CWSF 2016 - Montreal, Quebec

Myles Mueller

Application of Tool Coatings to Address Tool Wear for Steel & Titanium Machining

Challenge: Innovation
Category: Intermediate
Region: Niagara
City: Grimsby, ON
School: Blessed Trinity S.S.

Abstract: Machining is the process by which raw materials are shaped into desired sizes and finishes. A major challenge to machining is tool wear, the gradual failure of cutting tools due to regular operation. This can lead to frequent replacement of tools, which adversely affects productivity and product quality. My project aims to find suitable tool coatings that minimize tool wear during steel and titanium machining.

Biography

I am Myles Mueller, a grade 10 student from Blessed Trinity Catholic Secondary School, which is located in Grimsby Ontario. I was born in the Niagara Region and I have been growing as a person in the area ever since. I come from an athletic background, no science background whatsoever. As a student, I am extremely involved and I am passionate about what I do. Science, engineering in particular, is something I have developed interest on my own. I conduct research at McMaster University, located in Hamilton, Ontario. I am situated in the department of Manufacturing Engineering, subsection of Mechanical Engineering.

Awards	Value
Excellence Award - Intermediate - Bronze Medal Sponsor: Youth Science Canada	
Western University Scholarship Bronze Medallist - $1000 Entrance Scholarship Sponsor: Western University	$1 000
Total	$1 000