



## WELDING SEMINAR

PRESENTED BY THE CWA-NEW BRUNSWICK CHAPTER

Friday, April 9<sup>th</sup>, 2010

7:30 AM – 12:25 PM

The Canadian Welding Association is pleased to invite you to our action packed welding seminar. The seminar will take place on Friday, April 9<sup>th</sup> from 7:30 AM-12:25 PM. The presentations will cover a variety of welding technologies and an update to the new CSA W47.1 standard. Please come and join us for this half-day seminar and learn how these new welding application technologies may help your company grow and prosper. We have an incredible line-up of guest presenters who will demonstrate how these welding technologies are improving plant production efficiencies.

You will also have an opportunity to view the student Weldoff competition results after the seminar.

**Registration fee:** CWA Members \$50, Non-Members \$60  
**To Register:** Please call 800 844 6790 Payment may be made by Visa or MasterCard.  
**Location:** NBCC College 1234 Mountain Road, Moncton, New Brunswick. E1C 8H9  
**Time:** 7:30-12:25

### AGENDA

**7:30-7:50** Registration

**7:50-8:00** Introduction

**8:00-8:45** **Advancements in Pipe Welding & Induction Heating Technology**

**Miller Electric presentation by Craig Spindler**

This discussion will be on the advantages when using Modified GMAW and GMAW-P processes in pipe welding. The discussion will also touch on the advantages of Induction Heating during and after the pipe welding process.

**8:45-9:15** **The New CSA Standard W47.1-2009: An overview of the changes**

**CWB Group presentation by Jim Reid**

CSA Standard W47.1-2009 was released in November 2009, and introduced new options for Certified Companies relating to both welder and procedure testing. This presentation will give an overview of the major changes in the document and how these changes will positively impact the industry. The presentation will also provide information on what Certified Companies need to do to transition from the 2003 edition to the new 2009 edition. CWB Certified Companies, Welding Supervisors, Welding Inspectors and Welding Engineers will all benefit from this presentation.

**9:15-9:45** **Variable Waveform AC Submerged Arc Welding**

**Lincoln Electric presentation by Brent Mallett**

High technology inverter electronics now permit Variable Waveform Alternating Current (AC) Submerged Arc Welding (SAW). AC waveform welding allows an operator to finely control the amount of penetration and deposition for a given SAW weld. These waveforms can be tailored by the operator to control the amount of positive and negative elements of the AC welding output. In addition to

productivity gains, other benefits include reduced heat input, distortion, and defects. Companies are able to use and realize advantages with both single and multiple welding arcs on a wide variety of metals including carbon and low alloy steel, stainless, and specialty alloys.

**9:45-9:55 Coffee break**

**9:55-10:25 Manufacturing Efficiency through Welding Automation**  
**Panasonic presentation by Ken Van Dyk**

This presentation will review methods to improve manufacturing efficiency through the application of welding automation for both high volume and low volume manufacturing environments. System features to be reviewed include the following: Productivity improvements with automation, reducing welding costs, return on investment, offline programming applications, reduced programming time and adaptive control through seam find and tracking.

**10:25-10:55 MISON® Shielding Gas – Improving the Weld and Protecting the Welder**  
**Linde presentation by Luke Balderson**

Linde Canada Limited has introduced a new line of shielding gases called Mison. This gas mixture has been proven to improve welding characteristics and at the same time reduce the production of hazardous by products of welding. The adverse health effects of occupational exposure to welding fume continues to be of concern to the welding industry. In particular, two harmful gases that are of trepidation and are generated in the welding arc are ozone (O<sub>3</sub>) and hexa-valent chromium (Cr<sup>VI</sup>). The effects of variation in welding process parameters on production of (Cr<sup>VI</sup>) indicate that ozone in the air around the arc may be an oxidant involved in producing at least part of the CR(VI) in the fume. The paper will outline the composition of the gas, the kinetics of the reactions and provide some statistical findings around the off gas hazards and typical welding parameter benefit.

**10:55-11:25 The Effect of Hexavalent Chromium and Fume Extraction Required**  
**Nederman presentation by Dylan Millward**

This presentation will be on the health risks associated with Hexvalent chromium and other fumes while welding and grinding and how proper use of fume extraction equipment can offer a safe workplace in which you can work more efficiently and effectively.

**11:25-11:55 Increasing Customer Productivity & Profit**  
**Praxair presentation by Jeff Hart**

Praxair has been working with the metal fabrication industry to provide innovative solutions as a means of increasing customer productivity and profit. The presentation will be highlighting the Praxair Starsolver Process a cost analysis program that uncovers opportunities, reduces the cost of operations and improves your bottom line. In addition we will review the equipment offerings Praxair has available in "Automated Cutting", "Robotics & Automation" and "Laser Support Systems" Praxair has been providing gas and welding solutions to North America for over 100 years.

**11:55- 12:25 TOPTIG**  
**Omniweld presentation by Serge Brule**

TOPTIG is TIG reinvented by getting the quality of TIG at the speed of MIG. Applications are for mild steel and stainless steel from 1 to 3 mm thick. The mechanics of the process and its advantages will be reviewed.

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