





Autonomous, electric, self-loading feeding robot





## SELF-LOADING

At 3.5m long and 1.5m wide, the robot has a feed hopper with an impressive capacity of 4 m3.



- Self-loading due to the cutter on the front of the device.
- The cutter moves directly at the edge of the basket, straight into the mixing chamber.
- The cutter allows you to pick up all types of feed: from bales with long 30 cm fibers , blocks of haylage, corn, to loose feed.
- Already during the intake, the ingredients are pre-cut.



### AUTONOMOUS

The device is fully autonomous



- It runs on EM's reliable proven Lizard scraper robot induction loop technology.
- It has the ability to work outdoors.
- Triple safety system (ultrasonic sensors , safety bumpers and emergency stops



### ELECTRIC

The device is all-electric and features dedicated electronics created by EM engineers.

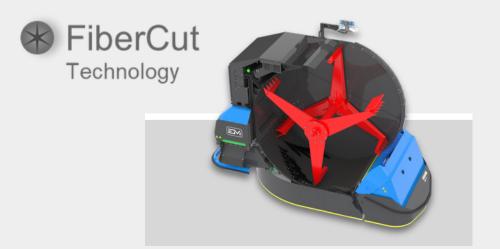




#### PATENTED

EM Falcon is an all-Polish, first-of-itskind device in the world, for which several patent claims are pending.





- \* 15-17 tons/day
- \* Approx. 300 pcs/mixed arrangement
- \* All types of feed
- \* Pick-up height 2.7m
- \* Width of the feed aisle min. 2,5

## TECHNICAL DATA



# FiberCut Technology

**\* 6L** 6 arms in L-shape

FiberCut is an innovative feed mixing system based on six L-shaped mixing arms

As many as 6 shovels set the feed in motion, making it fluffier and more aerated.

Such an arrangement allows a minimum of 50 kg of feed to be mixed without adversely affecting the quality of the TMR, which was not possible with vertical auger haulers.

The speed of the arms does not affect the quality of the feed in any way.



\* L-R left-right feed rotation

The arms flip the feed from one side of the tank to the other, and this makes the feed well-mixed and homogeneous.

The mixing process is very efficient.



# FiberCut Technology

**\* 8V** 8 knives in V pattern

FiberCut is not only a unique mixing system, but also a precision feed cutting technology.

8 knives arranged in a V-shape - This arrangement allows for efficient and even cutting of forage.

The shovels guide the forage along the sharp edge of the knife - The forage is not kneaded or damaged, and its structure remains unchanged and natural.

Adjustable number of knives - The system allows you to adjust the number of knives depending on the composition of the feed and the specifics of the farm.



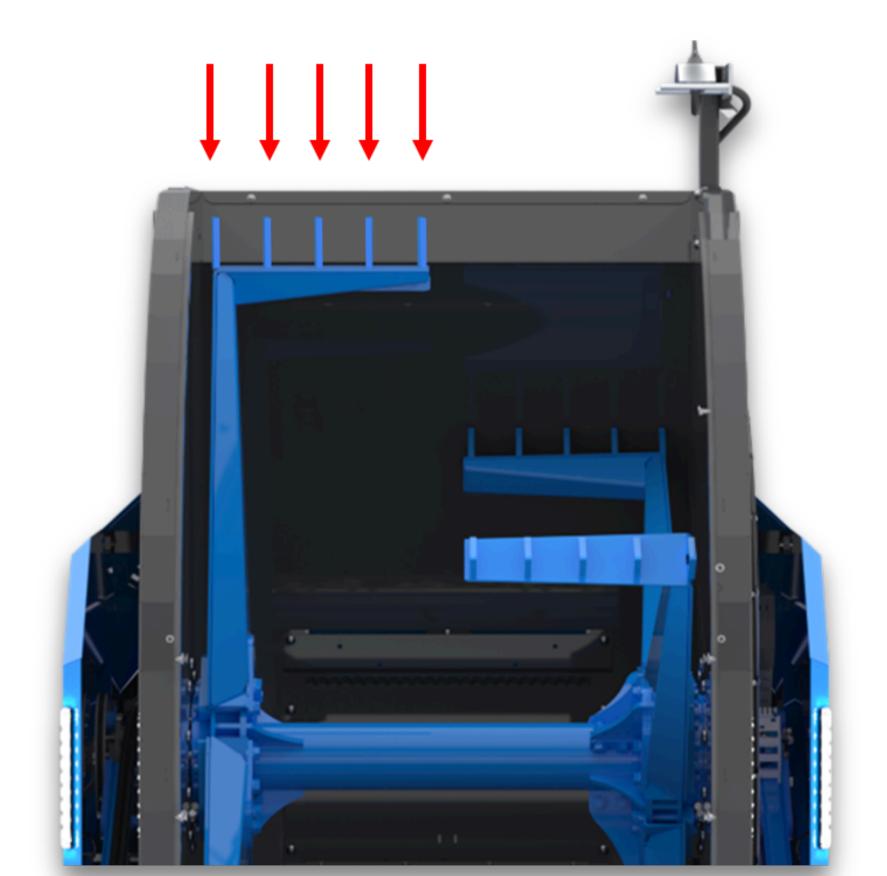
#### \* Repeatability

thanks to the constant distance of the blades and combs

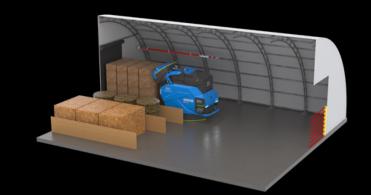
Shovels are equipped with fixed distance combs, Knives are also equidistant from each other.

FiberCut cuts the feed to the specified length.

All these advantages make it the most advanced TMR preparation technology in the world.



\* EM Falcon works in a system with a feed kitchen.



\* We bring the feed ingredients to the feed kitchen, where they are picked up by the robot, mixed and distributed to the animals.



# HOW TO BESIN

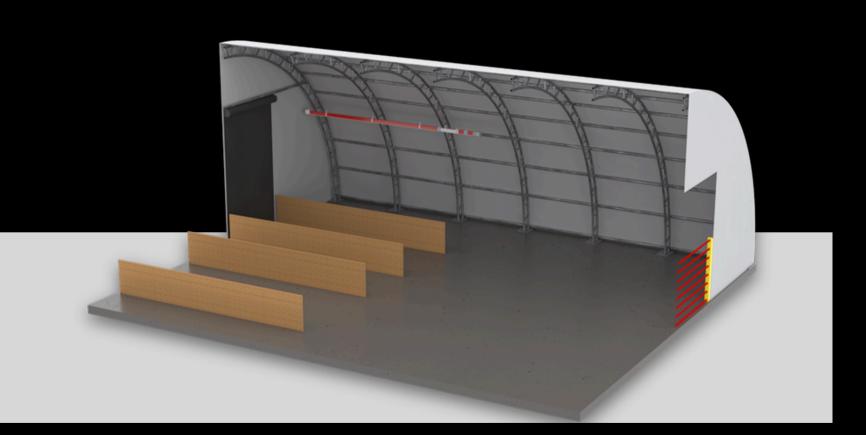
\* So we start by building a feed kitchen.

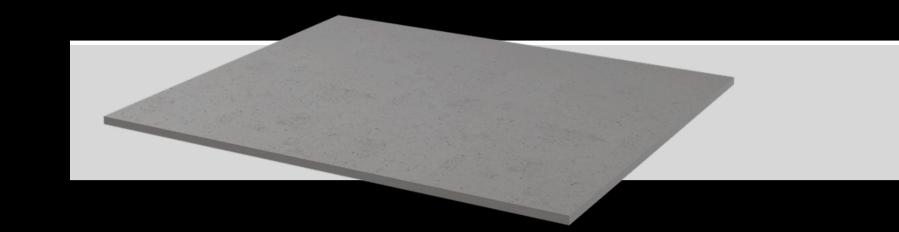
#### \* Concrete slab

A flat floor is required.

The big advantage of EM Falcon is to work even in low buildings from 3m high.

We can adapt existing buildings on the farm e.g.: older barns, sheds, etc.





#### \* Feed kitchen

use of Tent Hall

The next steps are to arm the feed kitchen with power, silos with feed lines, etc.

If the farm does not have buildings that can be used for feed kitchens. there is a very quick economic solution

Tent halls are an ideal solution due to their low purchase costs, lack of permits and quick implementation.

# FEED PREPARATION

EM Falcon, thanks to its very economical mixing and loading system, works in the feed kitchen from battery power.



Thanks to the FiberCut system and arms, mixing time is very short, especially if the feed ingredients are pre-cut, by a forage trailer or forage harvester.

After the feed collection process, it connects to a docking station, where concentrate feeds are backfilled, batteries are recharged, and feeds are mixed.

After the feed is prepared, the robot moves to the barn to inflict the feed on the animals.

# DISTRIBUTION OF

### FEED

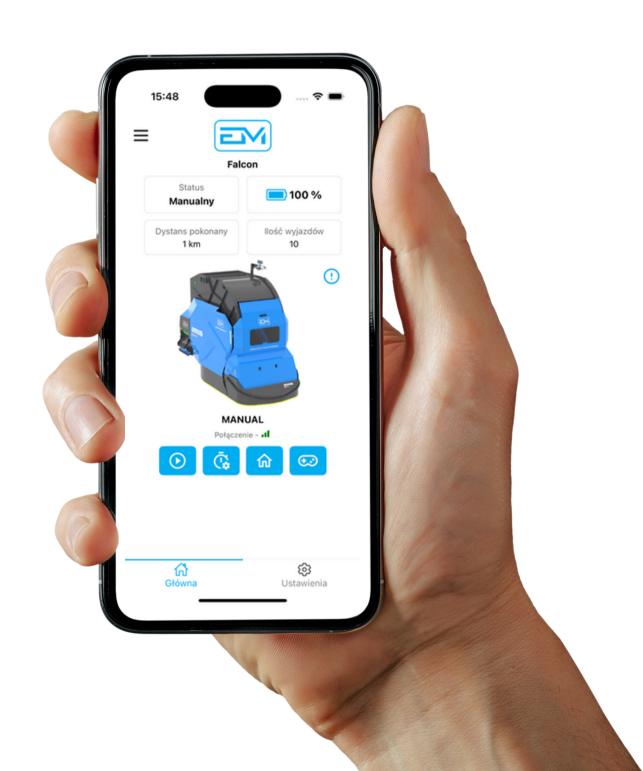
Feed distribution is possible to the left and right side thanks to a transverse belt.

The belt is installed at a height of 90 cm, and this makes it possible to dispense even large amounts of feed.



# CONTROL

Completely remote control of the device thanks to an intuitive downloadable application for phones and desktops.













The future of animal nutrition begins today!

