



# ENERGY-EFFICIENT MECHANICAL DISINTEGRATION

**DisRuptor: The individually adaptable  
concept for mechanical disintegration  
of solid matter**

**VOGELSANG – LEADING IN TECHNOLOGY**

**VOGELSANG**



# OUTSTANDING FLEXIBILITY

The individually adaptable  
DisRuptor for mechanical  
disintegration of solid matter



DisRuptor  
DR7000



Optimal substrate disintegration is key for determining biogas yield. This is why Vogelsang also offers a mechanical alternative for disintegrating substrates: the flexibly designed DisRuptor. The reduction of the particle size and the simultaneous defibering increases the surface area of the solid matter used. This helps bacteria reach the nutrients better, accelerates conversion and increases the gas yield.

### The principle

The DisRuptor functional unit consists of a rotor with six blades as well as an outer DisRuptor ring. At high rotor speeds, the solid matter in the suspension is milled and frayed in the narrow gap between the rotor unit and the external ring. The gap can be individually adjusted to the specific application and the substrate. Thanks to these unique features, the DisRuptor offers particularly flexible and efficient mechanical treatment.

### Adjustable mechanism

The DisRuptor adjustment mechanism is simple to handle. With hydraulic assistance, the DisRuptor head can be easily pivoted upwards to enable easy access to the functional unit. Few steps and no special tools are required to individually adjust the gap between the blades and the outer ring for each substrate.

### Economical side effect

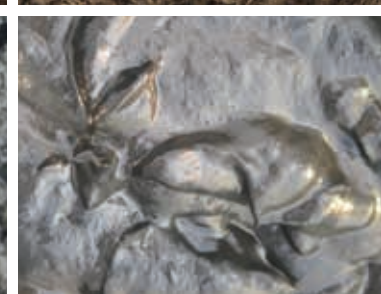
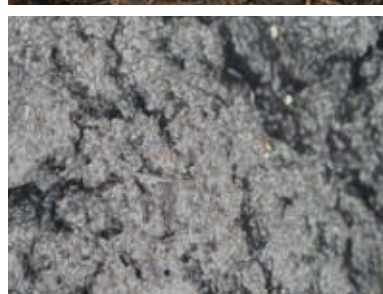
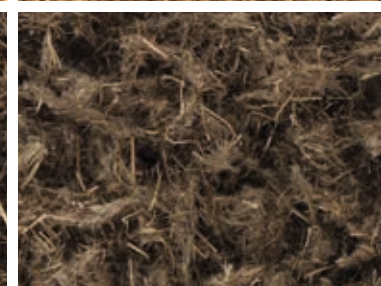
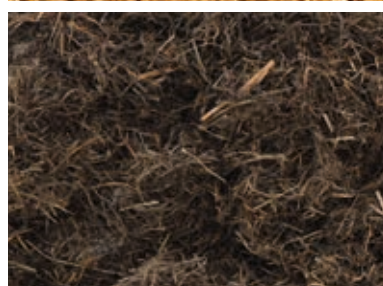
Since disintegration of substrates with the DisRuptor helps to prevent floating layers and reduces the viscosity of the organic suspension, power consumption and energy requirement of mixers and pumps is significantly reduced. Moreover, wear on the ring and blades can be compensated for by realignment – and their service life extended accordingly.

### Outstanding performance

The DisRuptor, Vogelsang's well-thought-out complement to the product range for biogas plants, has even won over independent committees of experts: The DisRuptor was the "WINNER 2016" of the EnergyDecentral INNOVATION AWARD.

## SPECIFICATIONS

Max. throughput	200 m <sup>3</sup> /h
Max. pressure	4 bar
Installed drive power	15/22 kW

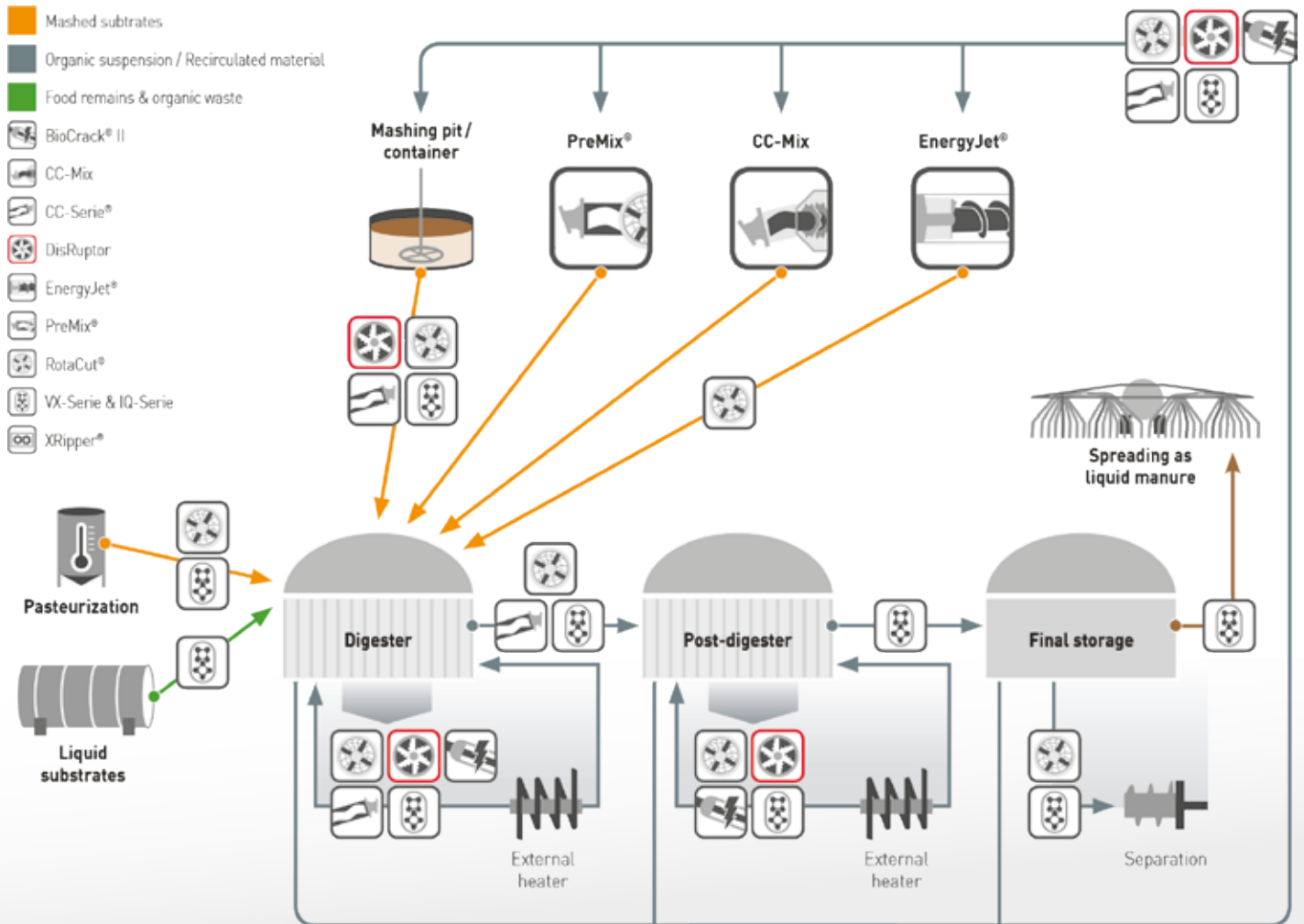


### Advantages of the DisRuptor

- Increases the target surface for the bacteria
- Reduces the viscosity
- Accelerates and increases gas production
- Ensures high throughput

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## Application examples for the DisRuptor



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