeast Labs |