



MIEDEMA: BETTER WORK PROCEDURE WITH LINAK ELECTRIC ACTUATORS

Dutch machine manufacturer Miedema offers farmers a complete programme for potato cultivation, from soil preparation and planting to cleaning, storing and sorting.

Potato farming also makes extensive requirements on machinery with regard to:

- Robustness
- Capability
- and Durability

Planting elements and planting distance must be individually varied when optimising the crop and potato size. The machine's planting elements may be switched on and off individually. The mechanism for this system has been automated by means of two [electric adjusting actuators from LINAK](#).

They are directly connected to the Miedema control system can be operated from the [tractor's](#) touch panel in the cab.

Miedema engineers have made explicit use of electric adjusting actuators in developing row deactivation. Unlike a hydraulic system, integration in the electric control unit is significantly easier and less expensive. In a hydraulic system, two connections must be made. In an electric actuator, only one is needed.

'The electric system operates with fewer components and is, for this reason, substantially less expensive,' explains Christiaan Poot, Technical Support Manager at Miedema. High-protection class [LA12 adjusting actuators](#) are used as a part of this system.

The actuators must not only withstand vibrations, but dust and moisture as well. The compact dimensions also speak for the LA12.

'Wherever possible, we try to replace hydraulic systems with electric systems. Electric actuators do not have any problem with leaks. Maintenance is also much simpler.' notes Christiaan Poot.

PRECISE ROLLER ADJUSTMENT FOR CLEANING

Following harvest, the potatoes are subjected to a first cleaning stage. Miedema also produces bulk receiving hoppers with cleaning and sizing units using different type of rollers, depending on the execution of the machine. Standard the bulk receiving hopper is equipped with one set of cleaning rollers.

The potatoes can also be sorted by size, therefore a second unit of rollers is added to the machine. Until now, the farmer had to adjust roller spacing by hand with the use of a crank. By turning a crank, he moved to bars, which adjusted the six, seven or eight rollers in parallel. However, falling dirt constantly blocked the mechanics of the leverage bars. Spacing exceeding maximum distances also resulted in damage to the bars.

Miedema now offers the option of electric roller adjustment for a limited additional price.



Two LINAK electric actuators adjust the roller technology exactly to set measurements between 5 and 65 millimetres. The entire mechanism is protected by precise positioning and not strained beyond the recommended limit. Due to the [communication](#) between the two LINAK electric actuators, a parallel displacement is guaranteed and is recognized as a big plus for an even grading over the 2.40 meters width of the cleaning and sizing rollers.

Electric adjustment also offers increased comfort. *'In our experience, electrically operated settings save a great deal of time. Adjustment is convenient and fast. Cleaning occurs without difficulty,'* reports Dutch farmer Henry van der Woerd.

The bulk receiving hopper MH 241 makes use of LINAK actuators from the LA35 range. With up to 6,000 Newton, they offer sufficient power to adjust the entire roller mechanism. The robust aluminium housing makes this actuator ideal for use in rough and dusty environments.

For Miedema, the option of electrically operated roller adjustment provides a large additional benefit for the user. Such innovations have enabled Miedema to expand its position on the potato cultivation market.

[Contact LINAK TECHLINE](#) for specifications and even more actuator solutions for harvesters and other farming equipment.