

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