

BEVERAGE CLARIFICATION S O L U T I O N S



ArtBEV, the beverage clarifier

Our clarifiers help you get the best out of your beverage. Whether your raw material is an apple, a grape or rice, our specially designed ArtBEV clarifiers are able to maintain the highest nutritional value and all the health properties of your product.

Juices

FRAUTECH clarifiers are preferably used for fine clarification after extraction and fining, to remove unwanted solids, haze particles or fining agents before further processing, such as juice concentration, filtration and pasteurization. The turbidity of naturally cloudy juices is standardized by clarifiers as well and the removal of coarse particles allows producers to maintain the desired cloudiness for longer during storage or on the shelf.

Tea and herbal drinks

Tea drinks are extremely popular in Asia and they are becoming increasingly popular everywhere, especially with young people. Our long experience with tea drinks is including green tea, black and herbal tea. Our ArtBEV clarifiers can remove the solids content and reduce the turbidity at the desired level in an extremely easy and efficient way.

Vegetable drinks

From the supermarket shelf to the breakfast table, the market has developed a taste for non-dairy, healthy and/or bio drinks. Soy, oat, rice, or almond milk for example. Whatever vegetable dairy product you are handling, FRAUTECH clarifiers can help you with your separation process.

Wine

Beginning with must clarification, to first and second racking and on to wine polishing, clarifiers are used in many different applications, replacing or acting together with conventional technologies. ArtBEV Separators offer winemakers an additional option to positively influence the wine's character and produce clear and elegant wines by effectively removing haze and unwanted solids as well as fining agents or yeast. Separators reduce the particle load entering downstream filter media and increase the service life of cross-flow-units and DE- or depth filters. At the same time, must and/or wine clarification by separators requires less time and space compared to sedimentation or flotation. Thus, they make wine production more economical.







STANDARD SCOPE OF SUPPLY

- Complete skid mounted clarifier unit with control panel and variable frequency drive
- ${\bf \cdot}$ Tangential cyclone with solids discharge tank
- · Liquid ring sealing to prevent oxygen pick-up
- Strainer with manual valves
- Automatic on-off butterfly valve
- Magnetic flow transmitter
- Manual valve for flow-rate control
- Pressure gauge at product outlet
- Manual valve for back pressure control
- Check valve at product outlet
- Sight glasses at product inlet/outlet
- Sampling valves at product inlet/outlet
- Electro-valve for bowl rinsing
- Pressure water reducer and cartridge filter for operating water
- Vibration sensor

ADVANCED SCOPE OF SUPPLY

- In addition to the standard scope of supply:
- · Automatic flow regulating valve
- Automatic back-pressure control valve with pressure transducer

OPTIONAL FEATURES

- Operating water feeding unit
- Solids discharge by VolCon system, our perfect control of the discharge volume
- Turbidity monitoring and control of TSS level at outlet
- Feed pump
- Solids discharge pump
- Sight glasses with backlighting at inlet/outlet

YOUR BENEFITS

- High separation efficiency
- Fully automated process
- Ease of operation and maintenance
- Greater reliability

TECHNICAL DATA

Model		ArtBEV 31	ArtBEV 41	ArtBEV 71	ArtBEV 131	ArtBEV 201	ArtBEV 301
Hydraulic capacity	kg	7,500	12,000	20,000	35,000	50,000	70,000
Installation weight	kg	750	1,100	1,600	2,800	2,950	3,700
Skid footprint	m	2.0 x 1.1	3.0 x 1.25	3.3 x 1.4	3.6 x 1.55	3.8 x 1.75	2.21 x 1.4
Skid height	m x m	1.8	1.8	2.0	2.0	2.1	1.9
Total installed power	kW (HP)	5.5	7.5	15	22	37	45



Coconut water processing

WHY IS COCONUT WATER SO HEALTHY?

Coconut water is the sweet liquid present inside young, tender coconuts. It is rich in electrolytes, such as calcium, potassium, magnesium, and sodium. These minerals have essential functions, affecting body fluids for instance, blood pH, and muscle functions. It is naturally very low in fat and sugar, meaning that it is cholesterol-free and low in calories. Coconut water is a natural, isotonic beverage with the same level of electrolytic balance as we have in our blood. It is the "fluid of life" and can be injected intravenously in an emergency.

In a coconut water processing line, the water is collected in tanks after the coconuts have been cracked. As this liquid contains oil and small particles like coconut meat, a separator is needed to separate and remove solids and to separate the oil from the water, preventing oxidation and discoloration.

In order to get the best out of coconuts, you have to remove the impurities from the liquid; thanks to FRAUTECH separators, you can do that efficiently and still keep all the natural properties of the coconut water.







STANDARD SCOPE OF SUPPLY

- 3-phase separator with control panel and variable frequency drive
- Pressure gauge at product outlet
- Manual valve for back pressure control
- Pressure water reducer and cartridge filter for operating water
- Vibration sensor

OPTIONAL FEATURES

- · Operating water feeding unit
- Manual valve for flow-rate control
- Flow-rate indicator
- Stainless steel skid

YOUR BENEFITS

- Preservation of nutritional properties
- Preservation of flavor
- Easy to install, operate, and maintainEasy cleaning thanks to CIP system

- High level of automation guaranteeing safety and efficiency
 Continuous processing
 High-grade stainless steel execution to ensure great separation efficiency and sanitization
 Integration into fully automatic CIP
 (cleaning in place) system
 Sturdy construction, made to ensure
- long-lasting operation

TECHNICAL DATA

Model		CA 41S	CA 51S	CA71 S	CA91 S	CA141 S	CA201 S	CA301 S
Hydraulic capacity	l/h	2,000	3,500	5,000	8,000	10,000	15,000	18,000
Installation weight	kg	1,060	1,060	1,250	1,250	2,100	2,200	3,700
Skid footprint	m	1.38 x 0.75	1.38 x 0.75	1.5 x 0.88	1.5 x 0.88	1.95 x 1.25	1.95 x 1.25	2.2 x 1.4
Skid height	m	1.34	1.34	1.47	1.47	1.75	1.85	1.9
Total installed power	kW (HP)	7.5	11	15	18.2	22	30	45



ArtBREW, the craft beer clarifier

FRAUTECH separators are used in the brewing industry in many different stages throughout the beer brewing process. They basically allow defined, fast clarification and require less space compared to conventional technologies.

FRAUTECH separators may be used for hot or cold wort as well as for trub wort clarification. Turbidity reduction and yeast cell count adjustment are, however, the main targets for separators during green beer separation and production of naturally cloudy beers such as wheat beer.

Maturing is preferably carried out with a defined, low yeast cell count so that unwanted impacts on beer quality due to cell autolysis are reduced. Turbidity of wheat beers can be automatically adjusted by means of flow regulation and by-pass solutions.

As a pre-clarification step prior to conventional filtration, separators help to reduce the consumption of filter aids and extend the filter service life. They are also used as pre-clarifiers prior to DE-free filter systems.

As trends in beer are fast changing and customers are demanding when it comes to new flavors, colors or types of beer, it is time for an easier, more flexible approach to beer clarification in craft brewing.

ArtBREW – the craft beer clarifier from FRAUTECH separators – is a high-quality, simple-to-operate, plugand-play beer clarification solution for your brewery. Combining efficiency and ease of maintenance, ArtBREW is the right ingredient for your success in the craft brewing industry.







STANDARD SCOPE OF SUPPLY

- Complete clarifier unit with colour touch panel and variable frequency drive
- KO2 oxygen knock-out device
- On-off feed valve, hood cooling valve, sample port at outlet
- · Sight glasses at inlet/outlet
- Flow transmitter with totalizer and manual flow regulating valve
- Manual back-pressure control valve
- Water filter, gauges, and all air and electrical connections
- Integration into a fully automatic CIP (cleaning in place) system

ADVANCED SCOPE OF SUPPLY

In addition to the standard scope of supply:

- Turbidity monitoring and control of TSS level at outlet, fully automatic with integrated recirculation line
- · Automatic flow regulating valve
- Automatic back-pressure control valve with pressure transducer
- Automatic water flushing valve

OPTIONAL FEATURES

- · Local or remote feed pump
- · Air trap or solids discharge pump
- Solids discharge by VolCon system, our perfect control of the discharge volume
- · Turbidity monitoring at feed
- Sight glasses with backlighting at inlet/outlet

YOUR BENEFITS

- KO2 system reduces oxygen pick-up
- Up to 10% higher yields compared to traditional filtration and settling methods
- Reduced processing times when compared to traditional filtration and settling methods
- Consumption of filter aids minimized or eliminated, extended filter shelf life
- Control of TSS level in the clarified beer allowing direct bottling, minimal losses of flavor or taste
- Low incoming and outgoing differential temperature maintained
- Low total cost of ownership due to energy savings from using a variable speed belt drive and low cost of spare parts
- Very short return on investment

TECHNICAL DATA*

Model		ArtBREW 31	ArtBREW 41	ArtBREW 71	ArtBREW 131	ArtBREW 201
Beer clarification capacity	hl/h	up to 50	up to 75	up to 150	up to 250	up to 350
Clarification of dry hopping beer	hl/h	6-25	12-35	25-75	40-130	70-180
Clarification of beer with addition of tank bottom **	. hl/h	15	33	68	125	160
Installation weight	kg	750	1,200	1,500	2,300	2,600
Skid footprint	m x m	2.0 x 1.0	1.6 x 1.7	1.9 x 2.0	3.0 x 1.7	3.0 x 1.7
Skid height	m	1.7	1.8	1.8	2.2	2.2
Total installed power	kW (HP)	5.5 (7.5)	11 (15)	15 (20)	22 (30)	37 (50)

^{*} Capacity depends on the characteristics of the beer.



^{**} Average value considering 2%v solids



WHAT SEPARATOR DO YOU NEED?

With over 100 years of history, FRAUTECH SEPARATORS is a leading manufacturer of centrifugal separators with a wide range of models that meet production needs in many applications in the dairy, brewing and general beverage industries.

The company is located in Marano Vicentino (VI), Italy, and has highly qualified personnel for the design and manufacture of disc separators with the utmost attention to detail, using materials of excellent quality. The use of electronic systems for full control of the equipment allow us to build machines with high separation efficiencies, saving operating costs and ensuring low energy consumption.

To support our customers throughout the entire lifecycle of our machineries, we rely on a global network of authorized distributors and after-sale service partners.

Whether your business is part of an international group or a local family company, our mission is the same: to provide safe, reliable, and efficient solutions that boost your productivity.

FRAUTECH SEPARATORS SRL

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