



CWSF 2005 - Vancouver, British Columbia



Joseph Querques

Metals and Their Weldability

Division: Physical & Mathematical Sciences

Category: Intermediate
Region: Bay Area
City: Acton, ON

School: Christ the King Catholic Secondary School

Abstract: The weldability of dissimilar metals using GTAW was evaluated using 1xxx

series carbon steel, ETP copper, 304L stainless steel, and 5xxx series aluminum. Liquid penetrant testing, tensile testing, ductility testing, metallography, and hardness testing were performed to find weldment imperfections. All metals except aluminum were successfully welded.

Awards	Value
The University of Western Ontario Scholarship	\$1 000
Bronze Medallist - \$1000 Entrance Scholarship	
Sponsor: University of Western Ontario	
Bronze Medal - Automotive - Intermediate	\$300
Sponsor: AUTO21	
Bronze Medal - Physical & Mathematical Sciences - Intermediate	\$300
Sponsor: Encana Corporation	
Total	\$1 600



