



# High Performance Torque Sensors for Digital Agriculture

Robust German technology simplifies data harvesting for optimized operations, predictive maintenance, and sustainable farming



## A Challenging Situation

Modern farming is a mutually beneficial system, offering farmers the opportunity to increase their profits and while maintaining a year-round supply of agricultural products.

However, the industry faces significant challenges with the imminent doubling of demand for these products in the next 15 years, compounded by rising fuel and fertilizer expenses, unpredictable weather patterns, and stringent sustainability regulations.

## A Modern Solution

In response to these requirements, agriculture has witnessed substantial advancements in recent years, with a strong emphasis on smart solutions that enhance cost-efficiency, yield, and green productivity.

And at the heart of every intelligent system lies a sensor!

NCTE sensors offer straightforward installation and non-contact measurement of torque and speed on the drive shaft. This unique measurement technology guarantees long-term stability, maintenance-free operation, and resilience against rugged environmental conditions encountered in the field.



NCTE AG  
Raiffeisenallee 3  
82041 Oberhaching  
Germany

Tel.: +49 89 6656190  
[sales@ncte.de](mailto:sales@ncte.de)

[WWW.NCTE.DE](http://WWW.NCTE.DE)

## FERTILIZER SPREADER:

When an NCTE torque sensor is combined with a disc fertilizer spreader, it can result in a remarkable reduction in fertilizer consumption by up to more than double-digit percentages.

Real-time measurement ensures uniform fertilizer distribution across the field, leading to efficient nutrient utilization, healthier plants, and higher yields.

Farmers not only save money and boost profitability but also safeguard the environment and fertilizer regulation.



## HARVESTING MACHINES:

The NCTE torque sensor serves a dual purpose, acting as a guardian against harvester overloads and as a key player in optimizing power distribution from the PTO shaft to its various sub-systems.

This proactive approach not only helps prevent unexpected maintenance during critical planting and harvesting seasons but also boosts operational uptime, translating into significant cost savings for users.

## BALERS:

An NCTE torque sensor accurately measures the torque when handling hay, resulting in improved bale compaction and overall pressing behaviour.

It increases productivity by automatically adjusting driving speed to ensure an optimal level of consistency.

Real-time data analysis enabled by an NCTE sensor ensures that the machine operates at its peak efficiency, reducing waste and optimizing overall performance.



## ROTARY HARROWS:

The NCTE torque sensor supplies crucial data for optimizing the development and serial production of harrows, aiding in decisions related to factors like the ideal number and shape of tines.

Additionally, it safeguards against damage from overloading, obstructions, and other operational challenges, ensuring a safer and smoother user experience.

This reduction in uncertainty contributes to an overall performance enhancement in rotary harrow operations.

NCTE Torque Sensors are invaluable for both agricultural machine development and operation, capturing unique data that others can't measure.



Sales rep.:



Sensors AS  
Setersletta 3  
NO-2006 LØVENSTAD

+47 67 90 43 00  
post@sensors.no  
www.sensors.no