



## AT A GLANCE

2 Researchers Engineering and Production Team managed the hands on manufacturing and assembly of the prototype, adhering to the technical specifications and design requirements. The Quality Assurance Team, 2 Quality Assurance specialists employed precision tools like the Keyence CL-sensor to verify the prototype's performance and adherence to industry standards.

# Ice Skate Sharpening Enhancement Project

## Project Overview

The initiative focused on developing a prototype for an automated deburring system to integrate with existing sharpening equipment. By innovating the manual process that often led to uneven sharpening and presented safety risks, the project sought to standardize results and reduce the need for extensive operator training.

## Purpose/ Objective

This project aimed to improve the quality and consistency of ice skate sharpening by automating the deburring process, enhancing both the operational efficiency and safety in skate sharpening provided by partners.

## Company Information

Through a partnership between academia and industry, this project represents an innovative blend of theoretical knowledge and practical application. It underscores the commitment of both St. Clair College and industry leaders leveraging safety in skate sharpening.

## Deliverables

- **Automated Deburring Prototype:** Created a first-of-its-kind automated machine that integrates seamlessly with existing sharpening processes to enhance quality and consistency.
- **Precision Metrology Measurements:** Employed advanced measurement techniques to ensure that the deburring process maintains high standards in blade quality.
- **3D Surface Mapping:** Utilized to further refine and perfect the automated deburring process, ensuring all types of skate blades are honed accurately and uniformly.

