



DP Biogas

OrganiPrep - The Solution for
Pre-Treatment of Organic Waste



- Biological/organic waste must be treated before being used for Anaerobic Digestion.
- The quality of the pretreatment process plays an important role in the conversion rate from waste to biogas.
- DP has the most longstanding, proven and reliable technologies to pre-treat biological waste to ensure the highest quality and volume of gas yield.

DP has over 30 years of actual operational and technical experience in the treatment of feedstock.

The technology has been refined to deliver the highest possible quality substrate for Anaerobic Digestion. DP's OrganiPrep process and equipment is a combination of the ADOS Mill and SEDI tank systems, and is the most effective pre-treatment equipment available to optimise the quality of material going to the digester and maximise the resulting gas yield.

How OrganiPrep Pre-Treatment Works

ADOS Mill

Feedstock is firstly treated in the specially designed 'wet-mill' in order to reduce particle size, to remove lighter particles and to add digestate to create high quality pumpable slurry for further sedimentation and digestion.

"SEDI" Sedimentation Tank

The slurry is passed to the sedimentation tank, where it is homogenized and separated into three layers - heavy sediment on the bottom, floating particles on the top, and putrescible material in the middle. The top and bottom layers are removed; and in addition, cooking oil can be removed from the floating layer as required. The putrescible material is pumped to a buffer tank.

ADOS Mill + SEDImentation Tank



Types of Treatable Wastes

- Organic Fraction of Municipal Solid Waste (OFMSW)
- Food waste
- Industrial food processing waste
- Market waste
- Category III waste (according to the EU Directive Animal by Products Regulation 1774_2002)
- Others (energy crops, animal waste, industrial food processing rejects, activated sludge, etc.)



Features and Benefits



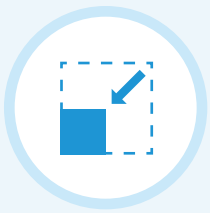
User Friendly

- Deliverable as plug & play solution and compatible with any existing system
- Easy to clean, maintain and operate



Highly Efficient

- Simple pre-treatment speeds up the initial biological processes - no further pre-treatment required
- Minimal energy consumption
- Low operational costs
- Enables higher organic load inside the digester
- Avoids big digester volumes
- Insensitivity to feedstock fluctuations
- Removal of heavy and floating particles
- Homogenization of material optimized for digestion
- Enhanced gas yield



Compact

- Small footprint
- Scalable - available in 2 configurations: 20m³ and 30m³



Versatile

- Suitable for every type of anaerobic plant
- Option for implementation of oil separation unit
- Option for manual or fully automatic water content adjustment
- Can process up to 16 tons per hour (tph) of organic waste

Quality Standards and References

ADOS Mill and SEDI tank
- City of Benesov, Czech Republic

Manufactured in Austria to meet
the highest CE standards



Contact Us

DP has 9 offices around the world in 8 countries – Austria, China, Czech Republic, Denmark, Poland, Thailand, UAE and UK.

To ensure that we can address your needs appropriately, please email info@dpcleantech.com for enquiries or further information.

About DP CleanTech

- ✓ Founded in 2004, DP CleanTech Group designs, engineers, manufactures and commissions complete solutions for managing waste materials; and for conversion of waste materials into clean energy.
- ✓ DP's core technologies originate in Europe and are behind over 300 biomass and waste-related projects around the world.
- ✓ DP has a broad portfolio of innovative Waste-to-Energy and environmental management technologies with which to lead the advancement of renewable energy and environmental protection.
- ✓ DP technology was behind the first biomass power plant in both Denmark and the first commercial power plant in China.
- ✓ DP has facilities and multiple references across Europe and Asia; and has projects under development in Africa and South America.

