SEPARATION

FOR AN OUTSTANDING TASTE EXPERIENCE AT LOW COST

ArtBREW

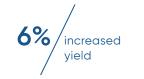


NGINEERED SUCCESS

"We are absolutely satisfied with our new beer clarifier skid. ANDRITZ really helped us in making our business grow, and I would recommend it to all breweries that are looking for greater success."

LUKE ERDODY

Director of brewing operations, Florida Beer Company





500% increased performance



ArtBREW, the craft beer clarifier

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 ANDRITZ, is a high-quality, simple-to-operate, plug-and-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 color 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 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



- 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

ArtBREW, the craft beer clarifier

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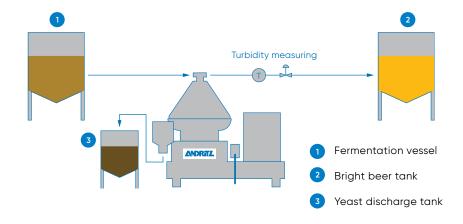




ArtBREW, clarification at its best

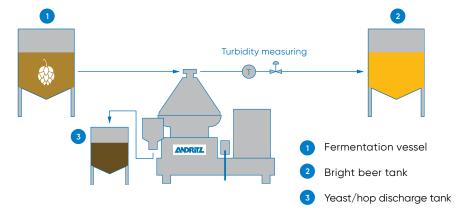
BEER CLARIFICATION

ANDRITZ ArtBREW provides a solution that fulfills the latest standards and increases yield while improving quality and quality consistency in your craft beer. Our technology helps you to achieve the right clarity in your craft beer thanks to an advanced control system allowing you to view individual recipes from the HMI control panel.



DRY HOPPING BEER CLARIFICATION

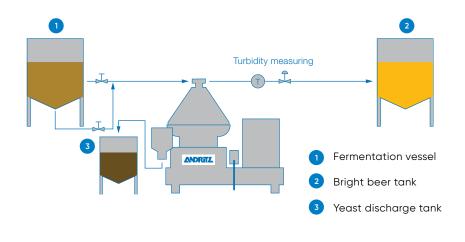
Dry hopping is a crucial element in producing successful craft beers in today's market, especially in the IPA category. With consumers expecting dry hopped beers to be full-flavored and providing a variety of olfactory aromas from the use of special aroma hops, the ANDRITZ ArtBREW allows you to clarify your beer while keeping these delicate flavours and aromas for your consumers to enjoy.





ANDRITZ ArtBREW is built to handle various levels of solids in the feed. As a consequence, most of the matter in the bottom of the fermenter tank can be processed and additional beer is recovered, thus increasing a brewery's yield from the day the skid is installed.

These are potential benefits from the ANDRITZ ArtBREW, results will vary from brewery to brewery.



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Can a clarifier give you the freedom and flavor to elevate the craft in your beer?

The craft beer movement is fueled by flavor, aroma, and creative freedom. But for the brewers at San Francisco's Speakeasy Ales & Lagers, long filtration times and high loss were a constant drain on the joys of their craft.

The solution? A uniquely efficient and easy-to-use ANDRITZ Separation beer clarifier skid to replace the brewery's problematic filter requiring filter powder.

The result? A range of beers with better flavor and fuller aroma, produced with half as much labor for clarification, and a seven percent average boost in yield. It's just one of the ways our expertise helps countless brewers to reach new heights in craftsmanship, every day.

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ArtBREW features, technical data, and product range

FEATURES

KO₂ – oxygen knock-out

KO₂ is the hydro-hermetic device designed to minimize the oxygen pick-up in beer.

- Dissolved oxygen pick-up, typically less than 10 ppb
- Unique inert gas sealing system
- No deaerated water needed and no risk to contaminate the product
- Low operating costs for CO₂ or N₂

Automation

- Input/setting of your recipes on control panel
- Precise turbidity control
- Emptying and flushing cycle integrated into control panel
- Variable speed
- Recirculating system that ensures that only clarified beer is sent to bright beer tank
- The control system monitors all functions and makes automatic adjustments to maintain operational characteristics, ensuring trouble-free and safe operation at all times.

TECHNICAL DATA

| Model | | ArtBREW 31 | ArtBREW 41 | ArtBREW 71 | ArtBREW 131 | ArtBREW 201 | ArtBREW 301*** | ArtBREW 401*** |
|---|---------|---------------|---------------|---------------|----------------|----------------|-------------------|-------------------|
| Beer clarification capacity | hl/h | up to 50 | up to 75 | up to 150 | up to 250 | up to 350 | up to 600 | up to 700 |
| Clarification of dry hopping beer | hl/h | 6-25 | 12-35 | 25-75 | 40-130 | 70-180 | 90-300 | 100-350 |
| Clarification of beer with addition of tank bottom ** | hl/h | 15 | 33 | 68 | 125 | 160 | 220 | 250 |
| Installation weight | kg | 750 | 1,200 | 1,500 | 2,300 | 2,600 | 3,400 | 3,700 |
| 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 | 2.2 x 1.9 | 2.3 x 2.1 |
| Skid height | m | 1.7 | 1.8 | 1.8 | 2.2 | 2.2 | 2.2 | 2.2 |
| Total installed power | kW (HP) | 5.5 (7.5) | 11 (15) | 15 (20) | 22 (30) | 37 (50) | 45 (60) | 55 (75) |

* Capacity depends on the characteristics of the beer.

** Average value considering 2%v solids

*** Clarifier dimensions without skid for mounting



full-service provider

ANDRITZ

With ANDRITZ, you gain access to one of the world's largest OEM manufacturers for solid/liquid separation systems, including such well-known brands as 3Sys Technologies, Bird, Delkor Capital Equipment (Pty) Ltd., Escher Wyss dryers, Frautech, Guinard Centrifugation, KHD Humboldt Wedag, Krauss-Maffei centrifuges, dryers, and filters, Lenser, Netzsch Filtration, Rittershaus & Blecher, Royal GMF Gouda, Sprout Bauer, and Vandenbroek.

Whether you need spare parts, rentals, local service, repairs, upgrades, or modernization of your equipment, ANDRITZ is your true full-service provider. From initial consulting through to service agreements, process optimization, and training programs, we are always looking for ways to minimize downtime and increase predictability in operations while raising your overall production efficiency. Wherever you operate, our network of 550 service specialists and global service centers ensures we'll always be there to support you for many life cycles to come. Let's sit down and see how we could take your operations to the next level.



LOCAL SUPPORT Responsive local service centers and field service technicians



REPAIRS & UPGRADES Optimization of machine and process performance, repair work, retrofitting, and modernization



OEM SPARE PARTS Filter cloths, spare and wear parts from OEMs or with OEM level quality, all readily available



SERVICE AGREEMENTS Preventive maintenance, contracts for spare parts, maintenance, inspections, repairs, upgrades, operation, and equipment monitoring



SECOND-HAND & RENTALS Certified second-hand and rental machines



PROCESS OPTIMIZATION Automation tools and process expertise to boost your profit



Operator training and tailored seminars for operating and maintenance personnel



LAB AND ON-SITE TESTS Lab and testing capabilities for process optimization and machine upgrades





WHAT'S YOUR SEPARATION CHALLENGE?

ANDRITZ Separation is the world's leading separation specialist with the broadest technology portfolio and more than 2,000 specialists in 40 countries. For more than 150 years, we have been a driving force in the evolution of separation solutions and services for industries ranging from environment to food, chemicals, and mining & minerals. As the OEM for many of the world's leading brands, we have the solutions and services to transform your business to meet tomorrow's changing demands – wherever you are and whatever your separation challenge. **Ask your separation specialist!**

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