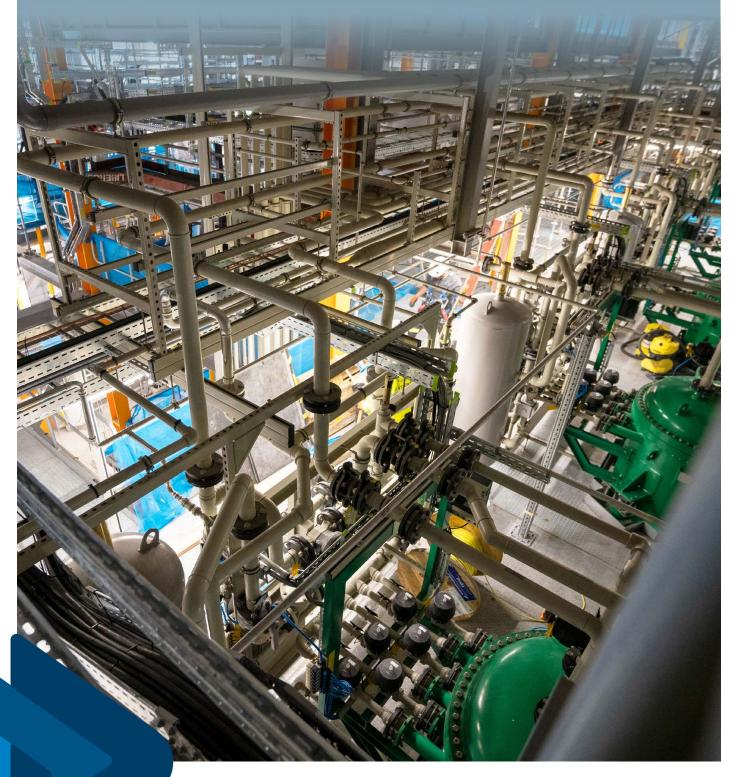


# Success stories our references



## The company AIK Technik AG

AlK Technik AG is the plant manufacturer for residual waste treatment and recovery of recyclable materials. Conscious of our duty, we contribute to reducing the environmental impact for the next generations and to achieve the best sustainability through our special processes and technologies in the different fields. Our innovative technologies form the basis for the exemplary, economical and ecological recovery of recyclable materials. Thus, we offer you the opportunity to also make an active contribution to global resource and climate protection with our processes.

#### Engineering and system supplier

As a system supplier, we providethe complete package of a total contractor, from engineering and planning to commissioning. We are specialized in treatment plants for soils and excavated material, as well as for sewer and drilling sludge using modern clarification technology and flexible systems for drainage. We also have a new process for the optical sorting of gravel, which is an optimal addition, especially for construction material recycling. Furthermore, we offer an innovative world novelty for the optimal treatment of bottom ash from waste incineration. We also provideall components for solid waste incineration plants, such as FAW (acid fly ash washing), mercury separation, and wastewater treatment.

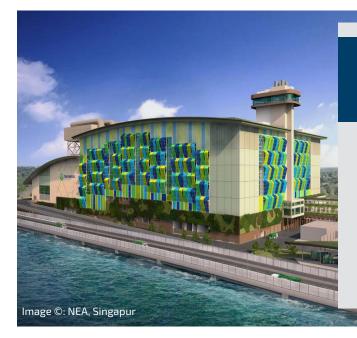
#### Laboratory

Thanks to our own independent laboratory, we are always in a posi-

tion to carry out expert laboratory and operational analyses and to provide our customers with competent support and assistance in troubleshooting, as well as process and operational optimization. We use different analytical methods (water, solids), which are successfully applied in the optimization of existing processes, as well as in the application of new process developments.

## Assembly, after-sales service and maintenance

We have our own spare parts warehouse and assembly team. Services are therefore available and ready for use at any time. Our after-sales service with the delivery and management of spare and worn parts is an integral part of our quality management.



## Tuas Nexus (IWMF), Singapore

Two complete, parallel FAW systems

Alk Technik AG to supply an acid fly ash washing (FAW) system for Tuas Nexus Integrated Waste Management Facility (IWMF) in Singapore. The challenges in this project are the tight space conditions of the plant. These had to be taken into account in the planning in order to find an optimal solution for the arrangement of the various components.

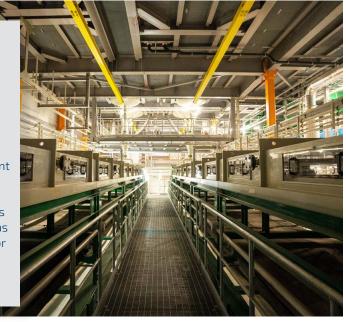
The whole project impresses with its size. Even the vacuum belt filters, at 320 cm, are thirty percent wider than the largest standard models and offer a filter area of 45 m2. The large number of stacking tanks also allows for a more flexible operation and at the same time creates a larger buffer for intermediate storage.

## RagnSells, Sweden

Two complete, parallel FAW systems

For the Salarium project in Sweden, AIK Technik AG is planning and supplying the FAW (fly ash washing) and the brine treatment system including chemical storage.

The FAW consists of two parallel lines for the extraction of salts from fly ash. The brine is freed from unwanted elements such as heavy metals in the water treatment and the brine is purified for evaporation.



## Tägerhard Kies AG, Wettingen Chamber filter press

For the Tägerhard Kies AG in Wettingen we are allowed to deliver a new chamber filter press for sludge dewatering of the existing sludge water treatment. The chamber filter press is a machine used to treat sludge water from gravel processing by dewatering the resulting sludge. This process is necessary to bring the water back into the gravel washing circuit and make the slurry transportable and landfill ready. The chamber filter press has 120 plates (upgradeable to 140) measuring 1.5 x 1.5 meters and weighs 38 tons over a length of 14 meters. This size was chosen to meet the customer's requirements and to achieve higher capacity. The filter press will be installed in early 2023 and then put into operation.

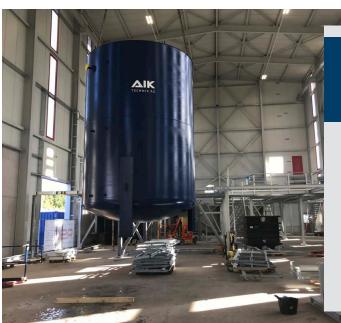
#### References

## Ernst Gerber AG, Roggwil

Optimization of the drilling mud reception

The mixing tank, the lime silo and the pumps have already been delivered for the drilling mud reception of Ernst Gerber AG in Roggwil. Currently we are now assembling the optimization of the sludge treatment plant began. Completion of the facility is scheduled for spring 2023.





## SELFRAG, Full-Reuenthal

Process water treatment, wastewater treatment and acid washing

In August, we started the installation of the wastewater treatment (WWT) at the construction of the bottom ash treatment facilities of Selfrag in Full-Reuenthal. The plant will reduce the bottom ash mass to be landfilled by at least 50% and thus substantially reduce environmental emissions.

AIK Technik AG supplies three central modules that enable the operation of the bottom ash processing plant.

- The process water treatment
- The wastewater treatment
- Acid washing in the final module

## KEBAG ENOVA, Zuchwil

Chemical supply

For the new plant of KEBAG Enova, we supplied the chemical supply for the flue gas cleaning area.

This includes process engineering equipment for the storage of chemicals. The scope of supply consisted of a complete chemical transfer station, with various containers, unloading and loading pumps, safety-related equipment and the entire pipework for chemical storage. We also supplied the scrubber collection tanks and the emergency tank with associated equipment.





## **GEVAG, Trimmis**

FAW renewal

In September 2022 we started with the renewal of the FAW (acid fly ash washing) at GEVAG in Trimmis.

The FAW (acid fly ash washing) will undergo some technical improvements in the coming weeks. In particular, the ash dosing, extraction, filtration and H2O2 dosing will be completely replaced. These improvements will increase the efficiency of the plant and allow it to achieve even better results. Also, all fittings and piping will be completely renewed and updated.

The plant is expected to be completed by mid-December 2022.

### **KVA Linth, Niederurnen**

Sedimentation plant & Hydrogen peroxide dosing

We are delight with the operation of the new sedimentation plant and the hydrogen peroxide dosing at KVA Linth. Within the scope of a process engineering performance increase, AlK Technik AG was allowed to install a complete sedimentation plant, including the pumps and the clear water tank. In parallel, a chemical storage tank for hydrogen peroxide and the associated dosing system were installed. This is used to dose hydrogen peroxide into the three extraction tanks of the FAW (acid fly ash washing). As a result, KVA Linth achieves significantly better depletion of heavy metals and is excellently positioned for the future.





## Müve, Biel

Wastewater treatment (WWT)

For the waste incineration plant in Biel (Müve), we have been awarded the contract to renew the entire wastewater treatment plant (WWTP).

The existing WWT no longer met current requirements and will be rebuilt by us at a new location in the basement of the plant.

#### References

## KIBAG AG, Regensdorf

Sludge disposal incl. sludge treatment plants

KIBAG soil recycling in Regensdorf operates an excavation washing plant. Through many innovations, such as the improvement of the clarification system as well as the improvement of the removal of water, through new mixing tanks, pressure pumps and filter plates, as well as the associated control system, the plant could be brought up to the state of the art.



## Peter AG, Sempach

Sludge disposal incl. sludge treatment plants

For Peter AG Kanalreinigung in Sempach, we were allowed to realize the entire sludge reception including sludge treatment. This included the receiving point, the clarification system with water treatment as well as the sludge dewatering with dosing for additives. Our scope of supply included the control system.

## TIB Recycla, Mezzovico

Soil washing plant

With the TIB Recycla in Ticino, the Toggenburger company implemented another soil washing plant with integrated sludge water treatment for polluted and mineral construction waste.

The system is designed in such a way that future legal or technical changes regarding material recycling, the washing process or product quality can be implemented.





## ERZ (Entsorgung + Recycling Zürich)

LCV & TRL

In the ERZ (Waste Management + Recycling Zurich) Hagenholz we were allowed to install an acidic fly ash washing including the associated wastewater treatment (FAW & WWT). The scope of delivery was the concept and the design according to the study + analysis for the new conception of the WWT including installation of the FAW.

The available space in the existing building was used optimally.

## EWB, Bern

Wastewater treatment

For the EWB Forsthaus, KVA Bern, we were allowed to plan and implement the hydroxide sludge dewatering for the wastewater treatment plant. The system is designed in such a way that the entire amount of sludge can be dewatered.





## Hastag, Arnegg

Sludge treatment plants

For the Gravel plant HASTAG in Arnegg, we were allowed to realize the sludge reception incl. Sledge treatment plants. This mainly includes the receiving point, the clarification system with water treatment and the sludge dewatering by means of a Filter press.

The system is designed in such a way that it can fully process the sledge produced during plant operation.

## Coming soon...

## Makies AG, Gettnau

Residual concrete water treatment

## Toggenburger, Frauenfeld

Optical sorting

## ERZ (Entsorgung + Recycling Zürich)

Expansion Fully Automatic Filter Press

## Statkraft, Trondheim

Wastewater treatment retrofit

## Müve, Biel

Replacement Filter Press





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