

Sepak Industries Dough Fermentation System for sour dough making

Sepak Industries has successfully designed, manufactured and installed a 2000L Fermentation System for Bread making. The system is designed to Mix 50% flour to 50% water weight/weight and consists of Flour screw conveyor, Fermentation tank with load cells and heating jacket, Food grade Lobe Pump, Food grade plate heat exchanger, Food grade valves, stainless steel food grade pipe work, 2,000L storage tank with cooling jacket and Programmable Logic Controller (PLC) industrial computer automation system.

The Sepak Industries Fermentation tank is designed and constructed to food grade standards such that SS316 food grade stainless steel is used and suitable for CIP (Clean In Place). The stainless steel tank is supplied with Sepak Industries unique dough mixing system. The mixing of dough is achieved by the main agitator which is a Sepak Industries Food grade scrape surface agitator and dough mixer working in counter rotating motion very much like Sepak Industries Counter Rotating Mixing system. The stainless steel tank is mounted on a set of stainless steel load cells (which measure correct amount of water and flour ratio to make dough) controlled via Automation system.

The Automation system accurately measures the amount of water to flour through the stainless steel load cells. The control system also controls the heating temperature for fermentation process with built in timer so that operator can set a suitable fermentation rate.

The fermented product is then transfer from stainless steel fermentation tank to another stainless steel storage tank via Sepak Industries food grade lobe pump and food grade heat exchanger. The plate heat exchanger is used to cool the fermented dough in a single pass so that the fermentation process slows as the fermented dough enters in to the stainless steel tank. The stainless steel storage tank is jacketed with glycol to keep the product cooled to slow the fermentation process, the cooling process is enhanced by Sepak Industries food grade scrape surface agitator. The operator can call up any amount of fermented dough to be added to the main bread making line.



**FEATURES:**

- Australian design and Australian made
- Stainless steel tanks
- Colour touch screen Human machine interface Automation system
- Food grade construction
- Food grade Lobe pump
- Food grade valve
- Plate heat exchanger