



NCI'S MASE SOYMILK AND TOFU PILOT PLANT

NCI's soymilk and tofu processing system is a scale down mimic of large commercial production. It requires only 2 kilograms of soybeans for making tofu and 1.5 kilogram of soybeans for making soymilk. This system is used for evaluating soybean quality and demonstrating soymilk and tofu production to visitors and short-course attendants. The system is used to develop new products and process for helping customers of food-grade soybeans.

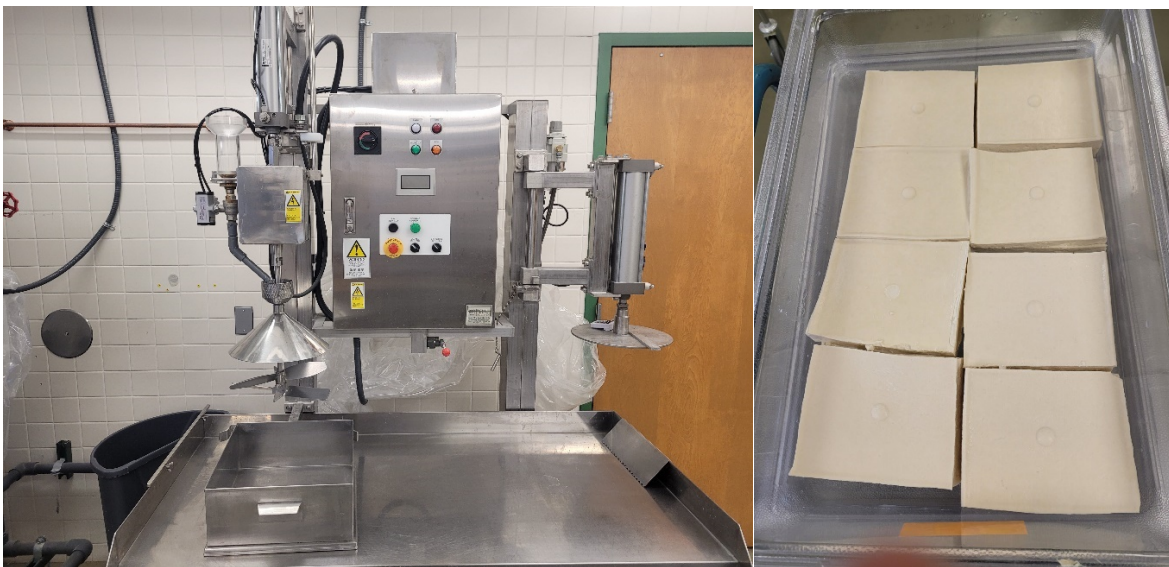
Soymilk Procedure

1. 2kg of soybeans are soaked in 5kg of water overnight.
2. Soybeans are washed, drained for 15 minutes.
3. Water temperature in holding tank should be 20°C.
4. 10L of water is added during the grinding process and run time is 87 seconds.
5. Soybeans are cooked for 5 minutes at 84°C.
6. Product is pumped into separator screw and run for 200 seconds. Milk will come out catch pipe and okara will come out end of screw pressure relief valve.
7. Cool and refrigerate as needed for soy milk. If making tofu, do not cool milk.



Tofu procedure

1. 11kg of soymilk is added in pan for curd, and milk is cooled to 82°C.
2. 35g of the coagulant Calcium Sulfate is used for tofu production. 75g of filter water is mixed with the coagulant.
3. Soymilk is mixed and 75g water is flushed through coagulant hopper and into soymilk.
4. Soymilk is mixed then covered for 12 minutes.
5. Curds are broken up with a wire whip and pan is re-covered.
6. After one-minute, product is transferred into drain and covered.
7. A series of cycles with pressure plate are used to press whey from tofu.
8. Tofu is then weighted and cut into squares.
9. Put the Tofu in cooling water for 15 minutes, then put in containers and refrigerate.



If you are interested in more information regarding NCI soy food development, please contact:

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