

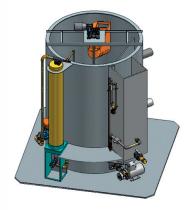
Efficient pre-treatment of industrial wastewater. Containerised flotation units of AS-ISO FLOT series designed for industrial branches requiring reliable and compact systems of pre-treatment of wastewater contain oily, fatty and other organic substances, as well as insolubles.

APPLICATION

The units are ideal for industrial branches with fluctuating operational conditions and wastewater production up to 100 m³ per day. For instance, this includes meat processing and dairy industries, fish processing, pulp & paper industry, auto motive, recycling of plastic materials, general engineering and galvanisation processes.

AS-ISO FLOT SOLUTION ADVANTAGES

- ✓ The containerised design make possible easy transportation and installation on the site, which represents an ideal solution for quick incorporation into the operational system and where the unit mobility is important.
- ✓ Fully automatic mode: Electrical panel board and instrumentation incorporated in the container provide for fully automatic mode and minimisation o the necessity of manual interventions in addition, it is possible to monitor the unit operations remotely, over the web interface.
- ✓ The electrical distribution board is placed in a separate space of the ISO container.
- ✓ Underground prefab tanks: The complete supply may include even underground prefab tanks for wastewater accumulation, pumping, and sludge storage. However, existing tanks can be also used.
- ✓ Speedy construction: It is sufficient to interconnect the pipelines among the underground tanks and the container system ... and the operations can start right away.



The container itself includes the complete process equipment for the efficient wastewater pre-treatment, i.e. mechanical pre-treatment, chemical management system, flotation unit, electrical distribution panel and instrumentation. The control system provides for fully automatic mode for the whole process operations, and the remote Supervisory Control & Data Acquisition system (SCADA) will ensure for you a perfect reference picture over the process.

The AS-ISO FLOT containerised treatment unit can be supplied with underground or aboveground tanks or it is possible to use the existing infrastructure. These tanks are required for wastewater accumulation, pumping, and storage of the sludge produce in the process. Once the pipelines are interconnected with the containerised flotation unit, and consequent connection to the electrical panel board, the operations may start.

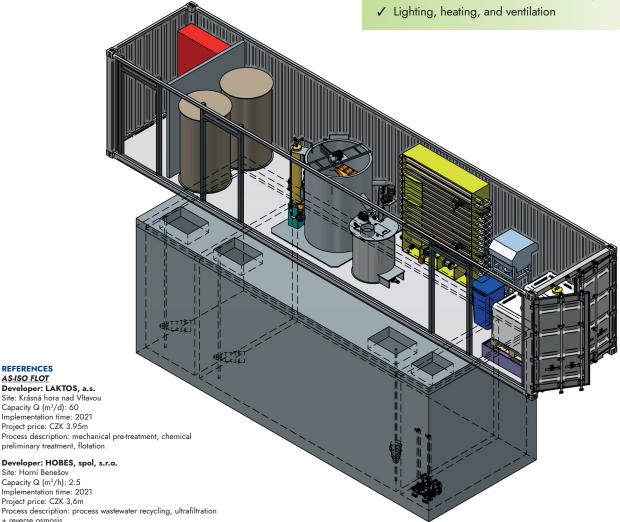
The design of the AS-ISO wastewater treatment plant is characterised by a simple and fast installation procedure.

AS-ISO FLOT APPLICATION DESIGN

- ✓ Wastewater pre-treatment before wastewater
- ✓ Wastewater pre-treatment before discharge to sewers
- ✓ Wastewater pre-treatment before discharge to wastewater treatment plants

CONTAINER FITTING-UP

- ✓ Flotation unit
- Tubular mixer
- ✓ Mechanical pre-treatment
- Chemical management system
- ✓ Electrical pane board, incl. the control system and instrumentation



+ reverse osmosis

Developer: Ennovi Energy & Power Site: Písek

REFERENCES AS-ISO FLOT Developer: LAKTOS, a.s.

Capacity Q (m³/d): 60 Implementation time: 2021 Project price: CZK 3.95m

Site: Horní Benešov Capacity Q (m³/h): 2.5 Implementation time: 2021 Project price: CZK 3,6m

Capacity Q (m³/h): max. 3

Implementation time: 2023

Project price: CZK 3.9m

Process description: wastewater recycling, flotation with sludge de-watering - clean water is used for washing of crates

Flotation

Developer: Kromilk, a.s.

Site: Kroměříž

Capacity Q (m³/d): 80 Implementation time: 2019 Project price: CZK 2.5m

Process description: mechanical pre-treatment, chemical preliminary treatment, flotation

Developer: Lacrum Velké Meziříčí s.r.o. (II. stage), (dairy) Site: Velké Meziříčí

Capacity Q (m³/d): 320 Implementation time: 2015

Project price: CZK 10.4m

Process description: biological wastewater final treatment

Developer: Lacrum Velké Meziříčí s.r.o. (I. stage), (dairy)

Site: Velké Meziříčí Capacity Q (m³/d): 400

Implementation time: 2013

Project price: CZK 8.2m

Process description: mechanical pre-treatment, chemical preliminary treatment, flotation, photocatalytic air oxidation and sludge de-watering

Developer: Mlékárna Olešnice, RMD (dairy)

Site: Olešnice

Capacity Q (m³/d): 200 Implementation time: 2013

Project price: CZK 5,9m

Process description: wastewater mechanical pre-treatment, chemical preliminary treatment, flotation, sludge de-watering by AS-DEHYDRATOR

Developer: MATEO PACKING, s.r.o.

Site: Újezdec u Luštenic 60 Capacity Q (m³/h): 30

Implementation time: 2021

Project price: CZK 8m

Process description: mechanical pre-treatment, chemical preliminary treatment unit, flotation, and sludge de-watering

Developer: HAJDÍK, a.s.

Site: Jablůnka Capacity Q (m³/h): 3

Implementation time: 2019

Project price: CZK 9m Process description: mechanical pre-treatment, chemical preliminary treatment unit, flotation, biological final treatment and sludge de-watering (by sludge press)

Developer: SPM, a.s. Site: Štětí

Capacity Q (m³/h): 30 Implementation time: 2020

Project price: CZK 10m

Process description: mechanical pre-treatment, chemical preliminary treatment unit, flotation a sludge de-watering (by sludge press)

Developer: Model Obaly, a.s.

Site: Opava Capacity Q (m³/h): 8

Implementation time: 2021

Project price: CZK 7,8m Process description: mechanical pre-treatment, chemical preliminary treatment unit, flotation a sludge de-watering (by sludge press)

Developer: Vodňanská Drůbež, a.s.

Site: Brno-Modřice Capacity Q (m³/h): 140 Implementation time: 2021

Project price: CZK 16m Process description: two-stage mechanical pre-treatment, chemical

preliminary treatment unit, flotation a sludge de-watering by

Developer: ASIO HR – UPTOV CROMARIS (fish processing)Site: Zadar, Croatia

Capacity Q (m³/d): 400

Implementation time: 2019 Project price: CZK 5.7m

Process description: mechanical pre-treatment, chemical preliminary treatment OV, flotation a sludge de-watering

Developer: ASIO HR - TUČ ŽITO (oil & fat production)

Site: Osijek, Croatia Capacity Q (m³/d): 180

Implementation time: 2018 Project price: CZK 4.7m

Process description: mechanical pre-treatment, chemical preliminary treatment unit, flotation a sludge de-watering









