



GREENCROP



TECHNOLOGIES & MACHINES

FOR LIVESTOCK FARMING & BIOGAS PLANTS



SEPCOM®



CHIOR®

SEPCOM® and CHIOR® offer advanced solutions through a comprehensive range of machines and accessories for livestock manure treatment and for effluents in biogas production.

SEPCOM® and CHIOR® develop innovative, industrially manufactured, market-oriented products for the world market.

SEPCOM®'s and CHIOR®'s goal is to provide the one-stop-solution in the field of solids-liquid separation.

SEPCOM® and CHIOR® base their commitment to offering the highest possible degree of quality in products and services at the most competitive price to reach customers all over the world through the global SAVECO™ distribution network.



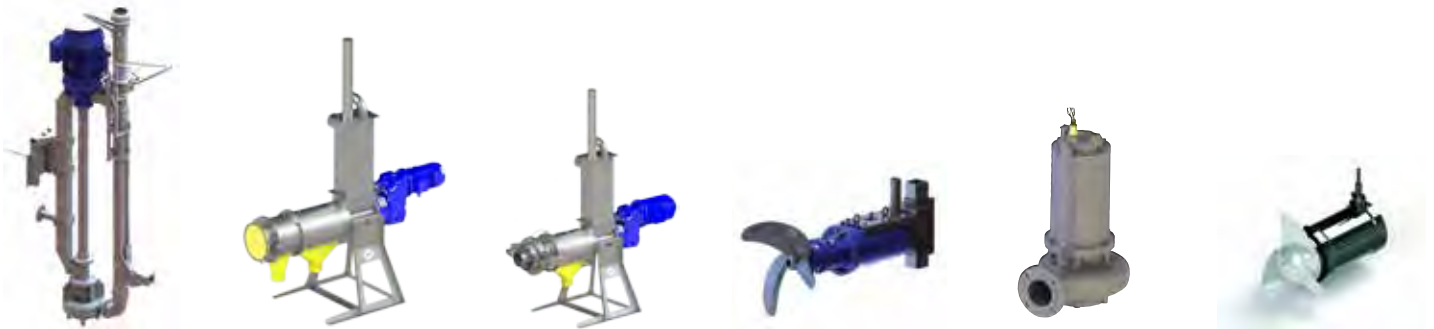
SECTORS OF APPLICATION



Cattle Farming



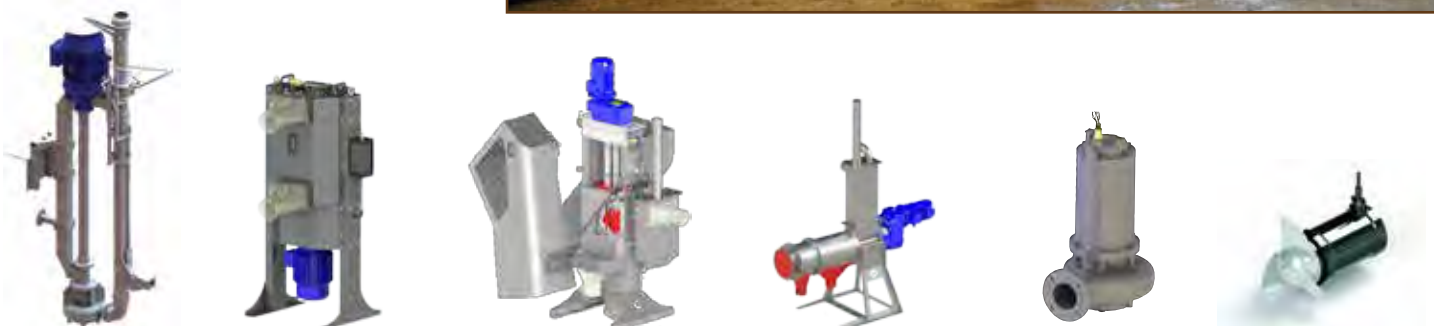
Manure treatment in cattle farms is a key application for the SEPCOM® range in animal husbandry. SEPCOM®'s expertise in separation, agitation and pumping technologies originates from this specific sector. The machines have been optimised over time with CHIOR® pumps and agitators allowing SEPCOM® to provide highly reliable solutions in all phases of slurry treatment. Products suitable for heavy-duty operation, a global distribution network and an attractive price make the SEPCOM® range the ideal solution for every farmer. With over 4,000 separators installed in cattle farms worldwide, SEPCOM® ranges among the main players on the global market.



Pig Farming



The large number of pig farms worldwide requires a specialised separator range for this sector. The particular characteristics of pig manure have led to the development of a specific machine for slurry treatment offering great advantages in terms of reliability and ease of maintenance.

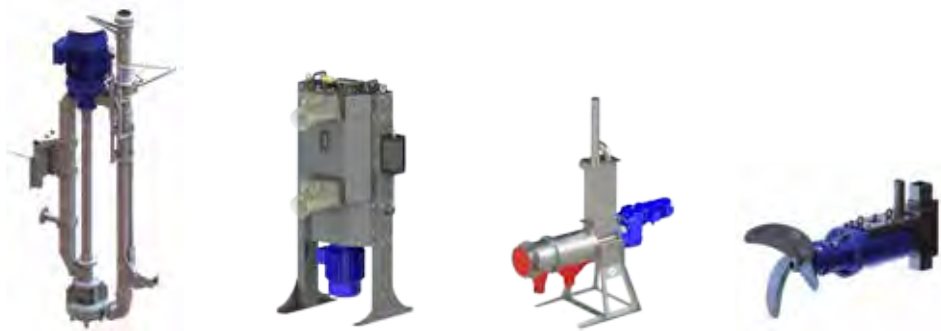




Poultry Farming



Poultry muck management has always been problematic considering the special characteristics of this type of manure. The solution offered by SEPCOM® boasts numerous references especially in egg farms.



Biogas Plants



For more than 25,000 biogas plants operating worldwide, SEPCOM® has on offer first-class technologies for the separation of digestate from anaerobic digesters. Micro-filtration treatment of the same digestate provides its maximum enhancement in fertigation as well as for the complex issue of nutrient distribution and treatment. The CHIOR® mixing and pumping equipment completes the biogas sector range.





SOLIDS-LIQUID SEPARATORS

SEPCOM® Horizontal Screw Press Separators

The SEPCOM® Horizontal Screw Press Separator, with its range of sizes and configurations specialised for different applications, enables the efficient separation of cattle and pig manure as well as biogas digestate. The key components are the SINT® engineering polymer screw that improves cleaning of the screen and the patented counter-pressure system with its SINT® diaphragm, which ensures the formation and maintenance of the separated solids outlet plug.

- Solids separated with up to 30% DM (dry matter)
- Patented counter-pressure system with SINT® engineering polymer outlet diaphragm
- SINT® engineering polymer screw for optimum screen cleaning





SOLIDS-LIQUID SEPARATORS

SEPCOM® Bedding Screw Press Separators

The SEPCOM® Bedding Screw Press Separator is designed for safe re-use of separated solids as bedding for livestock. The solids consist of cattle manure or biogas digestate. The pneumatic pressor, combined with the logic of the WAM® control panel, guarantees full control over the performance of the machine ensuring separated solids with constant dry content.

- Solids separated with up to 40% DM (dry matter)
- Pneumatic outlet counter-pressure system for constant dry content
- Separator control panel



SEPCOM® Vertical Screw Press Separators

The SEPCOM® Vertical Screw Press Separator is the ideal solids-liquid separator for pig manure. Its unique design, consisting of SINT® engineering polymer twin screws and their vertical orientation ensures efficient separation without the possibility of losing the solids plug even when dealing with low dry content manure.

- Ideal for pig manure or any other slurry with low dry content
- Unique design allows maintaining the solids plug
- SINT® engineering polymer vertical screws for optimised screen cleaning





MICRO-FILTERS TO ENHANCE SEPARATED LIQUID

SEPCOM® MFT Micro-Filter

The SEPCOM® Micro-Filter is the ultimate solution for the enhancement of the liquid phase of biogas digestate, as well as pig and cattle manure downstream of the main SEPCOM® separator. The rotation speed of the centrifugation tool combined with the fine spacing of the screen, improve the quality of the liquid separated in terms of solid particle content, generating in output a liquid rich in nutrients that can be used for fertigation and as filler material for complete treatment.

- Filtration efficiency up to 25 µm screen spacing
- Concentration of nutrients in the liquid phase
- Streamlining of the separated liquid
- Low operating costs



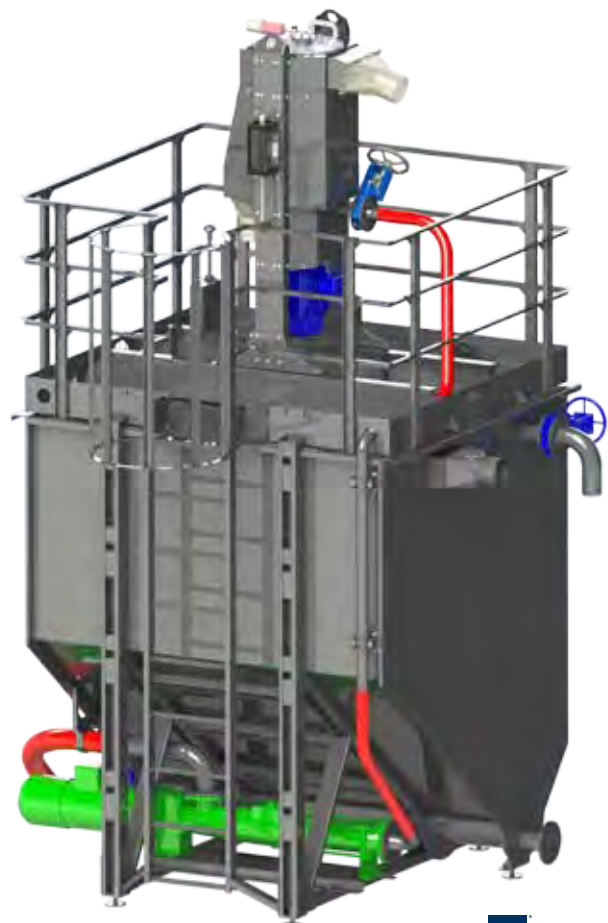


COMPACT MICRO-FILTRATION SYSTEMS

SEPCOM® MFT Micro-Filtration Plant

The compact SEPCOM® MFT Micro-Filtration Plant operates as an autonomous separation system, consisting of: micro-filter, storage tank, feed pump, control panel and level sensors. The plant ensures the enhancement of the liquid phase of the digestate as well as pig and cattle manure.

- Maximum micro-filtration efficiency
- No need for civil works
- Small footprint





SUBMERSIBLE AGITATORS

CHIOR® WSA Submersible Agitators

The CHIOR® WSA Submersible Agitator with drive power installed of up to 7.5 kW finds its main application in the mixing of livestock manure, biogas effluents, as well as industrial and civil wastewater. CHIOR® WSA agitators consist of an electric motor coupled with a propeller, designed and built for blending and suspension of liquids with medium-low density.

- Excellent mixing performance (up to a radius of 40 metres)
- Easy maintenance
- Low operating costs





SUBMERSIBLE AGITATORS

CHIOR® SE Submersible Agitators

The CHIOR® SE Submersible Agitator, with drive power installed ranging from 11 to 22 kW, propeller diameters from 520 to 1,000 mm and mixing efficiency up to a radius of 60 metres, finds its main application in mixing medium and medium-high density livestock manure. It is also used for agitation in biogas and industrial waste digesters.

- Special shape of highly efficient engineered propeller
- Wide range and different rotation speeds available
- Adjustable support system
- Low power consumption
- Easy maintenance





SLURRY MIXERS WITH FIXED ANGLE PTO-DRIVE

CHIOR® TBO Slurry Mixers with PTO-Drive

The CHIOR® TBO Slurry Mixer with PTO-drive is a horizontal unit equipped with universal joint. It is used for mixing livestock manure and digestate in biogas plants. A stainless steel structure and oil-bath transmission ensure durability over time. High mixing efficiency is ensured by a swivel system with manual mechanical depth adjustment with an easily replaceable hydraulic system.



- Shaft length: 4 ~ 8 metres
- Material: Cast iron or 304L stainless steel
- Special propeller shape ensuring high mixing efficiency





VERTICAL CHOPPER PUMPS WITH HIGH PERFORMANCE ELECTRIC MOTOR

CHIOR® VPH Vertical Chopper Pumps with Electric Motor

The CHIOR® VPH is a long shaft chopper pump with external motor drive. It is used for lifting manure from the livestock industry, as well as effluents from biogas production and industrial plants. A stainless steel structure and oil bath transmission ensure enhanced durability. High shredding efficiency, even with high percentages of solids, is ensured by suction from the top and by a spiral chopper system.

- Delivery pipe equipped with vertically and horizontally adjustable mixer nozzle
- Flow rate: 138 ~ 220 m³/h
- Delivery diameter: 100 ~ 120 mm
- Material: Cast iron or 304L stainless steel
- Drive power installed: 5.5 ~ 22 kW





VERTICAL CHOPPER PUMPS

CHIOR® VPT Vertical Chopper Pumps with PTO-Drive

The CHIOR® VPT is the PTO-drive version of the VPH model. The power take-off ensures increased performance in terms of achievable flow rate and head of the pump.

- Flow rate: 250 ~ 660 m³/h
- Delivery diameter: 120 ~ 200 mm
- Material: Cast iron or 304L stainless steel
- Drive power installed: 30 ~ 83 kW





SUBMERSIBLE CHOPPER PUMPS

CHIOR® WSP Submersible Chopper Pumps

The CHIOR® WSP Submersible Chopper Pump consists of an electric motor adapted to a pump impeller and a cutting blade. This pump is designed to convey water, wastewater and liquids containing solid lumps and fibre. It consists of the following components:

- External shell manufactured from steel with waterproof structure allowing immersion into the liquid to be aspirated
- Encapsulated waterproof three-phase electric motor
- Electric cable for mains supply
- Chopper blade



CHIOR® VPL Vertical Chopper Pumps with Electric Motor for Light-duty Applications

The CHIOR® VPL is a Long Shaft Chopper Pump with external motor drive that finds its main application in the preliminary treatment of manure from the livestock industry, in particular of low-solids pig manure. Aspiration is located in the lower part of the pump body, while shredding takes place by means of high efficiency chopper knives.

- Externally mounted drive unit for easy maintenance
- Oil bath transmission protected by mechanical cemented carbide seal
- Shredding knife system with suction from the bottom of the pump body
- Flow rate: 36 ~ 84 m³/h
- Delivery diameter: 60 ~ 80 mm
- Material: Cast iron or 304L stainless steel





BIOMASS FEEDING SYSTEMS FOR ANAEROBIC DIGESTERS

WAM® TCB Bulk Biomass Digester Feeding Systems

TCB by WAM® is a versatile screw lift system for extraction of the solid fraction of biomass from the mixer / batcher and subsequent lifting and feeding of the material into the anaerobic digester in biogas generation plants.

- Vertical screw conveyor system with supporting structure
- Heavy-duty high thickness steel screws
- Standard connection for mixer / hopper



OTHER APPLICATIONS

OLIVE OIL PROCESSING WASTE



PULP & PAPER



OTHER APPLICATIONS

TAPIOCA PROCESSING WASTE



COFFEE PROCESSING WASTE





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