



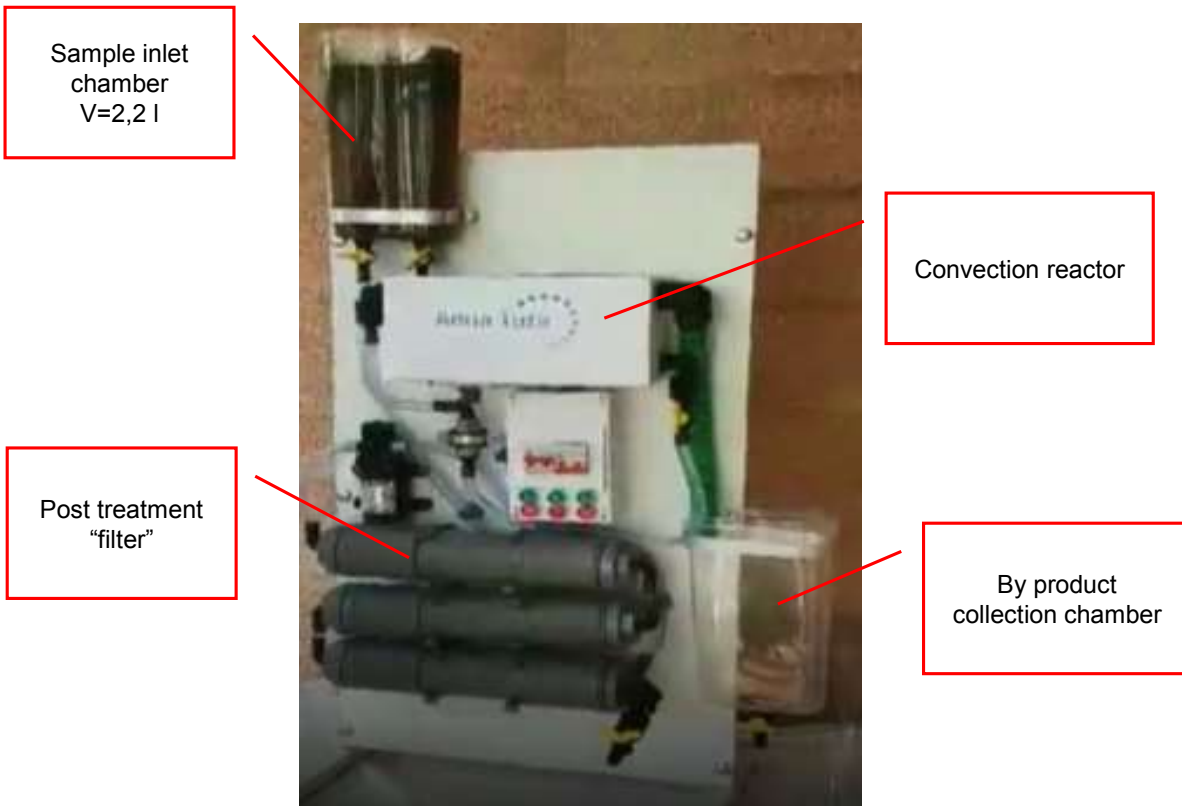
**ABInBev**

# Aqua Tuta Pilot Leuven Belgium

17, 12, 2018

# Pilot – Using Demo Unit Leuven Brewery

## AQUA TUTA™ Patented Technology



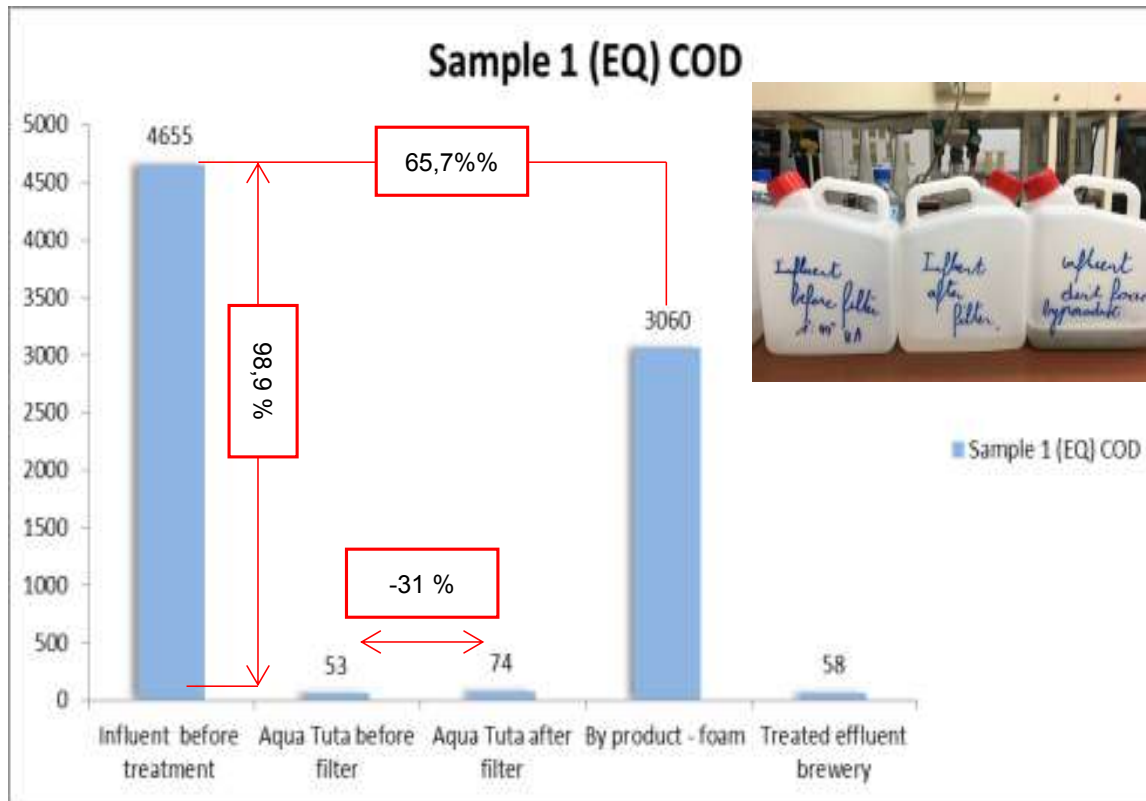
### ■ Test set

#### Summary :

- Test equipment: Demo unit - patented AQUA TUTA™ convection reactor
- Technology details – not possible to reveal at this stage (patent process)
- Processed samples:
  - Sample 1: after EQ tank (no biological treatment)
  - Sample 2: after UASB (anaerobic treatment)
- Results analyzed:
  - Sample 1: COD, TSS, TN, TP after main reactor, after post treatment, by product
  - Sample 2: COD, TSS, TN, TP after main reactor, after post treatment, by product

# Pilot – Using Demo Unit Leuven Brewery

## AQUA TUTA™ Patented Technology



ABInBev

### Sample 1 Results COD mg/l

#### Summary :

Positive: Test demonstrated good results in COD reduction in terms of concentration

#### Results:

- COD reduced from 4 655 to 53 mg/l after conversion reactor or 98,9%
- Result comparable to the full biological treatment ( BTS results of the final effluent 58 mg/l
- 65,7 % or 3 060 mg/l end up in by product

# Pilot – Using Demo Unit Leuven Brewery

## AQUA TUTA™ Patented Technology

Sample 1 (EQ) TN



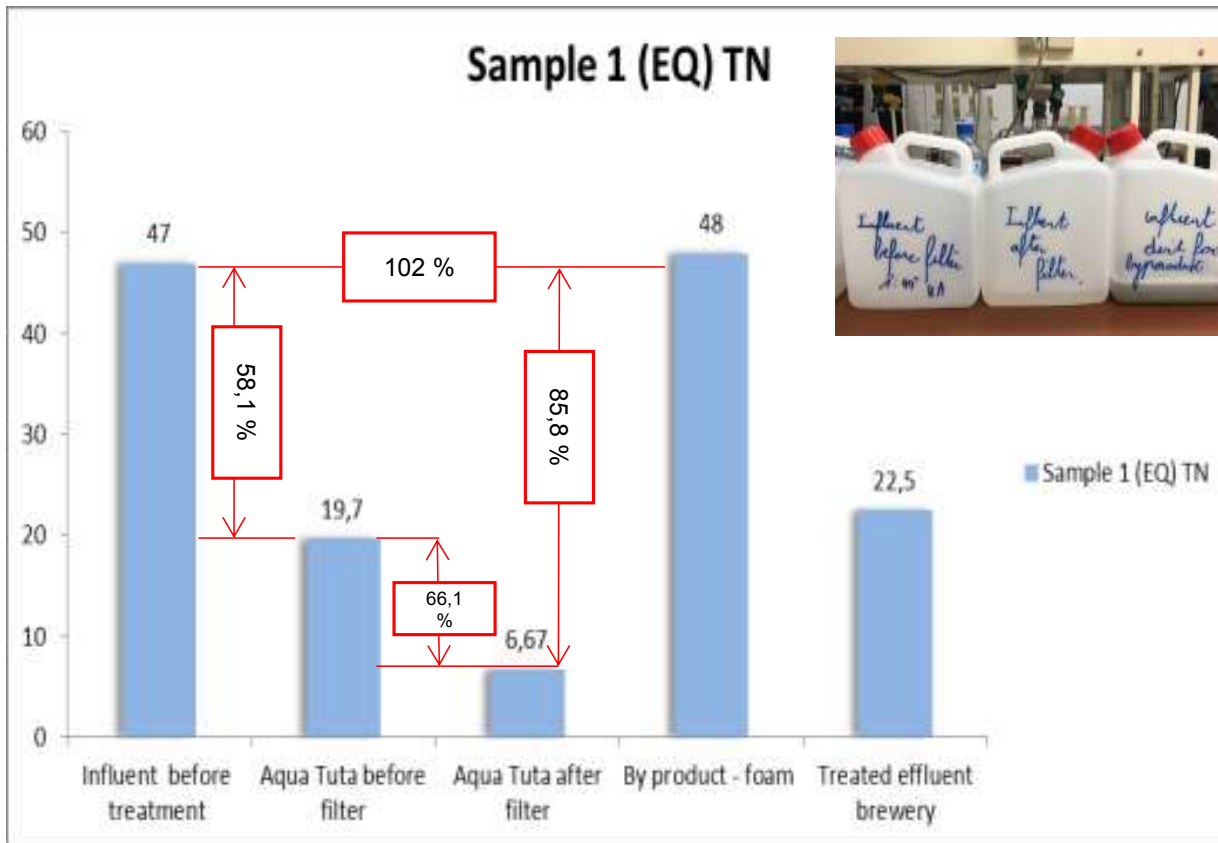
Sample 1 Results TN mg/l

### Summary :

Positive: Test demonstrated good results in TN reduction in terms of concentration

### Results:

- TN reduced from 47 to 6,67 mg/l outlet demo unit or 85,8 %
- Convection reactor decreases from 47 to 19,7 mg/l or 58 % further decrease observed in the post treatment unit from 19,7 to 6,67 mg/l 29 % ( or 66,1 compared to post treatment inlet)
- Result better compared to the daily result of the BTS to the full biological treatment ( BTS results of the final effluent 22,5 % mg/l
- 102 % or 48 mg/l concentration in by product



# Pilot – Using Demo Unit Leuven Brewery

## AQUA TUTA™ Patented Technology

### Sample 1 Results TP mg/l

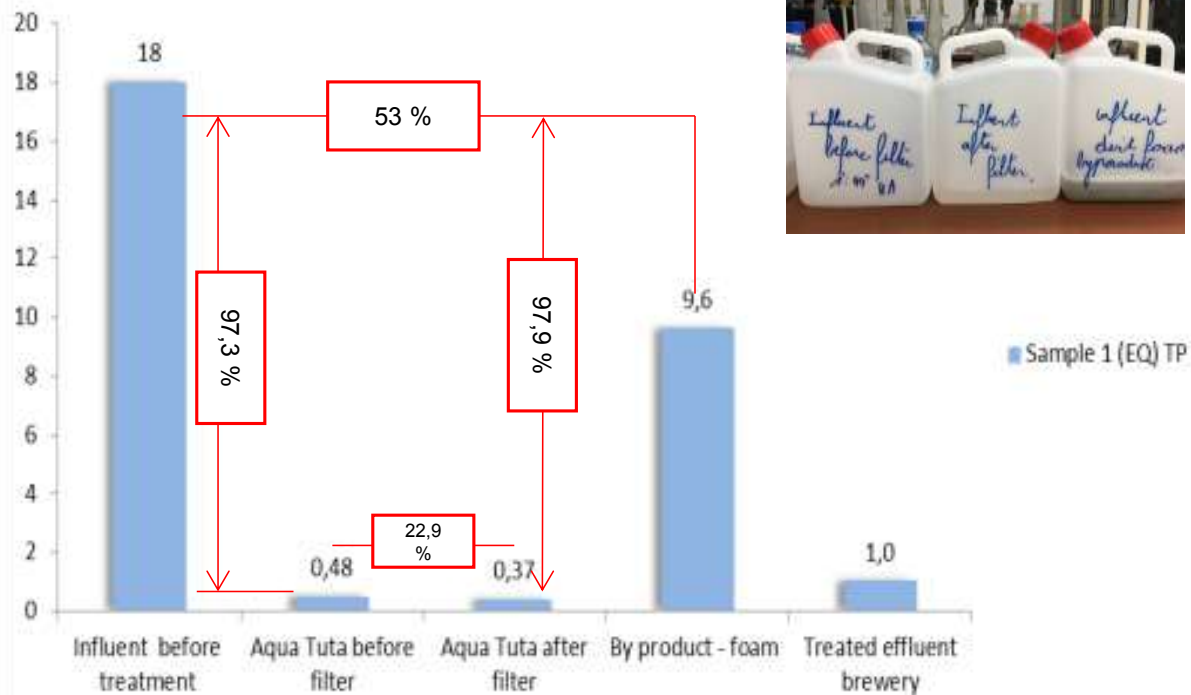
#### Summary :

Positive: Test demonstrated good results in TP reduction in terms of concentration

#### Results:

- TP reduced from 18 to 0,37 mg/l outlet demo unit or 97,9 %
- Convection reactor decreases from 18 to 0,48 mg/l or 97,3 % further decrease observed in the post treatment unit from 0,48 to 0,37 mg/l 0,6 % ( or 22,3 % compared to post treatment inlet)
- Result better compared to the daily result of the BTS ( BTS results of the final effluent 1 mg/l)
- 53 % or 9,6 mg/l concentration in by product

Sample 1 (EQ) TP



ABInBev

# Pilot – Using Demo Unit Leuven Brewery

## AQUA TUTA™ Patented Technology

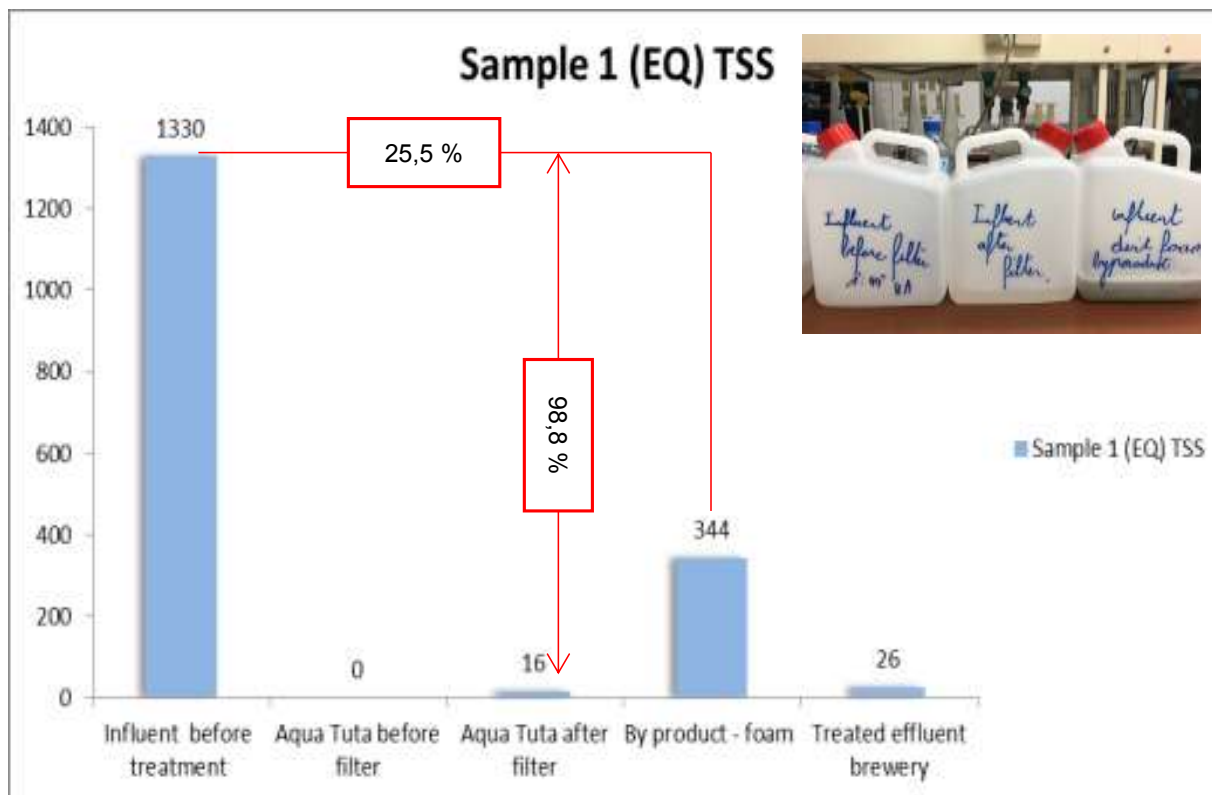
### Sample 1 Results TSS mg/l

#### Summary :

Positive: Test demonstrated good results in TSS reduction in terms of concentration

#### Results:

- TP reduced from 1 330 to 16 mg/l outlet demo unit or 98,8 %
- Convection reactor – sample volume insufficient to perform analysis
- Over all result better compared to the daily result of the BTS ( BTS results of the final effluent 26 mg/l)
- 25,5 % or 344 mg/l concentration in by product





**We are owners**