



# The Life-Cycle of Flexible Risers and Flowlines

*An Awareness Course*

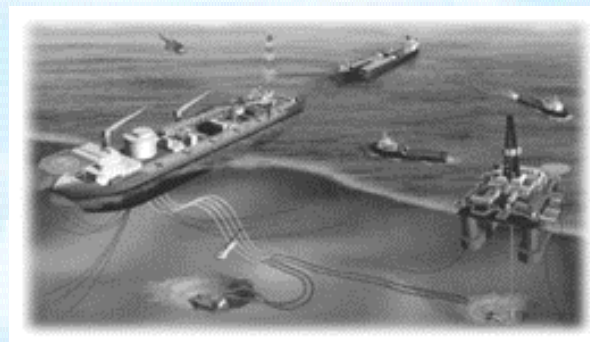
**25th & 26th March 2015**

Parmelia Hilton Hotel (Karri Room)  
Mill Street, Perth, Australia

This course has been developed by three flexible pipe manufacturers and key companies associated with system design, failure mode analysis, and integrity management of flexible flowlines and risers.

The course is aimed at those who specify, purchase, approve, install, operate, manage the integrity of, or decommission flexible risers or flowlines, including jumpers.

The course should provide enough knowledge for them to feel comfortable with their responsibilities and is likely to apply to both engineers and non-engineers at various stages in their careers.



*SUT reserves the right to change/amend the programme as it sees fit.*

Presenting Companies Include:

**INTECSEA**  
WorleyParsons Group

  
**s2v consulting**  
SOLUTIONS 2 VALUE

**Technip**  
*take it further.*

  
**WOOD GROUP  
KENNY**

# PROGRAMME—The Life Cycle of Flexible Risers and Flowlines (An Awareness Course)



**Day 1 09:00–16:45**

09:00 **Registration**

09:15 **Introduction to Flexible Pipe**

*Richard Stuart, INTECSEA*

09:45 **Design of Flexible Risers and Flowlines**

*Camila Kage & Hendra Po, Technip Oceania*

- ◆ The structure of different types of flexible pipe
- ◆ Materials: plastics and their selection; corrosion considerations for steel

10:30 Morning tea

- ◆ Flexibles track record
- ◆ Static flowline design
- ◆ Dynamic riser design, including dynamic analysis and fatigue analysis

12:15 **Lunch**

13:15 **Design of Flexible Risers and Flowlines Cont.**

- ◆ Overview of ancillary equipment
- ◆ Future technology (including deep water issues)

14:45 Afternoon tea

15:00 **Installation of Flexibles**

*Geoff Lansell, Technip Oceania*

- ◆ Installation equipment (reels, carousels, etc)
- ◆ Considerations for selection of method, equipment, installation vessel etc.
- ◆ Installation analysis: load prediction, sea state limitations, minimum bend radius etc.
- ◆ Tie-in operations

16:45 Day end

17:30 **Course Dinner**

**Day 2 09:00–16:45**

09:00 **Codes & Standards**

*Christian Wiebe, Wood Group Kenny*

- ◆ Which Codes & Standards are relevant
- ◆ Key issues relating to interpretation
- ◆ Ongoing developments in the Codes & Standards

09:40 **Damage, Degradation and Failure Modes**

*Christian Wiebe & Skjalg Erdal, Wood Group Kenny*

- ◆ How design takes account of failure modes
- ◆ Practical experience – use, damage and failure

10:30 Morning tea

- ◆ Flexible pipe failure modes, and their mechanisms
- ◆ How integrity management is linked to failure modes
- ◆ Guideline on Flexible Pipe Integrity Management

12:00 **Lunch**

13:00 **Integrity Management**

*Skjalg Erdal, Wood Group Kenny*

- ◆ Integrity versus Asset management, what is the difference?
- ◆ What are the requirements of an IM system?
- ◆ How do you apply IM?
- ◆ A currently operating asset - study of an actual IM system in action

14:55 Afternoon tea

15:10 **Applications of Flexible Pipe in the North West Shelf of Australia**

*Nigel Underwood, S2V Consulting*

- ◆ Typical applications in the area
- ◆ Site specific design and installation issues
- ◆ Case studies

16:30 **Certification and Course Conclusion**

## Registration Information

The Life Cycle of Flexible Risers and Flowlines Mar 2015

Should you require further information on this event, please contact Jennifer Maninin on [j.maninin@sut.org](mailto:j.maninin@sut.org) Tel +61 8 9446 9903  
To register, either e-mail the information required on the registration form to [perthevents@sut.org](mailto:perthevents@sut.org) or fax the completed form to +61 8 9446 9905

### Registration Fees

SUT Members - \$1072.72 + GST = \$1180.00

Non Members - \$1272.72 + GST = \$1400.00

**Fee includes** - All refreshments during the course including dinner on the first night, handout notes of the presentations & DVD containing PDF versions of the presentations available, and videos.

### Preferred Payment Methods:

**Credit Card:** Visa, Mastercard or AMEX\* only. We cannot accept payment by any other card.

**\*Please note if paying by AMEX there will be a 2.75% surcharge.**

**Cheque:** Australian Dollar only, made payable to The Society for Underwater Technology  
Send to, SUT, 5/5 Hasler Road, Osborne Park, Perth, WA 6017

Please make sure you reserve a place by e-mail or fax before sending payment.

**Invoice:** Please tick here to be invoiced

### Joining Instructions:

Joining instructions will be e-mailed to the registered delegate (as shown on the registration form). All details of presenters and updates to the programme will be included in the joining instructions.

### Course Dinner:

An informal dinner will be held in a local restaurant on the first night of the course (details with joining instructions).

### Transport During the Course:

Delegates are responsible for their own travel arrangements at the beginning and end of each day. Transport will be arranged by the SUT from the Parmelia Hilton Hotel for site visits.

### Cancellations:

Refunds will be made on written cancellation received up to ten working days in advance of the event, but will be subject to a 15% handling charge. 50% will be deducted up to three working days in advance and 100% thereafter up to the start of the event. No refund will be given for non-attendance. Delegates may wish to nominate a substitute in their place.

Please tick box if you do not wish to receive further SUT information

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## Registration Form

Please e-mail details to [Perthevents@sut.org](mailto:Perthevents@sut.org) or fax the completed form to +61 8 9446 9905

Please tick to indicate your preferred payment method: \_\_\_\_\_ SUT Member No. \_\_\_\_\_

Credit Card \_\_\_\_\_ (Visa, MasterCard or AMEX\*) Cheque \_\_\_\_\_ Invoice (PO No.) \_\_\_\_\_

Name \_\_\_\_\_

Company \_\_\_\_\_

Address \_\_\_\_\_

E-mail address \_\_\_\_\_ Tel No. \_\_\_\_\_

Credit Card No: VISA, MASTERCARD ONLY or AMEX \* \_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_

Exp. \_\_\_\_\_ / \_\_\_\_\_ Security no \_\_\_\_\_ (last 3 digits on the back of your card)

Name on the card \_\_\_\_\_

Billing Address if not as above \_\_\_\_\_

E-mail address where receipt should be sent for credit card payment \_\_\_\_\_

Amount to be charged \$ \_\_\_\_\_ Signature \_\_\_\_\_