

## GOOD PRACTICES AND TECHNOLOGIES

Reducing footprint in water

El Agua Nos Une – SuizAgua América Latina



## Implementation of a dissolved air flotation system in a Soybean Oil Extraction Plant

SDG: 6.3 Improvement in water quality



### Company / implementer

Grupo Aliar- Soybean extraction process

**Sector:** ISIC 1090 Production of animal feed.

**Location:** Hacienda La Fazenda- Puerto Gaitán, Meta. 4.342789, -72.220538.

**Update:** 02 Feb. 2018



### Results

- This equipment allowed a reduction in pouring parameters by 80% (BOD without DAF: 964 mg/L-BOD with DAF: 192.8 mg/L, COD without DAF: 2965 mg/L- COD with DAF: 593 mg/L and fats without DAF: 1596.3 mg/L- fats with DAF: 319.26 mg/L).



### Other benefits

- Non-monetary savings: the process generated pouring that can be used in other company processes under the principles of circular economy.



### Supplier References

**Supplier** Internal development.



### Implementing Company

**Company in charge of implementing the solution:** Grupo Aliar

Proceso de extracción de soya.

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### Description

Dissolved air flotation is a process in which micro air bubbles are introduced into a pond filled with industrial water or sludge. The particles present in the liquid adhere to the micro bubbles as they come up, separating and forming a floating layer of concentrated material. Suspended Solids, Oils, Fats, BOD, COD and turbidity can therefore be removed effectively.

The water is then sent to treatment with biodigesters and later used for livestock farming to give part of the water and nutritional components to the pasture.



### Investment and Operating Costs

**Costs:** 44,562 USD civil works and installation of equipment

**Life span:** approximately 20 years



### Recommendations and limitations

- The use of this technology requires chemical products for the flocculation-coagulation process



### Cases of application

N/A



### References

**Good practices and technology sheet:**

- Implementation of a dissolved air flotation system in a Soybean Oil Extraction Plant