



Welding Smart Camera In The Torch (CITT) Project Workshop

A System to Improve Manual Welding Safety, Productivity, and Quality

Team: Pacific Shipyards International | Vigor Marine | EnergynTech | D'Angelo Technologies | Gatekey Engineering | Hepinstall Consulting Group | Miller Electric Company | Hobart Brothers Company

Welding quality and productivity improve with better visibility

Originally conceived to eliminate mirror welding, the CITT system is now anticipated to offer improvements for all manual wire-feed welding applications

Solution / Approach

A miniature camera mounted on a conventional wire-feed torch behind an auto-darkening lens with a novel cooling and spatter-elimination system streams video to a head-mounted display. The image is enhanced, and the operator is provided with real-time weld quality data.

Projected Benefits

- Reduction in rework, particularly in visually obstructed areas
- Reduced eye injuries, total elimination of Arc Flash risk when system is in use
- Improved ergonomics – eliminates need to contort neck to achieve line of sight – leading to improved productivity



Project ROI

- Anticipated 50% reduction in cost and time for visually inaccessible welding.
- Anticipated 50% reduction in welding-related eye injuries.

April 15, 1:30pm to 3:00pm (EST)

Webinar hosted by Pacific Shipyards International (PSI)

U.S. Companies Only

Agenda

1:30pm Project Overview

2:00pm Camera in the Torch Welding System (including Demonstration)

2:30pm Benefits, Lessons Learned, and Next Steps

2:45pm Q&A

