

BIG-Mix									
basic module	45/2500	60/2500	60/2500	80/2500	80/2500	60/3000	60/3000	80/3000	80/3000
expansion module included	-	-	60/2500	-	80/2500	-	60/3000	-	80/3000
expansion module	-	o	-	o	-	o	-	o	-
contents (m³)	45	60	100	80	140	60	100	80	140
A – total length (m)	9.55	10.50	18.50	13.50	24.50	8.50	14.00	11.50	20
B – container width (m)	2.50	2.50	2.50	2.50	2.50	3	3	3	3
C – total height (m)	3.60	3.60	3.60	3.60	3.60	3.60	3.60	3.60	3.60
D – sill height (m)	3.10	3.10	3.10	3.10	3.10	3.10	3.10	3.10	3.10
max. load (t)	32	42	70	56	100	42	84	56	100
push strips drive output (kW)	7.5	7.5	2x 7.5	7.5	2x 7.5	7.5	2x 7.5	7.5	2x 7.5
dosing unit – mixing screw	1	1	1	1	1	1	1	1	1
drive (kW)	22	22	22	22	22	22	22	22	22
optional drive (kW)	11	11	11	11	11	-	-	-	-
hinged cover	o	o	o	o	o	o	o	o	o
stainless steel dosing area	x	x	x	x	x	x	x	x	x
push floor plastic coating 20 mm	x	x	x	x	x	x	x	x	x
stainless steel side walls	x	x	x	x	x	x	x	x	x
weighing system	o	o	o	o	o	o	o	o	o
electrical control of push strips and mixing area with level sensor	x	x	x	x	x	x	x	x	x
transfer to conveyor screw model 360	x	x	x	x	x	x	x	x	x
transfer to conveyor screw model 450	o	o	o	o	o	o	o	o	o

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

## Konrad Pumpe GmbH

Innovative technology plus experience.



AGRICULTURAL TECHNOLOGY



DOSING TECHNOLOGY



METAL TECHNOLOGY

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.

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



## BIG-MIX

Model 45  
Model 60  
Model 80  
Model 100  
Model 140

## Dosing technology in XL format

### Perfectly masters major tasks.

Our experience has taught us that every plant has its own unique requirements when it comes to capacity, substrate materials and conveyor technology. With our customized and proven BIG-Mix dosing units, we here at PUMPE have developed just the right solution to each of these challenges.



BIG-Mix Push strips with mixing area

The energy efficient BIG-Mix is a versatile dosing unit used for storing and processing a wide variety of substrate materials for biogas plants. The BIG-Mix stands out due to the low amount of energy required for large feed volumes of difficult substrates. The distinctive feature consists of stainless steel push strips individually driven by hydraulic cylinders. These push strips transport the substrate into a connected mixing and dosing area. The material is processed and then transferred to subsequent conveyor screws by a vertical mixing screw. This push floor system allows for the easy processing of difficult substrate material, such as 100% grass silage, solid manure, green waste etc. Volume capacities of 45 – 200 m<sup>3</sup> are available.

## BIG-Mix dosing unit from PUMPE

### Innovative. Long-lasting. Efficient.

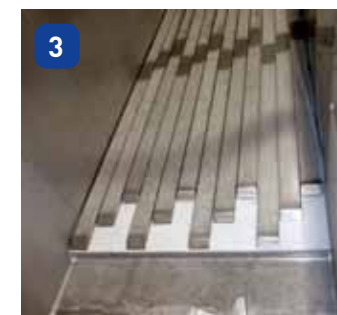
The storing and dosing of difficult, long-fibered substrates, such as grass silage and solid manure, plays an important role in many biogas plants. The Pumpe BIG-Mix dosing unit is characterized by a large storage volume with reliable downstream mixing and dosing technology. It is also versatile when it comes to difficult substrate and requires an impressively low amount of energy. With our PUMPE BIG-Mix, you can be assured of a long-lasting system with proven technology, customizable options and of course our comprehensive PUMPE service package.



**Storage container**  
The robust design of the storage container is the product of our many years of experience. The section of the container that comes into contact with products is made from stainless steel.



**Hydraulic power unit - controls**  
The push strips are driven by an electric hydraulic power unit, which is standard-equipped with thermal monitoring and a low oil switch. The BIG-Mix comes equipped as standard with a PLC for controlling the push strips and the mixing and dosing area.



**Push strip system**  
On the floor of the dosing container, hydraulically driven stainless steel push strips convey the material to the processing area. The floor itself is coated with wear-resistant plastic, which results in low friction between the push strips and the floor.



**Motors**  
Robust electric motors (equipped with a spur gear system depending on the application) transfer the output to a planetary bevel gear via a drive shaft. Available performance classes 11 – 22 kW.



**Planetary bevel gear**  
This type of gear mechanism transmits high torques with a compact design by distributing the load across multiple planetary gears. The result is the highest degree of efficiency, productivity and process reliability.



**Level measurement**  
A standard-equipped, high-quality, ultrasonic sensor monitors the fill level in the processing and dosing area. The push strips only continue to convey material into the dosing area when the level in that area falls below the adjustable level setting. This control significantly reduces the running times of the hydraulic power systems.



**Processing and dosing area**  
Standard-equipped, stainless steel vertical mixing screws are used to process the stored substrates. The mixing screws can be equipped with stainless steel cutting blades.



**Oil Reservoir**  
With its robust, stainless steel design, the oil reservoir ensures easy control of optimum levels in the planetary bevel gear. The gear's output bearing is supplied with lubricant and easy to use.