

## FERMENTERS FOR INDUSTRIAL VINEGAR PRODUCTION

Cetotec delivers turn-key industrial scale fermentation plants with production capacities of up to 110m<sup>3</sup>. The fermenter is the core component of every vinegar production. It is delivered in high quality stainless steel and equipped with a custom-tailored cooling coil.

### Description:

In modern vinegar production facilities, nowadays the submerge fermentation is the pre-dominant process. High performance aeration systems guarantee a homogenous and uninterrupted supply of oxygen to the fermenter, therefore optimally supporting the growth of the microorganisms. In Cetotec fermenters you can achieve up to 15% acidity when applying the semi-batch process as well as more than 20% acidity when applying the fed-batch process.

### Function:

A complete fermentation plant in vinegar production technology generally consists of the following main components:

- High quality stainless steel tank with cooling coil
- Aeration system
- Foam system
- SIEMENS PLC – process control
- Acetoline – system for the on-line alcohol and acidity measurement / Alcocontrol – system for the on-line alcohol measurement
- Stainless steel pumps
- Sensors (filling level, temperature, alcohol volume)

### Advantages:

- Technological leading engineering for the optimal construction of your vinegar fermenter
- High performance aerator design for vinegar production
- Easy to handle foam system with very low energy consumption
- Innovative alcohol and acidity measurement systems
- Reliable Siemens PLC control with well-proven software

## INDUSTRIAL VINEGAR FERMENTERS



### Available sizes:

Type	Fermentation volume [l]	Vinegar [l 10% / year]	Fermentation volume [US gal]	Vinegar [US gal 10% / year]
F30	3.000	470.000	790	124.000
F60	6.000	940.000	1.590	248.000
F90	9.000	1.420.000	2.400	375.000
F120	12.000	1.900.000	3.200	502.000
F200	20.000	3.100.000	5.300	819.000
F250	25.000	4.200.000	6.600	1.110.000
F300	30.000	5.000.000	7.900	1.321.000
F400	40.000	6.600.000	10.600	1.740.000
F500	50.000	8.200.000	13.200	2.170.000
F600	60.000	9.900.000	15.900	2.620.000
F750	75.000	12.300.000	19.800	3.250.000
F850	85.000	15.400.000	22.500	4.070.000
F1000	100.000	16.400.000	26.400	4.327.000
F1100	110.000	21.000.000	29.100	5.550.000
F1400	140.000	25.000.000	37.000	6.604.000