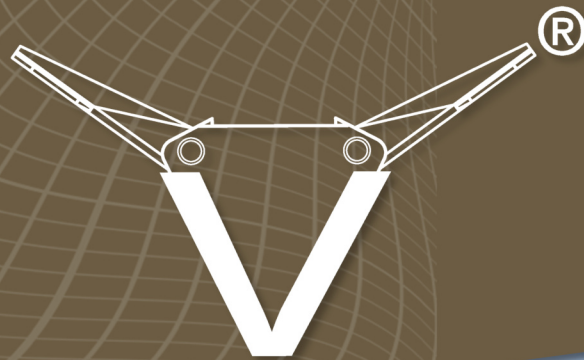


TERBRACK

MASCHINENBAU GMBH



PRODUCTCATALOG

**YOUR PARTNER FOR CONVEYING,
DOSING AND FEEDING**

www.terbrack-maschinenbau.de



An aerial photograph of an industrial facility. On the left is a large building with a grey roof and a white cylindrical ventilation duct. In the center, a complex conveyor system with white pipes and metal structures is visible. To the right, a dark asphalt area contains a white truck. The foreground shows a dirt area with several rectangular pits filled with dark material, possibly mulch or compost. The background is a grassy field.

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Terbrack Maschinenbau GmbH is a family-run company, founded in 1997 in Vreden in Germany's Münsterland region. For over twenty-five years, we have been producing innovative conveyance, dosage and feeding technology for a wide variety of different uses.

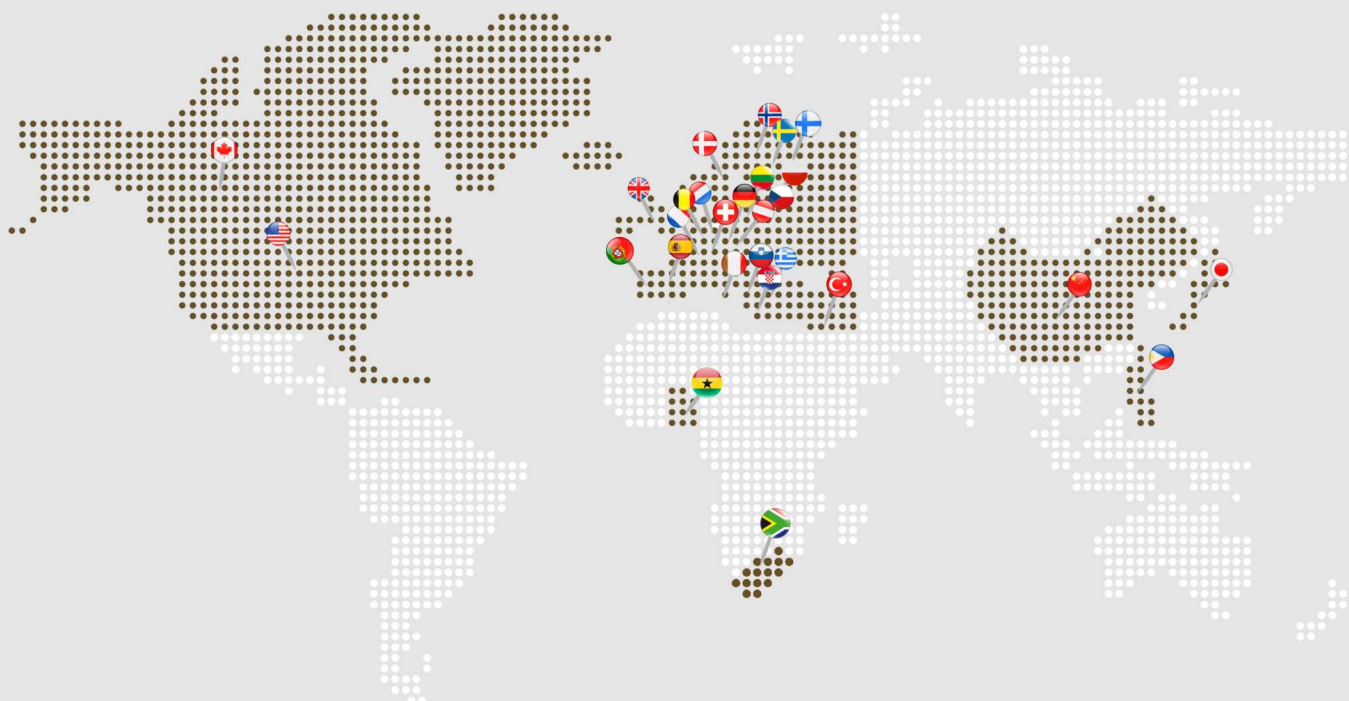
At the beginning, Terbrack Maschinenbau GmbH was primarily known as a biogas/agroindustry supplier. Today, the name Terbrack Maschinenbau denotes a company with a proven international track record as a leading manufacturer in a wide variety of branches, including the recycling, plastic, composting, waste materials, replacement fuels, sewage sludge, biomass and agroindustries.

Our company's history has been shaped by our pioneering spirit and innovative ingenuity. We have implemented well over 1,500 projects, making us one of today's most sought after leading partners in the conveyance, dosage and feeding technology industries worldwide. We offer technical solutions that are both of excellent quality and economical for an extensive and constantly growing range of branches of industry. We can fit the individual components together for you, like pieces of a jigsaw puzzle. And, whatever we do, we never lose sight of what is most important to you: efficient technology and ease of use.

Our company's size and clear structures make things run quickly and smoothly, which is especially important when producing customised products and special components for our clients. Our goal is to provide you with the highest quality products, carefully designed to meet your needs and, above all, sustainable. Our products are assembled both nationally and internationally by our own highly motivated, optimally educated and trained workforce.

Do you want to expedite your projects and need a complete performance portfolio? Terbrack Maschinenbau GmbH is your ideal partner! We can not only deliver the product to your doorstep, but also offer complementary customised solutions and comprehensive customer support. Discover our creativity and innovativeness for yourselves! Take a close look at Terbrack Maschinenbau's range of services and benefit from the advantages we offer.

PROJECTS COMPLETED WORLDWIDE





VARIO PRODUCT OVERVIEW



The Vario dosage container is a modular system that comes in sizes ranging from 7 m³ – 120.5 m³ and can be adapted to meet your individual needs.



The Vario *DUO* dosage container – our larger model –
If our Vario dosage container is too small to meet your needs, the Vario DUO, available in 150 m³ – 240 m³ sizes, may offer the perfect alternative.



The Vario *FLOOR* is our tried-and-tested system for use in concrete bunkers.



The *TT* dosage system is energy efficient and low maintenance. Its 3 m³ – 13 m³ dimensions make it the ideal system for smaller plants.



Our Conveyor technology offers innovative, goal-oriented and customised conveyor equipment specially designed to meet your needs.



VARIO FUNCTIONAL PRINCIPLE



CONTROL

The standard system comes equipped with a Siemens S7 that permits autonomous control. It can also be integrated into new or existing control systems.

STORAGE CONTAINER

The container is impervious to fluids. Its modular construction allows it to be expanded later.

DISSOLVING SCREW

The dissolving screw permit even, unobstructed dosing, even with substrates that are cumbersome to transport.

HYDRAULIC UNIT

An electrically powered hydraulic unit is used to drive the Vario push components.

TRANSMISSION & MOTORS

We use planetary gear technology, which provides a high degree of efficiency and is highly resistant to wear and tear.

CYLINDER OPERATION

The stainless steel piston rods in the hydraulic cylinders are equipped with a dual seal, which prevents the substrate from mixing with hydraulic oil.

VARIO CONVEYOR COMPONENTS

Vario's conveyor rails are made of stainless steel and plastic. The outstanding efficiency and stability of this technology is unrivalled in this entire branch of industry.

DISCHARGE SCREW CONVEYOR

The position of the integrated discharge screw conveyor allows for the even delivery of the substrate.



One of its special features is our Vario conveyor rails. Their alternating conveyor mechanism allows for the steady, even discharge of materials. When the conveyor elements are moving forward, the push components unfold to powerfully drive the materials in the output direction. When the rails are moving backwards, the push components lie flat and slide through the material with very little resistance, allowing very little material to be pulled backwards.

In its standard configuration, the Vario dosage container can produce an output of up to 20 m³/h, depending on the substrate. Additional output performance can be customised to meet your needs.

Vario equipment can be integrated with all the usual subsequent equipment.

We can deliver and manage the following systems, together with all their accompanying components, in their entirety.

- Pumping equipment
- Screw technology



VARIO STANDARD SIZES

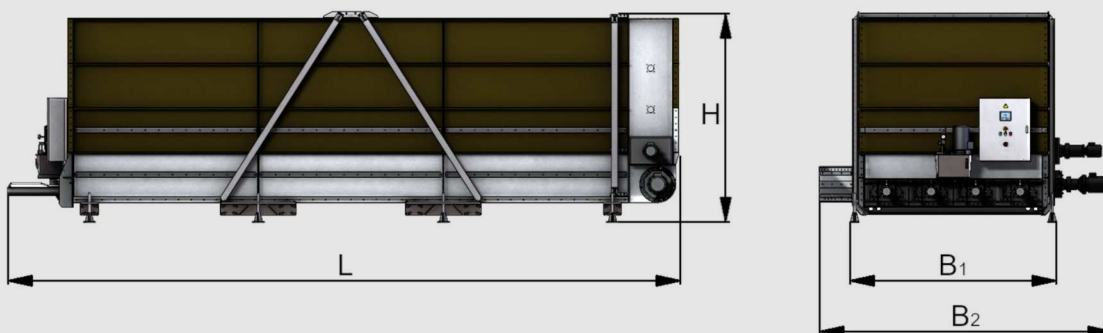
Equipment size / model designation is presented as follows. (Example Model 212)

The first number indicates the number of conveyor rails, width of the machine.
(in the example of Model **2**12: 2 conveyor rails; each further conveyor rail +0.7 m)

The second number indicates the number of cassettes along the length of the machine.
(in the example of Model 2**1**2: 1 cassette; each further cassette +3 m)

The third number indicates the number of cassettes along the height of the machine.
(in the example of Model 21**2**: 2 cassettes; each further cassette +0.7 m)

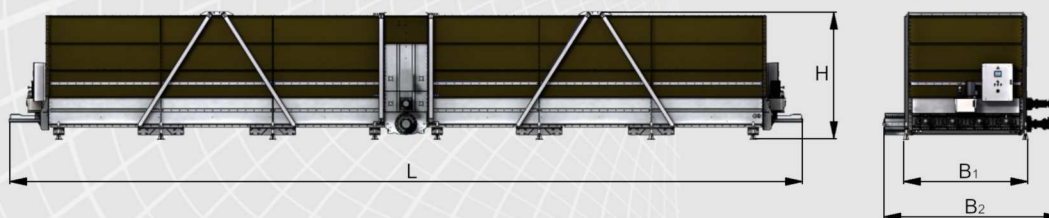
VARIO DOSAGE CONTAINER



Vario Type	Dimensions			
	Volumes	Length L	Width B1/B2	Load height H
212	7,1m ³	4,9m	1,9m / 3,4m	2,0m
213	10,6m ³	4,9m	1,9m / 3,4m	2,7m
313	15,9m ³	4,9m	2,6m / 4,1m	2,7m
314	21,2m ³	4,9m	2,6m / 4,1m	3,4m
323	28,7m ³	7,8m	2,6m / 4,1m	2,7m
324	38,2m ³	7,8m	2,6m / 4,1m	3,4m
333	41,5m ³	10,7m	2,6m / 4,1m	2,7m
334	55,3m ³	10,7m	2,6m / 4,1m	3,4m
413	21,2m ³	4,9m	3,3m / 4,8m	2,7m
414	28,2m ³	4,9m	3,3m / 4,8m	3,4m
423	38,2m ³	7,8m	3,3m / 4,8m	2,7m
424	51,0m ³	7,8m	3,3m / 4,8m	3,4m
433	55,3m ³	10,7m	3,3m / 4,8m	2,7m
434	73,7m ³	10,7m	3,3m / 4,8m	3,4m
443	72,3m ³	13,6m	3,3m / 4,8m	2,7m
444	96,4m ³	13,6m	3,3m / 4,8m	3,4m
513	26,5m ³	4,9m	4,0m / 5,5m	2,7m
514	35,3m ³	4,9m	4,0m / 5,5m	3,4m
523	47,8m ³	7,8m	4,0m / 5,5m	2,7m
524	63,7m ³	7,8m	4,0m / 5,5m	3,4m
533	69,1m ³	10,7m	4,0m / 5,5m	2,7m
534	92,1m ³	10,7m	4,0m / 5,5m	3,4m
543	90,4m ³	13,6m	4,0m / 5,5m	2,7m
544	120,5m ³	13,6m	4,0m / 5,5m	3,4m

All figures are estimates

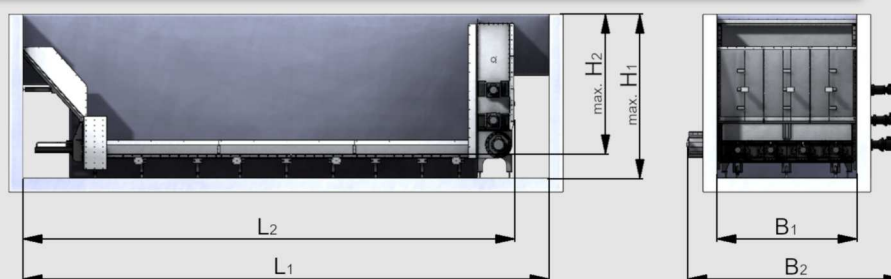
VARIO *DUO* DOSAGE CONTAINER



Vario <i>DUO</i> Type	Dimensions			
	Volumes	Length L	Width B1/B2	Load height H
464	150,0m ³	20,9m	3,3m / 4,8m	3,4m
484	193,0m ³	26,8m	3,3m / 4,8m	3,4m
564	185,0m ³	20,9m	4,0m / 5,5m	3,4m
584	240,0m ³	26,8m	4,0m / 5,5m	3,4m

All figures are estimates

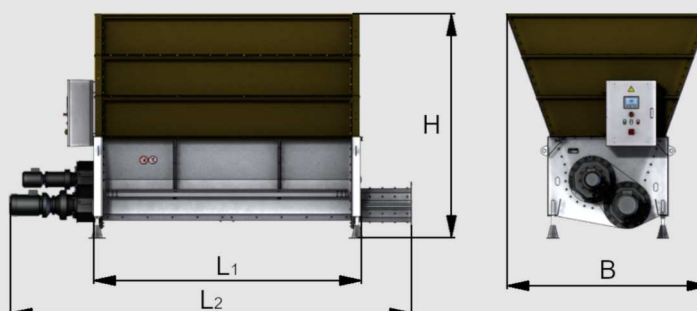
VARIO *FLOOR*



Vario <i>FLOOR</i> Type	Volumes	Length		Width		Height	
		Bunker L1	Floor L2	Bunker B1	B2	Bunker max. H1	Load height max. H2
80	80m ³	11,3m	10,6m	3,0m	4,7m	3,5m	3,0m
100	100m ³	11,3m	10,6m	4,0m	5,5m	3,5m	3,0m
120	120m ³	12,8m	12,1m	4,0m	5,5m	3,5m	3,0m
160	160m ³	14,7m	14,0m	4,0m	5,5m	3,8m	3,3m

All figures are estimates

TT DOSAGE SYSTEM



Vario <i>TT</i> Type	Dimensions			
	Volumes	Length L1/L2	Width B	Load height H
3	3,0m ³	3,4m / 4,9m	1,8m	1,7m
4	4,0m ³	4,4m / 5,9m	1,8m	1,7m
7	7,0m ³	3,4m / 4,9m	2,1m	2,2m
9	9,0m ³	4,4m / 5,9m	2,1m	2,2m
10	10,0m ³	3,4m / 4,9m	2,5m	2,7m
13	13,0m ³	4,4m / 5,9m	2,5m	2,7m

All figures are estimates



EQUIPMENT, OPTIONS AND ACCESSORIES

PARTIALLY OR FULLY STAINLESS STEEL

The standard partially stainless steel model:

All the inner parts of the floor and the container's first C-profile ring, which come into contact with the substrate, are made of stainless steel and plastic, as are all parts of the conveyor equipment and the screws. All other parts are made of powder-coated steel.

The fully stainless steel model:

In the fully stainless steel model, the entire inner container, i.e. all parts that come into contact with the substrate, is made of stainless steel and plastic, as are all parts of the conveyor equipment and the screws.



HYDRAULIC LID

To minimise emissions and weather damage, the Vario dosage container can be fitted with a hydraulic lid, operated using a wireless remote control.

For example, if you are planning to load your Vario dosage system using a truck or lorry, we can offer you a variety of customised solutions.

(The hydraulic lid cannot be fitted in combination with overcharge protection.)

VARIO ON A STUD FRAMEWORK

In order to customise the height of the discharge screw conveyor output, the Vario dosage container can be mounted onto a stud frame.



INSPECTION APERTURE

To facilitate maintenance work, we offer an inspection aperture with safety switches in two sizes.



SPECIAL ELECTRICAL FEATURES

- Wireless remote control unit
- Integration with ProfiNET / ProfiBUS DP
- Tricolour operating indicator column
- Load-dependent control
- Operating indicator light
- Load break switch



AUTOMATED LUBRICATION

To provide automated lubrication, we offer centralised, automated lubrication.

FILLING STATUS MONITOR

To allow you to monitor filling status, we offer the appropriate system for each medium. Used in combination with our Vario control system, this ensures precision dosage of the medium.

- Radar sensors
- Laser sensors
- Rotary position monitors
- Weighing systems

SPECIAL PAINTWORK

The Vario dosage container is available in other colours, on request.

Standard Colours:

C profile (steel): moss green (RAL 6005).

C profile (stainless steel): aluminium white (RAL 9006).

Substructure and side supports: zinc plated

Motors, transmission crossbeams, cylinders etc.: deep black (RAL 9005)



OVERVIEW OUR ADVANTAGES

- Low energy consumption
- Liquid-tight
- Modular, extendable
- Customer service 365 days a year
- Interconnection with all common and popular downstream systems possible
- Unique Vario push element system
- Worldwide assembly, maintenance and service
- Customer care from start to finish
- Highest quality „Made in Germany“
- Trouble-free dosing of a wide variety of substrates, even long-fibrous



CONVEYOR TECHNOLOGY

Conveyor technology "Our know-how - your benefit"

We offer innovative, goal-oriented, customised, sustainable mechanical conveyor technology. You can choose between solutions that address your entire process and partial solutions for individual domains. But the approach is always determined by which medium you are handling.

There can be no doubt about it: different media demand different conveyor technology designs. Our screws are manufactured with the utmost precision, in order to ensure the highest quality and accuracy.

EQUIPMENT AND ACCESSORIES



INSPECTION APERTURE

To facilitate maintenance work, we offer an inspection aperture with a safety switch.

ROTATION TRACKER

The rotation tracker can identify when a screw breaks, thereby protecting the dosage system and other equipment from major harm.



CLOGGING SENSOR

The clogging sensor protects screw technology and other equipment from damage.

SAMPLE APPLICATIONS



Vario with truck filling



Sludge hopper with stuffing screw



Vario with trough screw and special paintwork



Vario, partial stainless steel design



Vario with flushing and polymer pump



Vario as truck acceptance



AGRO BIOGAS



BIOGAS



AGRAR



INDUSTRY RECYCLING



RECYCLING



INDUSTRY



SEWAGE SLUDGE



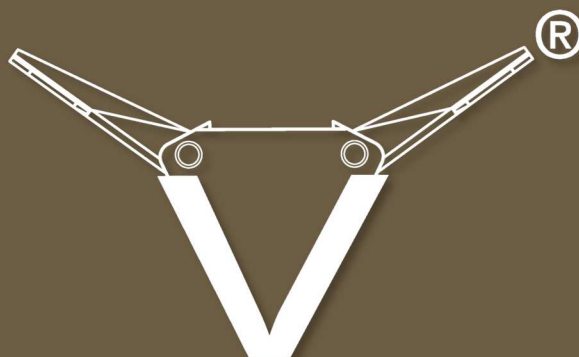
SLUDGE

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