

# Simplified control and lower costs at Lantmännen

A case story by Emotron  
– application specialist in FANS





*Emotron variable speed drives ensure a constant air flow when the grain is separated from chaff and dust. The flow is measured continuously and the fan motor speed adjusted to the level required. Filip Schiött is pleased with the new solution.*

**Lantmännen is one of Sweden's largest groups in the food and agricultural industry. The installation of Emotron variable speed drives in their grain handling in Helsingborg resulted in simplified control and reduced costs. Demands were high for both product performance and service level when choosing a supplier.**

### **Handling 400 000 tonnes of grain**

The Lantmännen group handles everything from raw materials to ready made food items. Their company in Helsingborg buys, cleans, dries and stores grain. It is then sold to the food industry or used in their own feed factory. The excess from the process is used to produce pellet fuel. Every year 400 000 tonnes of grain are handled. The silo storing this grain is 70 meters high and operated by 2-3 people. When the fan control needed modernizing, Emotron was their choice.

“We wanted a supplier who could guarantee a high service level,” says Filip Schiött, foreman at the electrician's department. “Emotron also offered a complete solution adapted to our needs.”

### **Constant flow a critical factor**

Autumn is a hectic period when four 35 meter high driers take care of large amounts of damp grain. Outdoor air heated by natural gas is used for drying. During the summer the driers are used to cool the grain in order to

avoid the emergence of vermin. The grain is run through so called cyclones where large fans create an air flow that throws out chaff and dust. The fans are controlled by variable speed drives from Emotron.

“Constant air flow is critical,” says Filip Schiött. “We want to get rid of chaff and dust, but not the seed. This is ensured by the variable speed drive sensing the flow and regulating the speed of the fan motor.”



*Lantmännen in Helsingborg handles 400 000 tonnes of grain every year. Variable speed drives from Emotron control the fans used for drying. Constant flow is critical when using air to separate the grain from the chaff.*

### **Simplified control and reduced cost**

“This new solution has made our job easier,” says silo operator Jan Nordqvist. “We can now monitor and control the process from the control room, instead of regulating the air flow manually with dampers on site.”

Using Emotron products has reduced equipment wear. When the air flow was regulated with dampers, the motors were running at the same speed all the time. Regulating with variable speed drives means the flow is adjusted continuously to meet the actual need.

“Above all, it is actually being done now that it so easy,” says Jan Nordqvist. “The result is an optimized process.”

Another result is an improved working environment. The operators spend less time in the dusty and noisy premises.

### **Customized solution for a tough environment**

The dusty environment puts very high demands on equipment installed on the premises. IP 54 classification is required, but to further protect the variable speed drives Emotron developed a complete solution with customized cabinets. The equipment mounted in the cabinet is cooled by outdoor air blown in with a fan controlled by another variable speed drive. The air in the cabinet also creates pressure that keeps fine dust from getting in. Radiators protect the electronic equipment from damp during winter time when the building is not heated.

“This solution was decisive in our choice of Emotron,” says Filip Schiött. “We also appreciate the user-friendly control panels on the cabinet front, and the possibility to set which process values are displayed. For us air flow is the most critical parameter.”

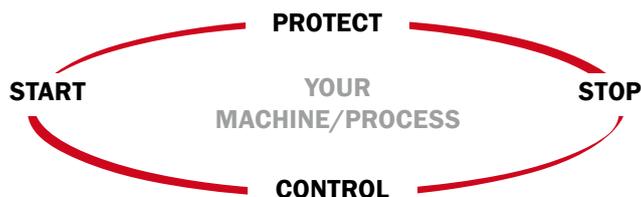


*“The new solution allows us to control the process from the control room,” says Jan Nordqvist. “We used to regulate the air flow manually with dampers on site. Now we make continuous adjustments and thereby reduce equipment wear.”*



*“The customized cabinet was one of the main reasons for us choosing Emotron,” says Filip Schiött. “It protects the equipment and offers easy operating via control panels on the front.”*

# A dedicated product portfolio



Emotron's product portfolio meets all levels of needs for machines and processes driven by electrical motors. You will always find the most cost-efficient solution for your specific situation.

When choosing Emotron, you will also benefit from cost-efficient installation and commissioning through

built-in functionality that is otherwise provided by additional equipment. You will also find intuitive user and process interfaces with the possibility of communicating critical parameters to other parts of your process, using analogue, digital, serial or fieldbus communication.

## PROTECT



**Emotron Shaft Power Monitors** when you wish to protect your application from over and underload situations.

## START • PROTECT • STOP



**Emotron Softstarters** when you wish to protect your application from over and underload situations, as well as to optimize the start and stop sequence of your application.

## START • PROTECT • CONTROL • STOP



**Emotron Variable Speed Drives** and **Emotron Compact Drives** when you wish to protect your application from over and underload situations, optimize the start and stop sequence of your application, as well as be in full control of your process values – flow, pressure, speed, torque, etc.



## Dedicated Drive

Emotron focuses on solutions for starting, controlling, protecting, monitoring and stopping machines and processes driven by electric motors.

Our Drive is to create measurable benefits for our customers and their customers to achieve their and our business goals. Thus creating a win-win relationship for all parties involved with Emotron.

We have been developing our product portfolio for over 30 years towards carefully selected applications. As a

result we have built up specialist competence and can therefore offer our customers the optimum solution for their specific application needs.

Emotron is a Swedish company with manufacturing and development resources in Helsingborg, Sweden and in Bladel, the Netherlands. We have sales and service organisations in Sweden, Benelux and Germany, offices in China and Latin America, as well as a global network of distributors and service partners.



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