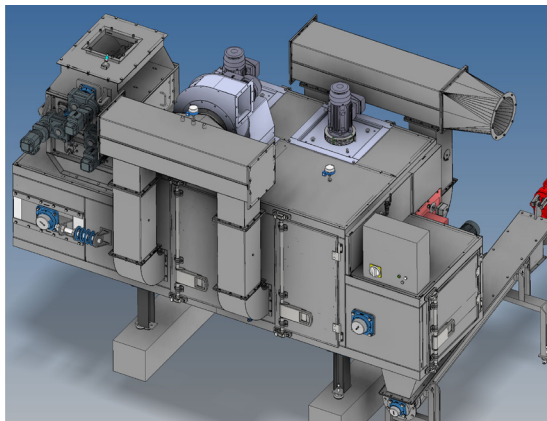


PILOT BELT DRYER BD 750/2 COMÉTHA, Paris (FRA)



Logo project Cométha, project partners SIAAP and Syctom



Design drawing of the Pilot Belt Dryer BD 750/2



Left: Pilot dryer with feed unit and exhaust air ducts
Right: Material feed via screw conveyor

Cométha is a joint innovation partnership project between **SIAAP** (French wastewater association) and **Syctom** (public operator for household waste recycling) in the Paris region, France. The companies treat the wastewater of 9 million inhabitants and treat the household waste of 6 million inhabitants. For Syctom's goal of **turning waste into a resource with a sustainable circular economy**, recycling routes are constantly being optimized. The Belgian engineering group **John Cockerill** has overall responsibility for the project as EPC contractor with the participation of SEVAR AG as subcontractor for drying.

Cométha focuses on the **treatment of the solid and liquid fraction from biowaste** generated during its treatment in the biogas plant. The methanization (anaerobic treatment) of organic material produces biomethane, which, purified, can be injected into the gas grid or used as fuel for vehicles. The digestate is the nutrient-rich residue left over from the fermentation process. In phase 2, Cométha is investigating in the pilot scale plant the feasibility of joint treatment (novel mixture) of the following solid and liquid biological materials with a high organic content: fats, sewage sludge, liquid fraction of garbage, household waste and horse manure. Energy recovery, optimized methanation and the production of nutrients are being investigated experimentally and in a forward-looking manner.

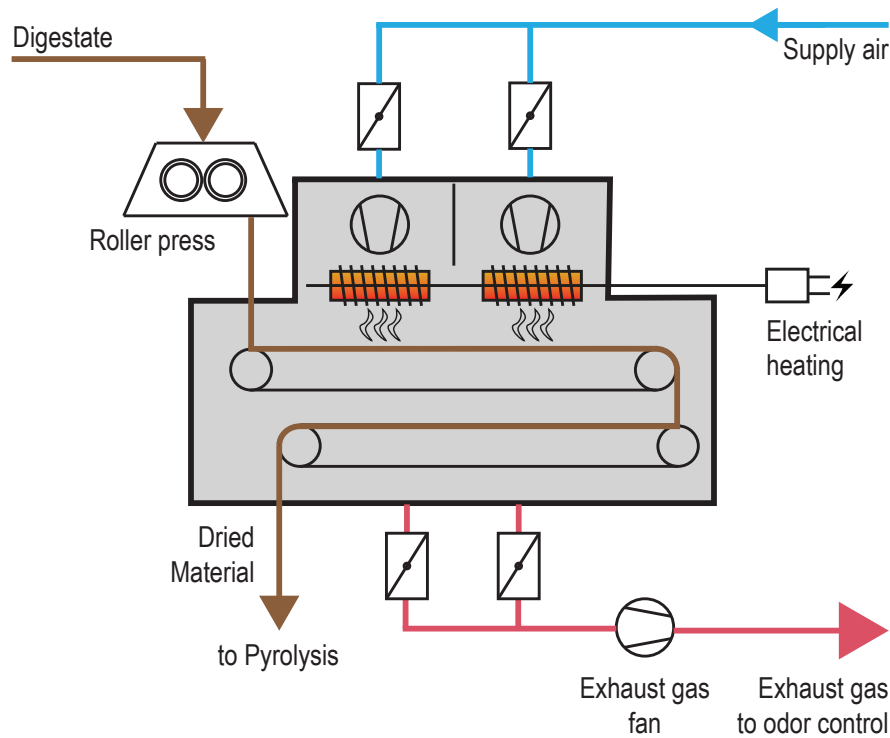
In the innovative pilot plant at the Seine Valenton site in France, the digestate produced during methanation is dewatered in a screw press, dried in a SEVAR belt dryer (pilot scale) and fed to pyrolysis. Ammonium sulfate is produced from the liquid phase by stripping for use as fertilizer.

The pilot scaled **Belt Dryer BD 750/2** was ordered by John Cockerill in February 2021 for a **throughput of 30 - 100 kg/h of dewatered digestate** with approx. 25 - 50 % DS and a **water evaporation capacity of 20 - 40 kg/h** at SEVAR AG. The digestate is fed via a roller press onto the 0.75 m slim dryer belt, transported through the two electrically heated drying modules and discharged via a water-cooled discharge screw. The external compact dimensions (L x W x H) are only about 4200 x 3250 x 3000 mm. The pilot plant will be operated for 3 years. The results from the operation will influence the planning and construction of the industrial plant in phase 3.

SEVAR

Drying Technologies

FUNCTIONAL PRINCIPLE



Source: SEVAR AG

TECHNICAL DATA

Scope of supply:	Belt Dryer BD 750/2 (pilot scale)
Type of drying:	Partial drying
Heating source:	Electrical heating
Material:	Digestate from anaerobically treated solid and liquid biological waste
DS input:	25 %
DS output:	50 %
Throughput_wet:	24 - 800 t/a (30 - 100 kg/h) / 60 - 200 t _{DS} /a
Water evaporation:	20 - 40 kg H ₂ O/h
Operating hours:	24 h/d, fully automatic
Commissioning:	2023

SEVAR AG

SEVAR AG emerged in 2020 from the environmental technology division of Haarslev Industries A/S. The over 30 years proven **technology of belt drying** is continued under the already well-known name SEVAR with a motivated team. The young German company with headquarters and production near Karlsruhe is supported by an international network of partners and agents.

SEVAR designs and manufactures equipment for the **thermal treatment of municipal and industrial sewage sludge**, biomass and digestate. The treatment of the humid exhaust air resulting from the drying process with condensation and odor control is also considered. Reference plants are available for visiting worldwide.

We reserve the right to alter the specifications at any time without prior notice.