

# Memosens 2.0 for reliable pH measurement

## Sensors reduce maintenance effort in food processing

### Benefits at a glance

- Low maintenance: ISFET technology is insensitive to high temperatures or temperature changes, which results in long calibration intervals.
- Maximum process safety: Non-contact, inductive signal transmission eliminates all problems caused by moisture or corrosion.
- Memosens 2.0 offers extended storage of calibration and process data, enabling better trend identification and providing a future-proof basis for predictive maintenance and enhanced IIoT services.
- Chemically stable reference gel assures long-term stable measurements.
- Unbreakable: PEEK sensor body withstands harsh conditions ensuring product safety.



Memosens sensor CPS97E

**Reliable pH measurement is important in food processing to maintain product quality. The new generation of Memosens ISFET pH electrodes maintain their performance in harsh process conditions and require very little maintenance.**

**The challenge** For a potato processing plant in the East of England, being able to accurately measure the pH content of water is vital. Their chips are blanched in a vessel of hot water before being dried and fried, and the water quality can affect the look and taste of the product. The plant's existing ISFET pH sensors were about to become obsolete, so a new solution was needed.

**Our solution** Endress+Hauser provided the manufacturer with two new pH sensors, Memosens CPS77E and CPS97E, for evaluation. The new sensors have proved their worth with regard to stability and general

measuring performance, and the customer was particularly impressed by the reduced maintenance effort required: "We have noticed that the 97 in particular doesn't need to be calibrated very often. It just needs a quick clean and it doesn't seem to drift. It's ideal for our process."

Since the successful trial, the customer has placed a further order for CPS97E sensors to replace the soon-to-be obsolete devices.

Memosens 2.0 combines cutting-edge technology with maximum practicability. Because the Memosens sensors are equipped with internal data storage and diagnostics they can be calibrated and adjusted under lab conditions that are favourable for the operator and offer superior results. Replacing sensors in the field is a simple process thanks to the lockable bayonet connector and automatic sensor identification by the transmitter, which reduces process downtime.

**Our solution** Endress+Hauser provided the following:

- Digital non-glass pH sensor Memosens CPS77E
- Digital non-glass pH sensor Memosens CPS97E

**Memosens CPS77E** is the expert for hygienic applications. Its bacteria-proof reference with highly stable gel guarantees reliable measurements. The unbreakable sensor is sterilisable with hot steam, autoclavable and assures highest product safety.

**Memosens CPS97E** is the expert for media with a high content of fibres or suspended solids such as dispersions, precipitations and emulsions. Its unbreakable shaft and the open aperture guarantee reliable measurement under harsh process conditions.



Memosens ISFET pH sensors are designed for hygienic applications

#### UK

Endress+Hauser Ltd  
Floats Road  
Manchester  
M23 9NF  
Tel: 0161 286 5000  
Fax: 0161 998 1841  
info.uk@endress.com  
www.uk.endress.com