

# PUMPE Our technology makes an impact.

## AGRICULTURAL TECHNOLOGY





# **UNI-DOS**

UNI-Dos 45

UNI-Dos 80

UNI-Dos 120

UNI-Dos 200

UNI-Dos 300



# **UNI-Dos Dosing Unit**

## Reliable - Flexible - Proven 1000 times over

We offer complete dosing systems using a screw conveyor system for storing and dosing feeds with poor flow such as CCM, wet grains, brewer grains, bread flour and many more. When combined with our special screw conveyors for fibrous products, our systems can even convey silage maize and short straw. In addition to agricultural applications, our systems can also be used for recycling (conveying PET flakes) or biogas plants (conveying separated fermentation substrate).

Our dosing feeders are manufactured in series and are distinguished by an excellent cost/performance ratio. Our products are made from stainless steel and have been perfected over years of industry experience.





### Container (upper section)

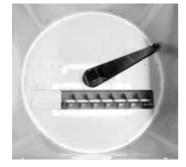
The bodies are designed as a bolted modular system and come in several sizes. Corrosion-resistant stainless steel ensures excellent container hygiene and a long service life.



### Container (base)

The base frame is a robust welded construction made out of stainless steel.

The feets are manufactured from galvanized steel and can be made in several lengths.



### View of container interior

A solid steel blade rotates above the circular base plate. By continuously rotating, this dosing blade prevents the conveyed product from bridging and ensures that the base conveyor screw is constantly fed. The dosing blade can easily be replaced by loosen a screw connection.



## Dosing blade drive

The dosing blade is driven by a low-maintenance spur gear motor. For device model 45 and model 80, energy is transferred via a solid chain drive. For larger devices, drive shafts with planetary bevel gears are used.



## **Applications**

## Optimal solutions for all requirements

The devices can be flexibly installed both indoors and outdoors. The material conveyed can be dosed out with screw conveyors in 3 different sizes (model 114, model 160 and model 200) and at various conveyance rates. Because we manufacture our own, individual screw conveyors, we are also able to create conveyance systems for even more demanding technically applications.

## UNI-Dos model 45

- Storage volumes 3.2 m³
- Discharge via blade dosing
- Blade drive 3 kW optional 4 kW
- 2-piece screw conveyor line model 160, consists of horizontal discharge screw and inclined screw
- Hand crank for opening cover



2 UNI-Dos model 45s made from stainless steel with 3.2 m³ storage volume, horizontal discharge screw model 160, stainless steel cover with hand crank

## UNI-Dos model 200

- Storage volume 20 m³
- Discharge via blade dosing
- Blade drive 5.5 kW optional 7.5 kW
- 3-part screw conveyor line model 160, consists of horizontal discharge screw, conveyor screw and horizontal screw
- Hydraulically operated cover



UNI-Dos model 200 with 20 m³ storage volume, horizontal discharge screw model 160 and hydraulically operated cover



# PUMPE

# Equipment options and accessories

## Customized Dosing Units for all applications



### Variable transfer to dosing screw

Our special transfer technique allows us to convey material in every possible direction with the screw conveyors. We adapt our screw conveyor technology to your local conditions.



#### Transfer to dosing screw for fibrous products

The particular form of the outer tube on our inclined and horizontal screws inhibits the rotation of the substrate in the conveyor screw thus ensuring that even the most difficult material (corn silage and short straw for example) is conveyed without difficulty.



### Cover for UNI-Dos

For outdoor use, the feeder must be equipped with a cover for protection against rain and snow. The cover for devices up to 8 m³ consists of a stainless steel cover. The cover can be operated manually or electrically and even via radio remote control upon request. For devices larger than 8 m³, the cover is covered with a UV-resistant tarp and operated hydraulically.



### Stainless steel conveyor screw outlet

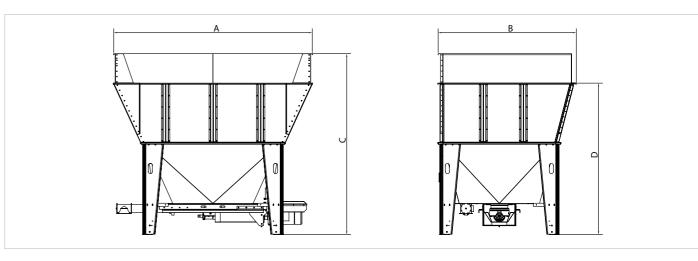
The conveyor screw outlet is characterised by a large square cross section that ensures reliable operation even when difficult material is being conveyed. The outlet head and the outlet tube are both equipped with inspection and cleaning openings.



### Butterfly valve for container inlet

We provide an electropneumatically operated container inlet valve for using our dosing technology for a liquid feeding system. Using a rubber seal, the valve prevents moisture from the feed container from entering and leaving sticky residue. A flexible rubber diaphragm between the conveyor screw outlet tube and the butterfly valve ensures reliable decoupling and the accurate weighing of the mixing tank.

# **Specifications**



UNI-Dos													
Model	45	45	45	45	80	80	120/8	120/10	120/12	200/13	200/17	200/20	300
contents (m³)	2.5	3.2	4.1	5	6	8	8	10	12	13	17	20	30
max. load (t)	1.88	2.40	3.08	3.75	4.50	6.00	6.00	7.50	9.00	9.75	12.75	15.00	22.50
A – container length (m)	2.02	2.50	2.80	2.80	3.06	3.06	3.08	3.08	3.08	3.88	3.88	3.88	6.07
B – container width (m)	1.37	1.37	1.37	1.37	1.69	1.69	2.24	2.24	2.24	2.69	2.69	2.69	2.39
C – total height (m)	1.96	2.11	2.36	2.64	2.63	3.13	2.36	2.71	3.06	2.97	3.55	3.80	3.55
D – height of loading sill (m)	1.96	2.11	2.36	2.64	2.63	3.13	2.36	2.71	3.06	2.97	2.97	3.22	2.97
blade drive power (kW)	3.0	3.0	3.0	3.0	4.0	4.0	5.5	5.5	5.5	5.5	7.5	7.5	7.5
gear motor + chain drive	Х	х	х	х	х	х	-	-	-	-	-	-	-
gear motor + planetary gear	-	-	-	-	-	-	х	х	х	х	х	х	х
dosing blade screwed	Х	Х	Х	Х	Х	Х	Х	х	Х	Х	Х	Х	х
hinged cover	0	0	0	0	0	0	0	0	0	0	0	0	0
stainless steel base frame	Х	х	х	х	0	0	0	0	0	0	0	0	0
painted steel base frame	-	-	-	-	х	х	х	х	х	х	х	х	х
stainless steel body	Х	х	Х	х	х	х	0	0	0	0	0	0	0
galvanized body	-	-	-	-	х	х	Х	х	х	х	х	х	х
weighing system	0	0	0	0	0	0	0	0	0	0	0	0	0
electric controls	0	0	0	0	0	0	0	0	0	0	0	0	0
preparation UBS model 160	Х	х	Х	Х	х	х	Х	х	х	х	х	х	х
preparation UBS model 200	-	-	-	-	0	0	0	0	0	0	0	0	0
preparation UBS model 360	-	-	-	-	-	-	0	0	0	0	0	0	0
conveyor screw model 114	0	0	0	0	0	0	0	0	0	0	0	0	0
conveyor screw model 160	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	х
conveyor screw model 200	-	-	-	-	0	0	0	0	0	0	0	0	0
conveyor screw model 360	-	-	-	-	-	-	0	0	0	0	0	0	0

x = standard equipment. o = optional. - = not available

## Konrad Pumpe GmbH

Innovative technology plus experience.



For more than 180 years, we have been closely following the developments and increasing demands of the agricultural industry. Our barn equipment and feeding systems are characterized by sophisticated functionality, individual concepts and the highest standards of quality and durability. Partnership is our foundation; reliability and professionalism are our recipe for success.



The transition to renewable sources of energy is opening up new perspectives for agricultural practices. We here at PUMPE are reliable partners to the energy farmers of tomorrow and offer innovative products and proven technology for biogas operators. From the design process, to manufacturing in our own production facilities, to installation and maintenance, we guarantee perfect service from a single source.



**METAL TECHNOLOGY** 

Our origin is our expertise. Since 1830, we have been forging solid realities out of metal. With the latest technology and our years of experience, we are coming up with customized metal solutions for various applications in agriculture and industry. Custom-made solutions and in-house developments using steel and stainless steel is our passion.

## Our service for your success

- Full service from design and manufacturing to installation and service
- 365 days a year customer service for our clients
- Our own high bay warehouse and in-house production guarantee availability of all spare parts
- Quick reaction times and personal contacts
- Customized production and adaptations for individual specifications
- Close cooperation with our clients and consulting by our specialists

- Short distances and clear structures for perfect customer service
- Worldwide installation and maintenance of your equipment
- Quality and material "Made in Germany"
- A qualified staff that receives ongoing training guarantees the highest level of service
- More than 180 years of experience in the metal processing
- Owner-managed family company



#### Konrad Pumpe GmbH

- project engineering
- special machinery
- CNC sheet metal
- accessory and containers
- machinery and equipment
- steel construction
- barn equipment
- feeding systems for pigs
- dosing technology for biogas plants



Schörmelweg 24 | 48324 Sendenhorst | Germany Phone +49 2526 93290 | Fax +49 2526 932925