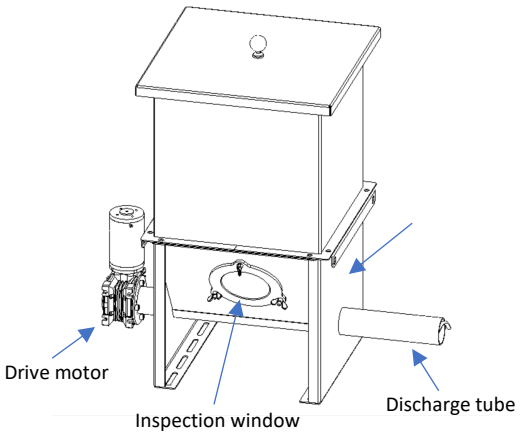
TS	Microdoser 60 For dosing of micro feed components into AutoFeed 60 line.	
TS0201 EN	Part number: 1.11.06.001	Version 1.0. 20.09.2021 M.Schmidt

1.0 Description

The Microdoser is a precise volumetric dosing device for feed micro component and additives in dry powder form.



The total capacity of 50 liters, body, anti-bridging agitator and round dosing auger made from stainless steel wire and a robust gear and 24V DC motor.

2.0 Technical data

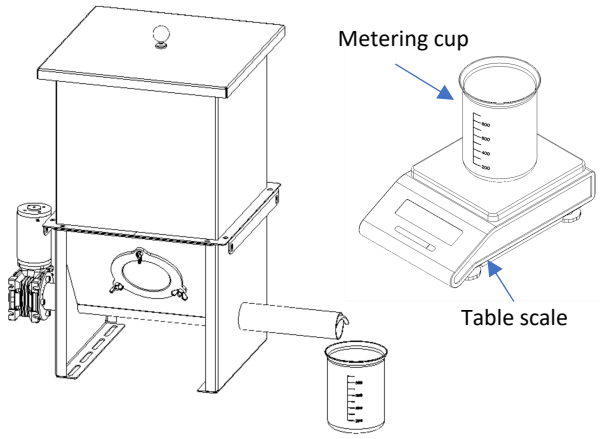
Microdoser 50	
Total Volume	50 L
Base Volume	20 L
Power	24V; 90W; 3A
Speed	70 rpm
Discharge tube	50 mm diameter
Agitator	Yes, anti-bridging

For constant dosing applications, the microdoser needs to connects to a 24V, 5A, DC power supply and can be controlled by any controller or plc device.

If adjustable speed is requered, the controller Varcon, with manually adustable speed is requered.

3.0 Calibration procedure

The use of the Microdoser for precise continuasly volumetric dosing rrequeres a metering procedore to determine the feeding rate of the running doser.



1 – conntec the microdoser to a 24V DC power supply.

2 – Fill the powder material to be used in operation

3 – Take a metering cup and posiition it under discharge tube and let the motor run for at least 60 s , until a constact stream of material doosiing is achievied. Stop the motor and put the coollecte material back into the doser.

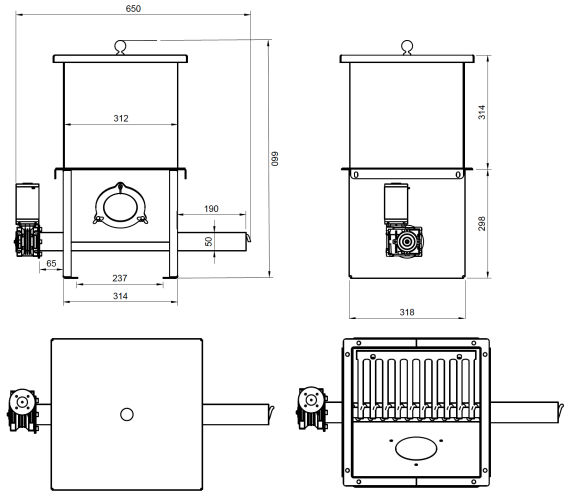
4 – Now collect precise 60 s of material in the metering cup.

5 – By using a table scale is possible to measuere the total weight collected.

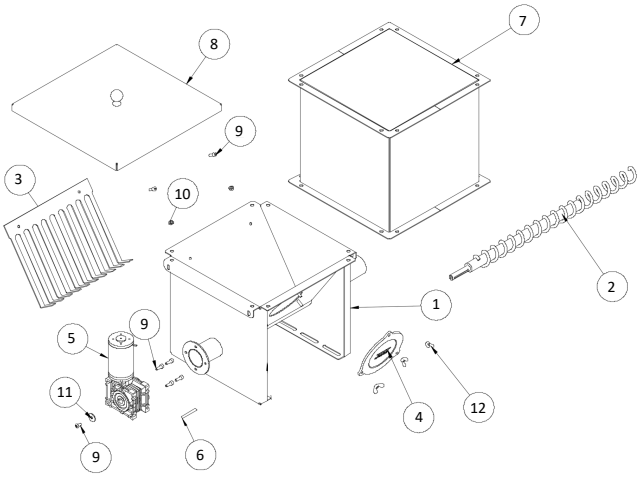
6 – Divided the total weight collected by 60, the feeding ratio of the microdoser can be calculated.

The calibration procedore needs to be repeated every time when new material is added into the microdoser.
The filling lever needs to be controlled by the operator to ensure the constant stream of the product.

4.0 Basic dimensions



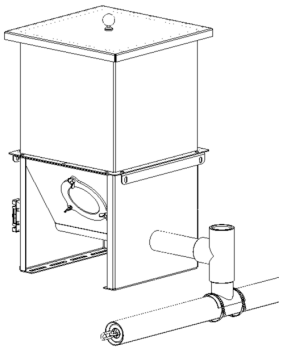
5.0 Main components



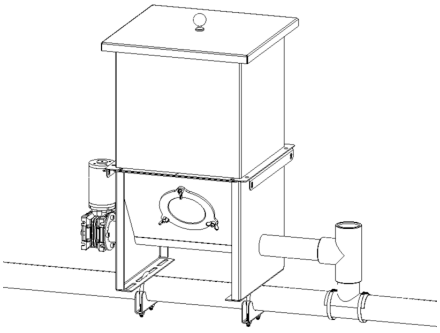
N	Part number	Description
1	1.11.06.010	Main body
2	1.11.06.019	Dosing auger
3	1.11.06.011	Agitator
4	1.05.05.140	Inspection window
5	1.11.06.030	Drive motor and gearbox
6	1.12.07.020	Shaft key
7	1.11.06.017	Container
8	1.11.06.018	Top Lid
9	1.12.03.012	Bolt M6x16 for Agitator
10		Nut M8 for Agitator
11		Washer M8
12	1.05.05.145	Manual nut

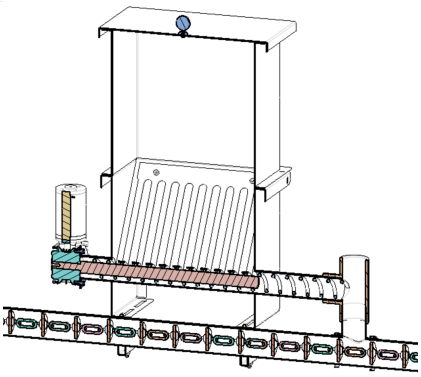
6.0 Dosing in the chain system

The microdoser can be used to dose an additive into the chain disk feeding line.



Mounting of the microdoser byside the feedline



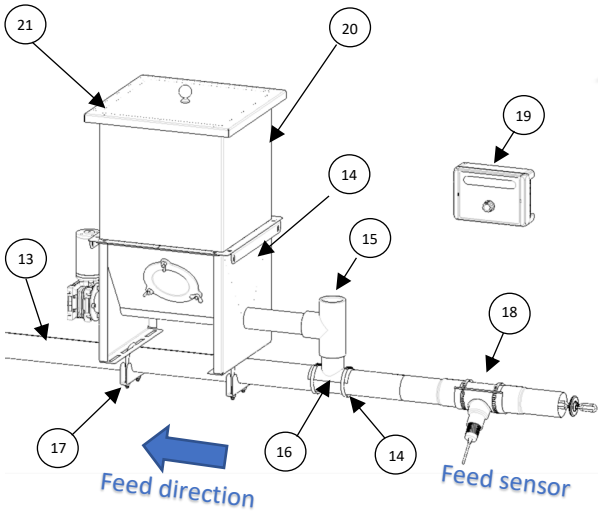


Mounting of the microdoser over the chain system line, with constantly dosing of additives direct in the moving feed line.

Calibration and monitoring of the efficient dosing process is responsibility of the operator

7.0 Feed detection

To ensure a safe dosing of the feed from the microdoser into the chain system, a capacitive sensor is installed on the feed pipe, that is able to stop the dosing in case of empty running feed line, protecting the livestock.



N	Part number	Description
13	2010-2010	Feed pipe
14	1125.0051	Microdoser
15		T connection
16		Pipe connection 50 / 60
17		60mm Pipe clamp
18	2010-5101	Feed detection sensor
19		Controller 24V DC
20	1125.0051	Container 10l
21		

8.0 Feed system measurement

9.0 Varcon – Basic controller

10. CON304 – IoT controller

11. CON304 – IoT controller

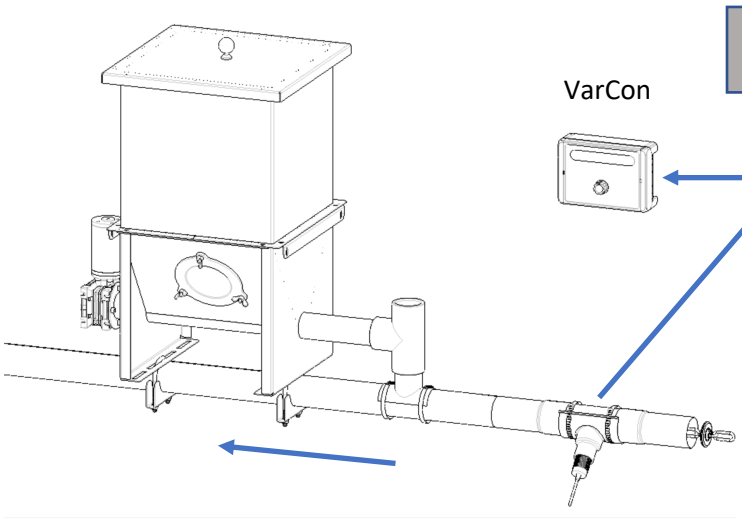
12. Gravimetric dosinig

Using Scale

12. CON220

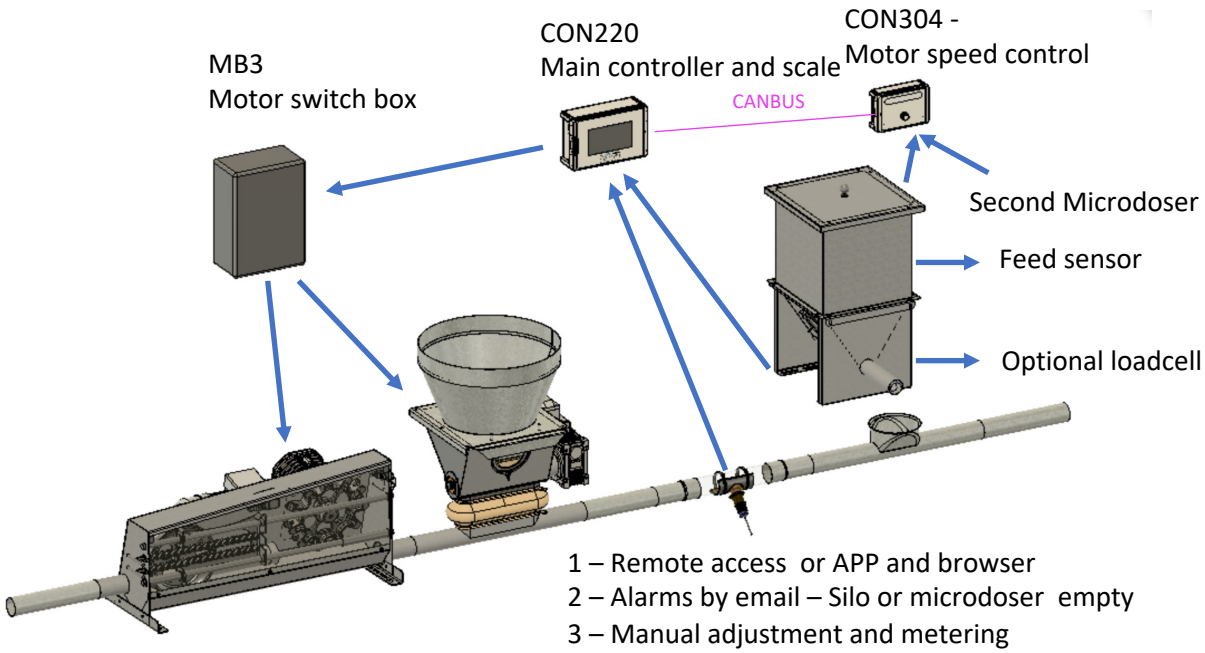
Network

VarCon



1 – Start from Easycontrol
2 –Needs a wiring of the logic of the feed sensor (run he microdoser only when there is feed in the chain line)
3 – Manual adjustment and metering
4 – No alarams
5 – No automatic monitoring

ConSys – Chain and Microdoser



1 – Remote access or APP and browser
2 – Alarms by email – Silo or microdoser empty
3 – Manual adjustment and metering
4 – Microdoser with loadcell for automatic precision adjustment
5 – Automatic stop dosing when silo or feed pipe is empty
6- Automatic speed adustmen for pecision adjustment and curve based dosing
7- Automatic chain control and starting times.
8 – Batch report

5.0 Revision Properties

Revision ID	Date	Revised by	Description