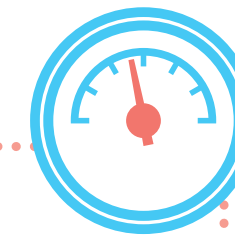


# THE FIRST HOMOGENIZER TO CHECK ITS OWN PULSE



The Tetra Pak® Homogenizer 250 has a series of sensors placed on key parts and connected to a smart automation system. Just like a cardiograph reveals the condition of a patient's heart, trends show the current health of the homogenizer. The system diagnoses the homogenizer's condition and issues warning signals or prompts. In this way, it reduces unexpected downtime while maintaining product quality. No other homogenizer has been designed with such sophisticated monitoring and automatic control as the new 250 model.



### PRESSURE TREND ANALYSIS

Monitors the deviation between hydraulic pressure and homogenizing pressure. When high, this indicates the machine is in need of attention, such as turning or replacing the seat and discs.



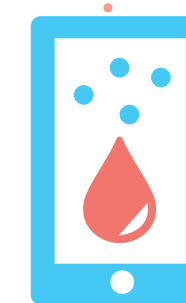
### LEAKAGE TREND ANALYSIS

Sensors detect leakage and pinpoint the optimal time to change seals. This ensures food safety by preventing contamination and maintains product quality.



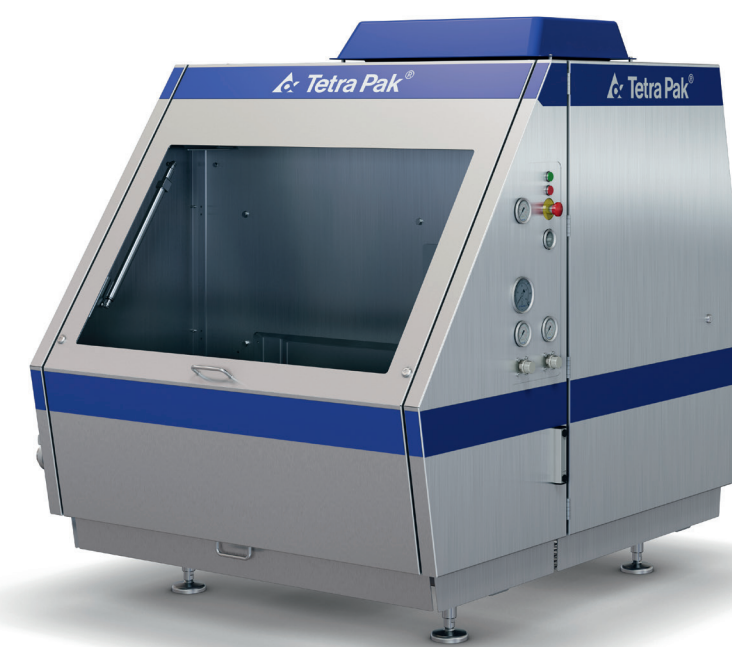
### VIBRATION TREND ANALYSIS

Sensors register deviations and help to notify when the machine needs attention in order to prevent unplanned stops. Others tell when it's time to turn or replace wear parts.



### CAVITATION RISK ANALYSIS

The system notifies the operator in case of high cavitation risk so timely corrective action can be taken to minimize wear on the walls of the homogenizer unit itself.



### AUTOMATIC PROCESS CONTROL

You see and control hydraulic pressure, flow rate and temperature in real-time to ensure that viscosity, particle size and more are correct according to your specification.



### AUTOMATIC DAMPER CONTROL

Enables fully automatic damper control so that the homogenizer can run longer without interruption.



### DAMPERLESS CONTROL OPTION

Why not do without a damper entirely? Smart control using vibration and pressure sensors enables valve control for optimal running conditions without the need for a damper.

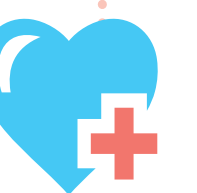
### AUTOMATIC RECIPE CONTROL

With just a click, you can switch recipes. The pre-programmed parameters for a wide range of recipes make it simple to make changes and to ensure consistent product quality.



### AUTOMATIC BYPASS VALVE CONTROL

Sensors check pressure in real time. If there is a build-up of pressure due to downstream issues, bypass valves are automatically activated to ensure safe operation.



### TETRA PAK SERVICES

Get the most from your homogenizer with a service agreement from Tetra Pak Services. Tetra Pak® Plant Care provides predictability, risk-sharing and long-term partnership through customized service agreements. By supplying maintenance and other services we improve production performance and plant availability.

SMART ANALYSIS

SMART CONTROL