Challenge
A cereal processing food plant experienced problems maintaining consistent temperature in its rotating flaker dryers. The plant uses temperature control valves to regulate the steam pressure to the dryers. When the steam pressure drops below a certain pressure, the dryers flood. To keep the dryers from flooding, the dryer operators open a valve to the floor drain. This method of operation allowed valuable hot condensate to be lost and created safety concerns.

Solution
Kadant sales and application engineers proposed removing the existing steam traps on each of the dryers and installing a Liqui-Mover pump on each of the 12 dryers. The Liqui-Mover pump uses steam pressure to pump the condensate back to the boiler thereby eliminating the need for conventional steam traps.

Results
The cereal plant is now returning all the valuable condensate to the boiler plant, without any flash steam loss. The dryers are now able to drain properly, even when operating at low steam pressures. Following this success, electric condensate pumps will also be replaced with float operated Liqui-Mover pumps.

Highlights
- The Liqui-Mover pump can prevent the loss of condensate and associated energy losses.
- Replacing conventional steam traps can eliminate dryer flooding and unsafe discharge of hot condensate into the machine room.