

## MANUFACTURE: FOOD PROCESSING MIXER

### CLIENT CHALLENGE

The client approached BP Automation to **design and manufacture an automated food processing mixer** to assist in keeping food mixtures in a homogenous state while filling jars. Under the client's manual mixing process, solids were settling at the bottom and liquids were rising to the top making it difficult to consistently fill the jars. The client faced a number of serious challenges:

- **Staffing** – The process required the manual mixing of a boiling product for up to 16 hours per day. The physical demands of the process were a strain on staff and resulted in higher than average WCB claims.
- **Lost product** – Significant numbers of jars had to be thrown out due to an improper mixture consistency.

### THE BP AUTOMATION SOLUTION

BP Automation **designed and fabricated a mixer** that would continuously lift, mix, stir and compact the food in a uniform manner. We built the prototype in-house and modified it to get the correct mixing and stirring combination. In addition, the mixer was electrically synchronized with the food depositor to ensure that the food mixture was compacted as it was extracted from the mixer and deposited in a jar. This prevented the liquids from being strained out through the solids while the jars were being filled.

As a result of **possessing all required expertise in-house**, BP Automation was able to design, fabricate and modify the system quickly during the commissioning stage.

### RESULTS

1. Reduced the labour cost required to fill the jars
2. Minimized work-related injuries and WCB claims
3. Improved the quality of the final product due to a more consistent food mixture



Automated Food Processing Mixer