



THE PRESENTER

Leon Rosenbrock, WTIA Queensland Technology Manager has wide experience in welding and repair of creep resisting materials, life extension and welding of creep aged materials and has been involved with metallurgical failure investigations of welded components, fabrication and repair. He has extensive

experience with ASME having used it in construction of ASME designed boilers and vessels and in nuclear power station maintenance. He is both a qualified welding technologist and metallurgical technologist.

WTIA NATIONAL DIFFUSION NETWORKS PROJECT

With the help of a Federal Government grant and support from Industry and State and Territory Governments, the WTIA launched the WTIA National Diffusion Networks Project (NDNP).

The Project involves the implementation of a structured welding and joining technology demonstration and improvement program for a range of industry sectors utilising welding.

The sectoral strategy involves the WTIA working directly with leading Australian firms, SMEs, supply chains and technology specialists in the OzWeld Technology Support Centres (TSCs).

THIS EVENT IS SUPPORTED BY WTIA SMART PRESSURE EQUIPMENT INDUSTRY GROUP MEMBERS

Rio Tinto Alcan Pty Ltd; AGL Torrens Island Pty Ltd; Alcoa World Alumina Australia; ANSTO; BHP Billiton Yabulu Refinery; BP Refinery (Bulwer Island); BP Refinery (Kwinana); Caltex Refineries (NSW) Pty Ltd; Caltex Refineries (QLD) Ltd; CS Energy, Callide Power Station; CSBP Ltd; Edison Mission Energy Loy Yang B Power Station; Loy Yang Power Management Pty Ltd; NRG Gladstone; Queensland Alumina Ltd; Rio Tinto Aluminium Yarwun; SANTOS; Stanwell Corporation Ltd; Tarong Energy; Verve Energy; Worsley Alumina Pty Ltd and WTIA Technical Panel 1 "Pressure Equipment".

For further information about membership of the WTIA National Diffusion Networks Project, SMART TechNet Project and OzWeld Technology Support Centres Network please contact the WTIA Tel: +61 (0)2 9748 4443, Fax: +61 (0)2 9748 2858 or visit our website <http://www.wtia.com.au>

Note: This Workshop can also be held In-Company. For further information please email l.rosenbrock@wtia.com.au

REGISTRATION FORM

ASME IX & AS/NZS 3992 Workshops

The Education & Training Administrator, WTIA Federal Office
PO Box 6165, SILVERWATER, NSW, 1811
Phone: (02) 9748 4443 Fax: (02) 9748 2858 Email: training@wtia.com.au

Surname: _____ First Name: _____

Position: _____

Company Name: _____

Address: _____

Suburb: _____ State: _____ Postcode: _____

Email: _____ Tel: _____

Mobile: _____ Fax: _____

Please book me to attend:

- Brisbane Gladstone Sydney
 Melbourne Darwin Perth

Dietary requirements if applicable

Venue details will be confirmed on registration

REGISTRATION FEE

\$880* WTIA Members \$990* Non-members

Fee includes coffee/tea, lunch, course notes and 10% GST

Method of Payment: All payments should be made payable to WTIA.

- Cheque MasterCard Visa Funds Transfer

Cardholder's Name: _____

Expiry Date: _____/_____/_____ Amount \$ _____

Card No: _____/_____/_____/_____

Signature: _____ Date: _____/_____/_____

Funds may be transferred to the following account details. Please return a **remittance advice** to fax: 02 9748 2858 or email training@wtia.com.au. National Australia Bank BSB: 082 330 Account: 047162875 Branch: 28 George Street, Parramatta, NSW Account Name: Welding Technology Institute of Australia.

IMPORTANT NOTICE

Note: For cancellations received within 10 working days of the workshop, 100% of the fees will be charged. Replacement delegates may be sent in lieu of those cancelled. WTIA reserves the right to cancel workshops due to insufficient registrations or other reasons beyond its control. Confirmation of bookings will be sent to delegates upon registration. WTIA also reserves the right to refuse registrations. WTIA ABN 003 696 526



OZWELD SCHOOL OF WELDING TECHNOLOGY SWT-31

ASME IX & AS/NZS 3992 QUALIFICATION OF WELDING PROCEDURES AND WELDERS

2-DAY WORKSHOPS

2012 LOCATIONS

DARWIN, NT	27 & 28 AUGUST
PERTH, WA	06 & 07 SEPTEMBER
MELBOURNE, VIC	17 & 18 SEPTEMBER
SYDNEY, NSW	20 & 21 SEPTEMBER
BRISBANE, QLD	24 & 25 SEPTEMBER
GLADSTONE, QLD	27 & 28 SEPTEMBER

The ASME IX Boiler and Pressure Vessel Code is internationally recognised for the welded fabrication of pressure equipment. AS/NZS 3992 is used similarly in Australia.

Both may be called up in key new projects in Australia such as nickel cobalt and other minerals refineries, coal seam gas projects, power station refurbishment, petro/chemical and refinery plants and liquefied natural gas (LNG) development projects. ASME IX is often also required for fabrication of many components exported from Australia and during repair and maintenance of plant.

The Workshops are intended to assist Australian industry to minimise costs in qualifying welding procedures and personnel to satisfy both standards.

"WTIA National Skills Campaign"
Targeting Skills Needs in all Regions to Keep Jobs in Australia

INTRODUCTION

This is one of a series of Seminars and Workshops held by WTIA on latest developments and practices for the Qualification of Welding Procedures and Welders e.g. AS/NZS 1554, AS/NZS 2980.

Although Australia has its own manufacturing Standards for products such as pressure equipment, welded steel structures, pipelines etc. it is important that industry personnel keep up with latest developments in other widely recognised codes. For example, with reference to ASME IX:

- Some key projects about to take place in Australia involve the ASME Codes;
- Some organisations are using ASME IX on work within Australia;
- Some organisations are looking to be competitive for export work in USA, South East Asia and the Middle East;
- Engineering personnel need to keep abreast of developments even if not using ASME IX;
- ASME IX is referred to in other manufacturing and maintenance codes e.g. ASME B31.1 and B31.3.

The Workshop is intended to deal specifically with ASME IX and AS/NZS 3992 *Pressure equipment – Welding and brazing qualification* which apply to boilers, pressure vessels and piping, and at the same time to highlight the fundamental principles of welding qualifications also adopted in other codes/standards e.g. the ISO series.

Opportunity will be taken to also highlight any significant differences between ASME IX and AS/NZS 3992.

WORKSHOP CONTENT

- An Introduction on the ASME, National Board Code and Standards Australia functions.
- The importance of proper qualification of procedures and personnel will be emphasised.
- The operation of the standards will be described, and demonstration will be given of a check-off system to verify that all required variables and tests have been properly addressed on the three basic documents; Welding Procedure Specification (WPS), Procedure Qualification Record (PQR), the Welders Performance Qualification (WPQ) record.
- The Workshop will cover applications such as the preheat and post-weld heat treatment as well as some difficult applications such as dissimilar base metal thicknesses combined with dissimilar base metals.
- The Workshop will conclude with a complete coverage of the supplementary essential variables for toughness applications.

PROGRAMME

DAY ONE

08:30 – 09:00 Registration
09:00 – 09:15 Introduction of Workshop
09:15 – 10:15 Use of ASME IX and AS/NZS 3992 in total work for pressure equipment
10:15 – 10:30 *Break (open for questions and answers)*
10:30 – 12:00 Overview of ASME Section IX and AS/NZS 3992 Welding Qualifications
12:00 – 13:00 *Lunch*
13:00 – 14:30 Preparation of a Welding Procedure Specification (WPS)
14:30 – 14:40 *Break (open for questions and answers)*
14:40 – 15:50 Preparation of a Procedure Qualification Record (PQR)
15:50 – 16:00 *Break (open for questions and answers)*
16:00 – 17:00 Preparation of a Welders Performance Qualification (WPQ) test
17:00 – 17:30 Question and Answer Time

DAY TWO

08:00 – 08:15 Temper Bead Weld Repairs Without Post Weld Heat Treatment
08:15 – 09:00 Review of Changes in the Code (Materials and Design)
09:00 – 10:20 Application of a WPS/PQR Check Sheet
10:20 – 10:30 *Break (open for questions and answers)*
10:30 – 12:00 Continuity and Renewal of Welders Performance Qualification
12:00 – 12:45 *Lunch*
12:45 – 14:30 Application of Preheat, PWHT, Dissimilar Thickness and Base Metals
14:30 – 14:40 *Break (open for questions and answers)*
14:40 – 15:50 Review of Supplementary Essential Variables for Toughness Applications
15:50 – 16:00 *Break (open for questions and answers)*
16:00 – 17:00 Review Actual Documentation Examples
17:00 – 17:30 Summary of Workshop and Feedback to Standards Australia

IMPORTANT

Registrants are encouraged to bring prepared written questions, actual application examples and oral questions. Also bring copy of ASME Section IX – Welding Qualifications and ASME Section VIII – Pressure Vessels or equivalent Australian Standards e.g. AS/NZS 3992 and AS 1210 to the Workshop. The new AS/NZS 3992 is currently under revision and is expected to be released early next year. The workshop will explain the existing AS/NZS 3992 and some anticipated changes, and gather feedback for improvement of the Standard.

WHO SHOULD ATTEND?

Types of Personnel:

Production Managers
Welding Engineers, Foremen and Supervisors
QC Managers and System Assessors
Fabrication Managers
Welding Coordinators
Specifiers and Designers
Trainers

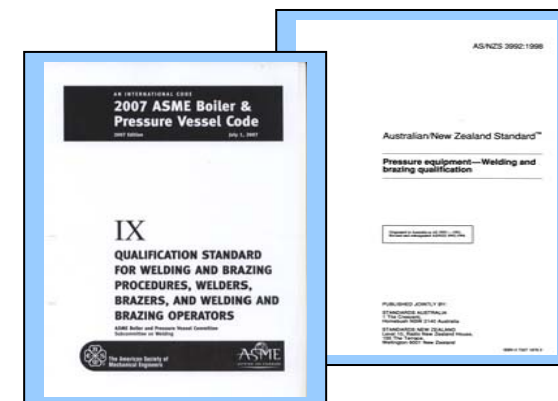
Types of Industry:

Fabrication (light/heavy)	Pressure Equipment
Structural	Manufacturing
Shipping	Quality Assurance
Processing Plant	Maintenance
Oil and Gas & Offshore	Transport
Piping & Pipelines	Inspection
Rail	Water
Defence	Power-Energy

WORKSHOP DETAILS

The 2-day workshop will be held from 08:30 until 17:30 at the location and dates listed overleaf. Bookings are essential as places are limited. Exact venue details will be advised on enrolment.

Each Workshop delegate numbers will be limited to ensure high teacher-student contact and interaction.



Copies of ASME Section IX – Welding Qualifications and ASME Section VIII – Pressure Vessels or equivalent Australian Standards e.g. AS/NZS 3992 and AS 1210 can be purchased through the WTIA, with WTIA members receiving the members discounted price, providing orders are received by WTIA 4 working weeks prior to the Workshop.