SAVE ENERGY AND IMPROVE CAPACITY WITH THE

CORE PRE-HEATER CONTROLLER CORE-HEAT

CORE

THE CONTROL CHALLENGE

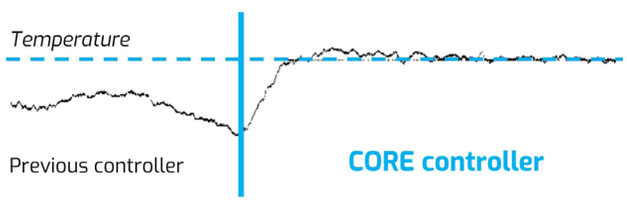
In the production of animal by-products or fish meal and fish oil, pre-heating to a temperature near the boiling point is generally used in the process of separating water and fat/oil from the residual material.

A good pre-heating process is when the heating time is long enough (temperature is high enough) for the material to be sufficiently coagulated and at the same time the temperature is kept below the boiling point to avoid unnecessary evaporation and waste of energy.

This in turn requires good control of temperature in the pre-heater, and consequently good control of material flow and steam pressure.

An inadequate temperature control means unnecessary loss of energy either directly due to evaporation or indirectly due to insufficient coagulation leading to bad separation, and thus more moisture to be handled in the subsequent processes.

In both cases production time is prolonged, i.e. capacity is lost.



CORE-HEAT

The CORE-HEAT advanced pre-heater controller utilizes critical information regarding process history to substantially reduce temperature variations, and thereby increase capacity and energy efficiency.

CORE-HEAT continuously collects and uses parameters such as feed, discharge, amps, steam pressure and weight or level to adjust the flow through the pre-heater (feed/discharge) and the applied steam pressure in order to achieve a stable discharge temperature and a stable level or weight in the pre-heater.

Prior to installation, CORE always provides an analysis of the potential for energy savings and the potential for increased capacity and yield.
CORE projects generally have a payback period between 6 months and 1 year.

The CORE-HEAT controller is delivered on a separate PLC and with the communication units needed.

The controller is implemented swiftly and commissioned without disturbing production.