

TECH NEED

Seeking Solutions in Automated Fish Deboning



KEY INFORMATION

TECHNOLOGY CATEGORY:

Foods - Processes

Manufacturing - Assembly, Automation & Robotics

TECHNOLOGY READINESS LEVEL (TRL): **TRL6 TO TRL7**

COUNTRY: **SINGAPORE**

ID NUMBER: **TN174475**

BACKGROUND/DESCRIPTION

Supported by the government's "30 by 30" initiative, Singapore aims to produce 30% of its nutritional needs by 2030, emphasising sustainability in its food production practices. A local fish farm believes in eating well and respecting the environment, where fish are given space to swim in the ocean with tides and currents. These fishes are farmed without any growth enhancements. More than 70% of the farm is made of reused materials and we use renewable solar energy for power. Milkfish is a hardy fish to farm. However, with over 200 tiny bones, it has not gain popularity with consumers. Manual removal of these bones are labour intensive. Therefore, the local fish farm would like to work with automation companies to customise an equipment to automate the deboning process of milkfish.

TECHNOLOGY SPECIFICATION

There is interest to seek out collaboration with automation and tooling companies who are able to customise machinery to

debone milk fish. Here are some key features that need to be available in the solution:

- Deboning milkfish into butterfly fillets
- Minimising flesh loss through precised bones extraction
- Ideally process fish of varying sizes from 500 g to 1 kg
- Throughput of 6-8 milkfish / hour

WHAT WE ARE NOT INTERESTED IN

- Off-the-shelf technologies
- Technologies that are not food-grade

PREFERRED BUSINESS MODEL

- R&D Collaboration