



# **ASME B31.1: POWER PIPING**

Presenter: Bob Wilson

#### ABOUT THE PRESENTER: BOB WILSON



Bob Wilson is a practicing piping design engineer. For more than 40 years he has been involved with the drafting, design, stress analysis, layout, support and construction of piping systems, working with petrochemical, power, steel, mining & processing companies in North America, Australia, Europe, Middle East and South East Asia. Mr. Wilson is amember of the ASME B31.1 Power Piping Code Sub Group on Design.

He is a former engineering professor at Sheridan College in Canada and currently teaches piping design and engineeringcourses for ASME including 'ASME B31.1 Power Piping Code' and 'Detail Engineering of Piping Systems'.

He is Author of a piping design book 'Detail Engineering and Layout of Piping Systems'.

Number of days: 4 Cost: R16 033 excl VAT CPD Points: 4

### WHAT WILL YOU LEARN

Worldwide competitiveness is forcing the need to construct more effective piping systems, possible only if existing piping codes and standards are understood and intentions realised.

This intensive 4 day course brings you updated information on current Power Piping Code requirements and provides insightinto how these requirements have evolved and what future changes in the Code may be expected. This course explores thebackground, rules and trends in piping design, analysis, and fabrication - vital elements of power, industrial and institutionalplant construction and maintenance - within the context of meeting the requirements and intent of ASME B31.1 and itsappendices.

Upon completion of this course, participants will have an understanding of:

- Why the Code is intentionally simplified and how to deal with special and complex piping problems
- The principal failure modes of piping components and structural design
- The difference between pressure component design and structural design
- Layout and simplified analysis techniques
- How to qualify non-standard fittings and joints
- How to develop stress intensification factors

The course will also include an overview of materials selection and limitations, fabrication rules and their bases, welding qualification requirements, and inspection, examination, and testing requirements.

## WHO SHOULD ATTEND

- Engineers entering the piping design and analysis field
- Practicing piping engineers requiring background on Code compliance and trends in piping design, analysis and fabrication
- QA/QC personnel

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## SPECIAL REQUIREMENTS

Attendees are required to bring a scientific calculator. The latest edition of the ASME B31.1 Power Piping Codebook is also required for this course. If your organisation already has a copy, please bring it along.

COURSE OUTLINE
History of codes
ASME B31.1 Operations and scope
Piping failure modes
Piping design conditions
Piping design criteria
Pressure Design and Straight Pipe
Pressure Design of Piping Components
Guarding against pipe collapse
Providing adequate piping flexibility
Cold spring
Stress intensification factors
Simplified Piping Analysis and Layout
Simplified Piping Analysis and Layout
Requirements for Specific Piping Systems

### **Registration Form**

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#### How to register for the course:

- 1. Complete this registration form and fax it to Phindi Mbedzi: Tel: 011 325 0686 Fax: 011 325 0488 Email: Phindi@2kg.co.za
- 2. Acknowledgement will be emailed to you.
- 3. Final confirmation and details will be faxed or emailed to you approximately 7 days before the commencement of the seminar.

#### **Conditions of entry:**

- 1. Cancellations are accepted in writing and without penalty, up to 7 working days prior to commencement of the seminar.
- 2. Cancellations in writing less than 7 working days prior to the seminar will be liable to pay 20% cancellation fee.
- 3. If prior written notification of cancellation is not received, defaulter will be liable to pay 50% cancellation fee.
- 4. In case of insufficient applications for the workshop 2KG reserves the right to cancel the seminar. Applicants will be informed and all fees will be refunded immediately.

#### **Delegate information:**

Title:	Surname:		Name:		
Full Company name:					
Postal Address (to which invoice must be sent):					
Code:	VAT number:				
Tel: ( )		fax: (	)		
Cell:		Email:			

### Contact/ Accounts information:

Title:	Surname:		Name:
Tel: ( )		fax: ( ) _	
Cell:		Email:	
	uirements: Normal	Vegetarian	
Accommoda	tion Requirements:	Yes	No
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Please tick the course that you would like to attend:

13-16 October 2014 Johannesburg, Mintek

I have read and agreed to all the conditions of registration as stipulated in this brochure.

Signature

Date

For more info and to register contact Phindi Mbedzi on tel: 011 325 0686 or cell: 071 125 6188 and email: phindi@2kg.co.za or visit www.2kg.co.za