BIOMASS SUBSTRATE FEEDER SYSTEMS
Complete, ready-to-use CRATOS conveyor systems for transporting biomass substrates to the screw conveyor.

Energy saving 50% Transport efficiency
CRATOS substrate feeder systems for sustainable biomass transportation

Substrate feeder system controls
- Control cabinet with PLC control – signals malfunctions, filling level information, etc.
- Adjustable cyclic operation
- Various operating modes (automatic, manual operation)
- Data can be exchanged with the biogas controls
- All conveyor components are controlled and monitored centrally to prevent them from moving without a load
- Can be filled flexibly at any time

Setup and assembly
- Modular structure; can be expanded at any time and is easy to repair.
- The housing can be positioned at an angle of up to 20°.
- Adjustable feet for flexible positioning.
- Positioning the pre-assembled dosing systems with a crane.

Loading the fermenter
- The combination of a drag chain and a large-volume dispensing drum ensure regulated substrate input with optimal control options.
- Connection options for inserting a fermenter using various versions of the screw conveyor: inserting from above, below or the side.
- Can be filled from the side and from behind. Can be filled at any time, even if the distribution system is partially emptied.

Metering device
- Large-volume dispensing drum with rows of aeration spikes reliably aerates various kinds of substrate, enabling you to increase the efficiency of your system.
- Aerating and splitting the substrate for an improved fermenting process.
- Substrate can be dispensed precisely thanks to the built-in scale and convenient electronic controls with cycle and weight settings.
- Doesn’t compress the material being conveyed.
- Input quantities: approx. 500 to 2000 kg/h of material (individually adjustable).
Saving energy by efficiently transporting biomass to the screw conveyor

Customer focus
- Additional equipment such as feed hoppers and baffle plates available upon request.
- Standard storage volumes from 25 to 50 m; other sizes also available.
- Hydraulic tailgates for using vehicles to fill from behind are available upon request.

We have the right size of substrate feeder system for every kind of biomass.

Energy efficiency
- Use up to 50% less energy with efficient double-strand scraper floor conveyor technology.
- Low power requirement of as little as 0.1 kW per metre of substrate.
- Installed electric power: max. 15 kW.
- All energy used in the direction of movement; none wasted as with moving floor systems.

Experience
- Thanks to our decades of experience in supplying fuel to and removing ash from biomass systems, incinerators and coal-fired power plants, as well as recycling and waste processing facilities, we offer only coordinated, proven components in durable, self-contained systems.
- Our components are highly wear-resistant and have withstood the test of a variety of uses.
- We also offer comprehensive engineering services to help you develop a more effective and resilient system.

Reliability
- Suitable for every season and weather; stainless steel casing in the conveyor area prevents corrosion.
- Sturdy scraper floor technology; round steel chains are self-cleaning, highly wear-resistant and durable.
- For use with virtually all solid materials: corn, grass silage, dung, waste and woodchips.

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CRATOS biomass substrate feeder system

Dimensions of standard substrate feeder system

<table>
<thead>
<tr>
<th>Dimensions of substrate feeder system</th>
<th>25 m³</th>
<th>30 m³</th>
<th>50 m³</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total length: approx. [m]</td>
<td>8</td>
<td>10</td>
<td>20</td>
</tr>
<tr>
<td>Total width: approx. [m]</td>
<td>2.8</td>
<td>2.8</td>
<td>2.8</td>
</tr>
<tr>
<td>Total height*: approx. [m]</td>
<td>2.2</td>
<td>2.2</td>
<td>2.2</td>
</tr>
<tr>
<td>Dosing system</td>
<td>Drum</td>
<td>Drum</td>
<td>Drum</td>
</tr>
</tbody>
</table>

* Without adjustable feet

Save up to 50 % less energy with the most efficient conveyor technology with highly wear-resistant double-strand scraper conveyor operation.

Contact the CRATOS engineering team directly:
tel.: + 49 7361-504-1369

RUD Ketten
Rieger & Dietz GmbH u. Co. KG
Friedensinsel
73432 Aalen/Germany
Tel. +49 7361 504-1369
Fax +49 7361 504-1523
cratos@rud.com
www.rud-cratos.com