

DISSOLVED AIR FLOTATION

THE BEST SOLUTION
IF YOU THINK
ABOUT CLEAN WATER



REFERENCES

KABANOS Jablonka – Poland

Function: Function: Removal of fat from waste water from the production process. As fats in the meat industry account for a large proportion of impurities in wastewater, reducing them to a high percentage will also significantly reduce pollution, both of fat itself and other indicators. For example TSS, and other indicators of dissolved organic pollution, which are known as a BOD and COD. The DAF process with 95% efficiency removes fatty substances from wastewater. After the DAF process, the waste water goes to the company WWTP.

Company: Kabanos slaughterhouse focuses mainly on the production of meat products from beef and pork.

Type	FT_5,5
Quantity	2 pcs
Qmax	36 m ³ /h
Unit dimensions	5500 × 1500 mm
TSS	2500 mg/l
Material	stainless steel AISI 316L



KABANOS, Jablonka – Poland

ADFORS Hodonice – Czech Republic

Function: Removes large amounts of fats found in process waste water. The pre-treated process water is further sent to the plant WWTP and then returned to the process. Fast return of investment. DAF saves the cost of discharging polluted water into the sewer, but also by trapping the material and returning it back to the process.

Company: ADFORS is a leading manufacturer and processor of fiberglass strands in Europe. It focuses on construction and industry.

Type	FT_5,5
Quantity	2 pcs
Qmax	60 m ³ /h
Unit dimensions	5500 × 3000 mm
TSS	3000 mg/l
Material	stainless steel AISI 304



ADFORS, Hodonice – Czech Republic

Severočeské Doly Tušimice – Czech Republic

Function: Separation of undissolved substances from the washing machine of machines performing work in mines.

Company: Severočeské Doly is a company focusing on the mining, processing and sale of brown coal and accompanying raw materials. They operate their mining activities in the North Bohemian Brown Coal Basin in two separate localities, Tušimice and Bílina. The company annually produces about 23 million tons of coal and is the largest producer of brown coal in the Czech Republic.

Type	FT_3
Quantity	1 pc
Qmax	11 m ³ /h
Unit dimensions	3000 × 1500 mm
TSS	3000 mg/l
Material	stainless steel AISI 316



Severočeské Doly, Tušimice – Czech Republic

FABIOS Jawornik – Poland

Function: Separation of fats and blood from waste water from casings production in meat industry. The waste water continues to the WWTP. DAF saves the cost of discharging polluted water into the sewer. IN-EKO TEAM has extensive experience in the meat industry.

Company: FABIOS focuses mainly on the production of various types and colors of protein packaging. Packaging is mainly used for sausages.

Type	FT_3
Quantity	1 pc
Qmax	11 m ³ /h
Unit dimensions	3000 × 1500 mm
TSS	3000 mg/l
Material	stainless steel AISI 316



FABIOS, Jawornik – Poland



ADFORS, Litomyšl – Czech Republic

ADFORS Litomyšl – Czech Republic

Function: Removes large amounts of fats found in process waste water. The pre-treated process water is further sent to the plant WWTP and then returned to the process. Fast return of investment. DAF saves the cost of discharging polluted water into the sewer, but also by trapping the material and returning it back to the process.

Company: ADFORS is a leading manufacturer and processor of fiberglass strands in Europe. It focuses on construction and industry.

Type	FT_5,5
Quantity	1 pc
Qmax	50 m ³ /h
Unit dimensions	5500 × 2000 mm
TSS	2000 mg/l
Material	stainless steel AISI 304

HOLLANDIA Karlovy Vary – Czech Republic

Function: DAF removes animal fat from waste water from dairy production, which drastically reduces costs for discharging wastewater into sewers. Early return of investment.

Company: focused in the production of dairy products. Especially for yoghurt production.

Type	FT_3
Quantity	1 pc
Qmax	20 m ³ /h
Unit dimensions	3000 × 1500 mm
TSS	200 mg/l
Material	stainless steel AISI 316



HOLLANDIA, Karlovy Vary – Czech Republic

FT / DISSOLVED AIR FLOTATION

Physical flotation is a process enabling the removal of a larger quantity of undissolved solids from wastewater. Flotation is applied where any other method of filtration and sedimentation cannot be used. Removal of undissolved matter with a density close to that of water. There is also an intense process where, besides the air, the chemicals are also dosed.

This process is a chemical-physical flotation and the result is the formation of thick foam on the surface. The foam is continuously collected and discharged. For this purpose, the flotation unit adding with chemical agent - coagulant and soda supply tank. A dosing pumps

are also part of the supply tanks. The chemical reaction is happening in a highly efficient tube mixer, which is directly connected to the flotation tank. The wastewater is led to the inflow part of the flotation tank with saturated recirculated water. High pressure saturated water with pollution arising precipitating flocs which are easily separable from the surface. All our units are designed for fully automatic operation. Flotation unit can be applied to thickening of sludge at municipal waste water treatment plants, separation of substances from industry - dairies, slaughterhouses, meat factories, leather factories, chemical industry.

DAF SERIES

Type	Dimeter × height (D×H) [m]	Surface [m ²]	Capacity [m ³ /h] <small>For TSS 3000 mg/l</small>
FT_1,5	1,5 × 1,5	1,5	3
FT_2	2 × 1,5	2,7	5
FT_2,5	2,5 × 1,5	4,2	8
FT_3	3 × 1,5	5,8	11
FT_3,5	3,5 × 1,5	8,5	15
FT_4	4 × 1,5	10,8	20
FT_4,5	4,5 × 1,5	14	25
FT_5	5 × 1,5	17,3	30
FT_5,5	5,5 × 1,5	20,8	35
FT_6	6 × 1,5	24,4	40

BENEFITS

- Cost – effective operation
- High reduction of pollution → High quality
- High quality of separated sludge
- Separation of hardly sedimentable particles
- Fully automatic operation
- Stainless steel product

EXPECTED REDUCTION

Parameter	Chemical – physical flotation
COD	55–80 %
BOD*	55–80 %
TSS	80–95 %
Fats, oils	80–95 %

* Reduction of BOD parameter depends on type of wastewater.

USE

- Slaughterhouse
- Dairies
- Manufacture of fiber glass
- Pharmaceutical production
- Sugar factories
- Meat factories
- Sludge thickening
- Leather production
- Separation oils, waxes

IF YOU HAVE ANY QUERIES,
PLEASE CONTACT US
BY EMAIL, PHONE OR IN PERSON.

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