

# The Life Cycle of Flexible Risers and Flowlines

(An Awareness Course)



**26<sup>th</sup> & 27<sup>th</sup> June 2018**  
Saxons Training Facilities  
1/140 St Georges Terrace, Perth

This course has been developed by 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.



Presenting Companies Include:



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



## Day 1 08:40–17:00

08:40 **Registration**

08.50 **SUT Introduction**

09:00 **Introduction to Flexible Pipe**

*Marius Martens, INTECSEA*

- ◆ Selection of flexible pipe vs. rigid pipe
- ◆ Flexible riser concept selection
- ◆ Codes and standards
- ◆ Application of flexible pipe in Australian conditions

10:15 Morning tea

10:30 **Design of Flexible Risers and Flowlines**

*Phil Ward & Erik Tran, TechnipFMC*

- ◆ The structure of different types of flexible pipe
- ◆ Materials: plastics and their selection; corrosion considerations for steel
- ◆ Flexibles track record
- ◆ Static flowline design
- ◆ Dynamic riser design, including dynamic analysis and fatigue analysis

12:30 Lunch

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

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

15:00 Afternoon tea

15:15 **Installation of Flexibles**

*Thomas Longo, TechnipFMC*

- ◆ 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

17:00 Day end

17:30 **Course Dinner**

## Day 2 09:00–17:00

09:00 **Pre-Commissioning / Commissioning**

*Gilles Gardner, 2H Offshore*

- ◆ Post tie-in testing
- ◆ Monitoring and survey
- ◆ Filling, pigging and pressurising
- ◆ Requirements and acceptance criteria

10:30 Morning tea

10:45 **De-Commissioning / International Applications of Flexible Pipe**

*Stéphan Eyssautier, Subsea 7*

- ◆ De-commissioning : plan for it before installation - makes retrieval easier
- ◆ Challenging North Sea installation – successful outcome
- ◆ Brazil flexible field development – an installation contractor experience

12:00 Lunch

12.45 **Damage, Degradation and Failure Modes**

*Adriana Botto, Wood Group*

- ◆ How design takes account of failure modes
- ◆ Practical experience – use, damage and failure
- ◆ Flexible pipe failure modes, and their mechanisms
- ◆ How integrity management is linked to failure modes
- ◆ Guideline on Flexible Pipe Integrity Management

14:45 Afternoon tea

15:00 **Integrity Management and Inspection**

*Andrew Mills, Wood Group*

- ◆ 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

17:00 **Certification and Course Conclusion**

*This programme is subject to change.*

# Registration Information

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 9481 0999  
To register please e-mail the information required on the registration form to [perthevents@sut.org](mailto:perthevents@sut.org)

## Registration Fees

<b>SUT Members Early Bird (register and pay before 22<sup>nd</sup> May)</b>	<b>\$858.18 + GST = \$944.00</b>
SUT Members (registration after 22 <sup>nd</sup> May)	\$1072.73 + GST = \$1,180.00
<b>Non Members Early Bird (register and pay before 22<sup>nd</sup> May)</b>	<b>\$1018.18 + GST = \$1,120.00</b>
Non Members (registration after 22 <sup>nd</sup> May)	\$1272.73 + GST = \$1,400.00
SUT Student Member	\$345.45 + GST = \$380 – <i>limited places available</i>

**Fee includes** - All refreshments during the course including dinner on the first night and an electronic copy of the available presentations and videos are provided.

**Not included** - Hard copy presentations are not provided. Should these be required there is an additional fee of \$50.

## Preferred Payment Methods:

**Credit Card:** Visa, Mastercard or AMEX only \*. We cannot accept payment by any other card.  
\* Payment by Visa or MasterCard will carry a 1.5% surcharge / AMEX will carry a 2.75% surcharge.

**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. Please bring along a laptop to view the presentations.

## 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.

**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.

**CPD Hours:** CPD hours can be claimed for this course, please keep flyer and receipt for auditing purposes.

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

# Registration Form

Please e-mail completed form along with delegate profile overleaf to [j.maninin@sut.org](mailto:j.maninin@sut.org)

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

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

Name \_\_\_\_\_ Please tick here if personally funding course

Company \_\_\_\_\_

Address \_\_\_\_\_

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

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

Exp. \_\_\_\_\_ / \_\_\_\_\_ Security no \_\_\_\_\_ (3 digit number for Visa & M/C, 4 digit number for Amex)

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 \_\_\_\_\_

So that the lecturers can get an idea of the level at which to pitch their talk, please let us have a few details of your current job position, history and what you hope to learn from the Course.

The Course dinner (Tuesday evening) has been arranged as an informal dinner at a CBD restaurant. Please indicate below if you are able to attend.

Please e-mail along with registration form to [j.maninin@sut.org](mailto:j.maninin@sut.org)

Position Held \_\_\_\_\_

Relevant Professional History \_\_\_\_\_

\_\_\_\_\_

Reason for attending course \_\_\_\_\_

\_\_\_\_\_

Any special dietary requirements \_\_\_\_\_

Count me in for the dinner    YES/NO  
(If indicating Yes and this changes prior to attending the course please email [perthevents@sut.org](mailto:perthevents@sut.org))

Please tick box if you do not want to share your delegate profile with other attendees