

Florida Beer Company

The right equipment to make your business grow





Beer clarifier skid at Florida Beer Company production facility

The challenge: Simplify filtration system and improve performance

Every drop of beer counts, as do its quality and consistency, and at the Florida Beer Company, they know this very well.

The Florida Beer Company, established in 2003, extended its activites in 2011 when various small companies were consolidated to form one single organization in Cape Canaveral, Florida. After consolidation in the new plant, the company started innovating and thinking about a new technogical solution for filtration. Until then, they had used DE (diatomaceous earth) filtration and thus experienced high costs for cleaning operations and filtration waste disposal. This process was generally complex and not very satisfactory from the performance point of view. The challenge for the Florida Beer Company was to simplify the filtration system while maintaining or even improving performance. The ideal solution would be innovative separation technology, flexible and easy to operate, and technology that would increase yields and reduce operating costs while maintaining or even improving the quality of the beer produced.

Our solution: A flexible and compact clarification skid

Taking all their needs into account, we proposed a comprehensive and customized solution to Florida Beer: a clarification skid configured to fit perfectly into the existing facilities.

The skid comprises two units. One for the clarifier and one for pumps, valves, and instrumentation. The clarifier, model CA 201 V, is equipped with KO² knock out

oxygen – the hydro hermetic device designed by ANDRITZ SEPARATION to minimize oxygen pick-up in the processed beer.

The beer clarifier skid is integrated into a fully automatic CIP (cleaning in place) system so there is no need disassemble the equipment to keep it clean. In addition, the color touch panel with graphic visualization of the clarification process makes the skid very easy to handle by any operator.

As a very flexible system, the beer clarifier skid is compact in size, easy to install, and quick to start up. Florida Beer needed only 24 hours to get the machine running and three days to generate finished product.

Results: Beer quality and yield at their best

Thanks to the beer clarifier skid from ANDRITZ SEPARATION, the Florida Beer Company was able to improve performance far beyond their expectations. Compared to their previous filtration system, they could achieve a 6% higher yield and improve the flavor profile of the beer, which is now full-bodied and very tasty. In terms of processing times it would take 9 hours to process one fermentation tank from start to finish with the DE filtration system, however the same tank can now be processed in around 105 minutes with the beer clarifier skid, which is a 500% increase in performance. With our beer clarifier skid, Florida Beer achieved a 20% reduction in labor costs, they eliminated filters, and reduced the waste to be disposed of. That not only means cost savings, but also an environmentally friendly process. Furthermore, the noise level was reduced compared to DE filtration and, and vibration was eliminated. A longer shelf life was also obtained for bottled product as a result of the minimized oxygen pick-up. A true customer orientation and a full understanding by ANDRITZ SEPARATION of the processes involved led to the right solution to take Florida Beer's business to the next level.

n% "We are absolutely satisfied with our" new beer clarifier skid. LABOR COST ANDRITZ SEPARATION really helped us REDUCTION in making our business grow, and I would recommend it to all breweries that are looking for greater success." **INCREASED** YIFI D LUKE ERDODY, **DIRECTOR OF BREWING OPERATIONS, FLORIDA BEER COMPANY 500% INCREASED** PERFORMANCE





Key equipment



KO², gas purging to sealing chamber

KO² benefits:

- Oxygen pick-up <35 ppb
- No risk of increasing the oxygen content during discharge
- No risk of contaminating the product with deaerated water
- Low operating costs with CO₂ or N₂
- No deaerated water needed



Example of a craft beer clarifier skid

| Standard technical data | Unit | CA 201 V |
|------------------------------------|--------|----------|
| Hydraulic capacity* | hl/l | 500 |
| Typical effective beer capacity* | hl/h | 59-163 |
| Installation weight of clarifier | kg | 2,100 |
| Skid footprint | m x m | 3 x 1.7 |
| Skid height | m | 2.2 |
| Total installed power of clarifier | kW(HP) | 37(50) |

* Hydraulic capacity is the maximum throughput capacity of the bowl. Typical effective capacity is usually lower and depends on the character of the beer and the required degree of discharge of the clarified beer.

AFRICA

ANDRITZ Delkor (Pty) Ltd. Phone: +27 (11) 012 7300

Fax: +27 (86) 636 2122 separation.za@andritz.com

ASIA

ANDRITZ Singapore Pte. Ltd. Phone: +65 (6512) 1800 Fax: +65 (6863) 4482 separation.sg@andritz.com

AUSTRALIA

ANDRITZ Pty. Ltd. Phone: +61 (3) 8773 4888 Fax: +61 (3) 8773 4899 separation.au@andritz.com

CHINA

ANDRITZ (China) Ltd. Phone: +86 (757) 6663 3419 Fax: +86 (757) 6663 3448 separation.cn@andritz.com

EUROPE

ANDRITZ AG Phone: +43 (316) 6902 2318 Fax: +43 (316) 6902 92318 separation@andritz.com

NORTH AMERICA

ANDRITZ SEPARATION Inc. Phone: +1 (817) 465 5611 Fax: +1 (817) 468 3961 separation.us@andritz.com

SOUTH AMERICA

ANDRITZ SEPARATION Ltda. Phone: +55 (47) 3387 9110 Fax: +55 (47) 3387 9103 separation.bra@andritz.com

www.andritz.com

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