

## # 38 The Lumberjack

- Gravity **13.6 BLG**
- ABV **5.6 %**
- IBU **73**
- SRM **29.5**
- Style **American Stout**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **27.6 liter(s)**

### Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.7 liter(s)**
- Total mash volume **22.2 liter(s)**

### Steps

- Temp **67 C**, Time **60 min**
- Temp **78 C**, Time **5 min**

### Mash step by step

- Heat up **16.7 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **5 min** at **78C**
- Sparge using **16.5 liter(s)** of **76C** water or to achieve **27.6 liter(s)** of wort

### Fermentables

| Type    | Name                        | Amount          | Yield | EBC  |
|---------|-----------------------------|-----------------|-------|------|
| Grain   | Strzegom Pale Ale           | 3.25 kg (58.6%) | 79 %  | 6    |
| Grain   | Weyermann - Rye Malt        | 1 kg (18%)      | 85 %  | 7    |
| Grain   | Strzegom Monachijski typ II | 0.7 kg (12.6%)  | 79 %  | 22   |
| Grain   | Carafa III                  | 0.2 kg (3.6%)   | 70 %  | 1034 |
| wygrzew |                             |                 |       |      |
| Grain   | Weyermann - Chocolate Rye   | 0.2 kg (3.6%)   | 20 %  | 493  |
| wygrzew |                             |                 |       |      |
| Grain   | Strzegom Czekoladowy ciemny | 0.2 kg (3.6%)   | 68 %  | 1200 |
| wygrzew |                             |                 |       |      |

### Hops

| Use for | Name                   | Amount | Time   | Alpha acid |
|---------|------------------------|--------|--------|------------|
| Boil    | Columbus/Tomahawk/Zeus | 15 g   | 60 min | 15.8 %     |
| Boil    | Citra                  | 15 g   | 30 min | 12.5 %     |
| Boil    | Simcoe                 | 15 g   | 30 min | 13.2 %     |
| Boil    | Citra                  | 15 g   | 15 min | 12.5 %     |

|         |        |      |          |        |
|---------|--------|------|----------|--------|
| Boil    | Simcoe | 15 g | 15 min   | 13.2 % |
| Dry Hop | Citra  | 30 g | 5 day(s) | 12.5 % |
| Dry Hop | Simcoe | 30 g | 5 day(s) | 13.2 % |

## Yeasts

| Name                 | Type | Form  | Amount | Laboratory |
|----------------------|------|-------|--------|------------|
| FM52 Amerykański Sen | Ale  | Slant | 300 ml | ---        |