

Spinach Harvester

INDUSTRY CONTACT

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BACKGROUND:

Durham Foods Limited is North America's first producer of year-round hydroponic spinach and is also the recipient of the regional Ontario Premier's Award for Agri-Food Innovation Excellence. Under the current manual harvesting approach for spinach used by most producers, Durham Foods was experiencing a substantial bottleneck, capping its ability to fill larger contracts and contributing to higher operating costs. As a result, the company was looking for a better way to harvest its product.

OBJECTIVES:

- To design and develop a harvesting system that meets required standards for food safety.
- To design and develop the equipment to harvest the spinach in a manner that will reduce labour, increase efficiency and reduce product loss due to the current harvesting methods.

OUTCOME:

Durham College (DC) worked with Durham Foods to develop a semi-automated harvesting system to increase productivity and reduce the labour requirements involved in the spinach harvesting process. The resultant system is reliable, easily set up, can be safely operated by one person and is constructed with food-safe materials. It also assists in managing the stress on the final crop product shipped to stores, while maintaining both the visual appeal and flavour of the spinach. The semi-automated harvesting system is saving Durham Foods time, increasing productivity and reducing unit cost along with increasing food safety for end consumers by reducing handling, which in turn reduces potential contamination. These improvements allow the company to compete for larger scale national supply contracts.

THIS PROJECT WAS MADE POSSIBLE THROUGH A PARTNERSHIP WITH:

Ontario Centres of Excellence (OCE):

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FOR MORE INFORMATION, PLEASE CONTACT:

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