



- WHAT:** AWS - Detroit Chapter in March for a Technical Meeting
- WHEN:** March 14, 2024 - 6:00pm-8:30pm
- WHERE:** RAM Solutions LLC, 1904 Woodslee Drive, Troy, Mi 48083
- WHO:** American Welding Society Members
- RSVP:** Please RSVP to "susann@ramsolutions.com"  
Food and Beverages will be provided
- HEAD COUNT:** 60
- AGENDA:** **RAM and Bluewrist MIG Welding Vision Inspection**
- i. RAM Overview – John Macdonald, Director at RAM Solutions INC.  
Bluewrist – Tom Thompson, US Business Development Manager
    1. Manual MIG inspection vs Vision inspection
    2. How camera and software vision technology works
    3. Quality comparison and reporting
    4. Coupon testing results vision and cross section data
    5. Statistical data

### **Event Description**

Please join us for the March AWS Technical meeting at RAM Solutions, distributor of robot automation equipment at the Troy, Mi location. RAM Solutions provides robot automation products, technical services, training, and development for the past 25 years. RAM Solutions is a technical partner with Bluewrist 3D vision systems supplier. Bluewrist offers innovative industrial automation solutions and products in the areas of robot and vision solutions. John and Tom will speak on the use of MIG welding vision inspection systems. Vision based MIG welding inspection employs automated systems using cameras and software. Vision inspection assesses weld quality by analyzing parameters such as bead size, shape, and alignment. They can detect defects like porosity, spatter and/or lack of fusion. The advantage lies in the quick and precise evaluations, improving efficiency in the inspection process. Includes a description of the camera, software system, statistical data, and the human machine interface. Demonstration of robot vision inspection on weld coupons to identify MIG welds that are inside and outside of quality limits.

## **RAM Solutions BIO**



John Macdonald, Director for RAM Solutions, with over 28 years of experience in automotive manufacturing. John has held numerous positions in joining engineering roles at direct OEM automotive, equipment supplier, and Tier 1. John has launched many joining assembly systems at integrators and plant level installations. Lab development work on advanced joining techniques for high volume production and with developing equipment and process specifications. At RAM Solutions, John's experience helps companies with new equipment development and equipment product launch.

John Macdonald, Director for RAM Solutions Inc.  
[www.linkedin.com/in/john-macdonald-595028154](http://www.linkedin.com/in/john-macdonald-595028154)

## **Bluewrist Bio**



Tom Thompson, US Business Development Manager for Bluewrist (USA) Inc., with over 35 years of experience in 3D vision inspection and quality measurement systems. Tom has held positions in sales engineering, sales management, and business development at vision equipment OEM's and distributors. Tom has worked with OEM's, Tier suppliers, and integrators to supply automated 3D vision and robot guidance solutions used in automotive, aerospace, agricultural, consumer, and defense. At Bluewrist, Tom's experiences help companies develop and implement 3D automated vision inspection and robot guidance solutions that improve efficiency, product quality, and cost reductions to the production process.

Tom Thompson, US Business Development Manager for Bluewrist (USA) Inc.