



TECHNOLOGY  
**showcase**

2016 Exhibition and Conference

*Hot Tapping – A Small Field  
Enabling Technology*

# Summary



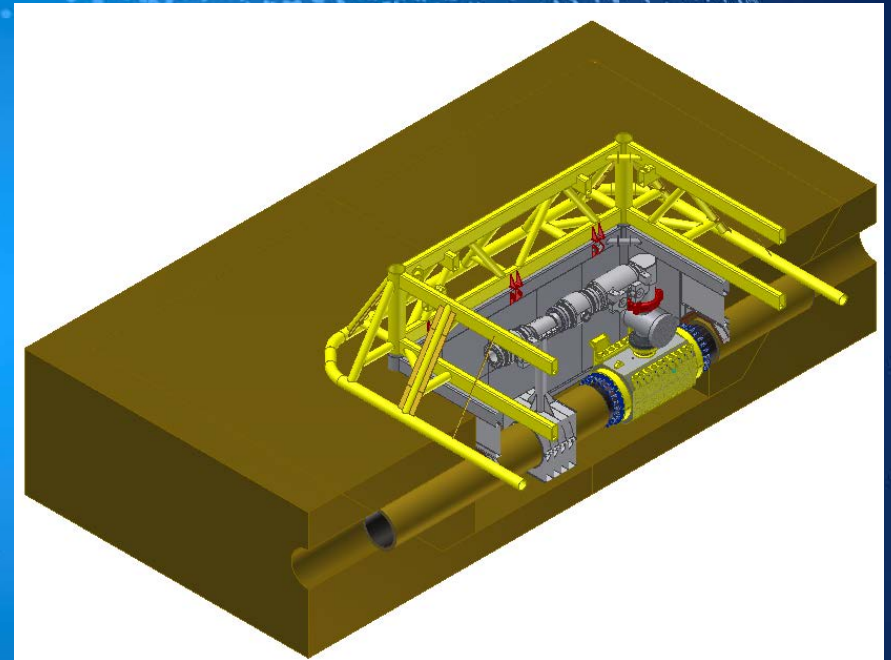
- What is Hot Tapping
- Why Hot Tap
- The Current Art
- A New Approach
- CWS Experience

# What is Hot Tapping



- Making connections to a host pipeline, or other pressurized vessel, whilst the pipeline or vessel remains in service

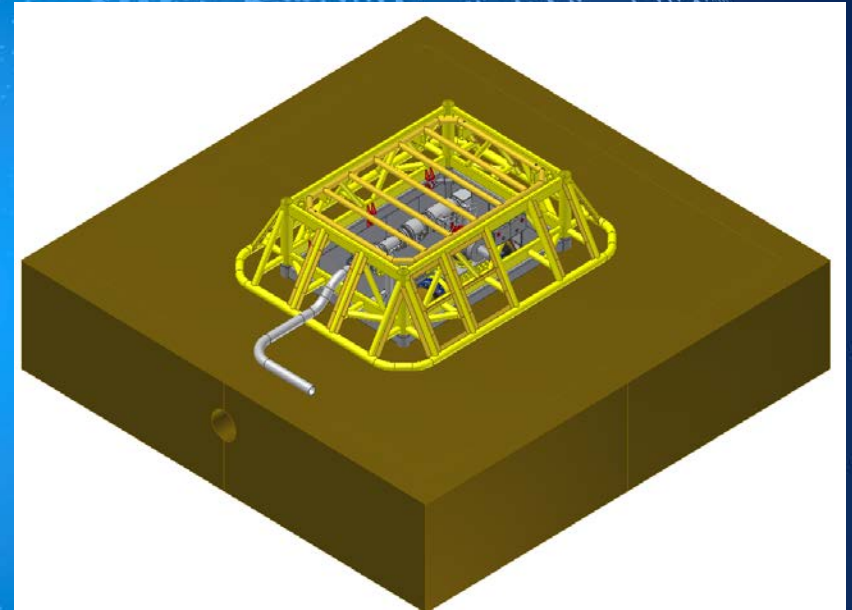
*i.e. Pipeline is fully  
pressurised and flowing  
product*



# Why Hot Tap



- Tie-back of small fields to export trunk lines
- Pipeline reconfiguration as part of field optimization
- Pipeline stopple and plugging operations as part of abandonment projects



# Current NS Approach



- Use of Hyperbaric welding (Diver)  
*Or*
- Use of Hyperbaric welding (Statoil RWT)  
*Or*
- Pre-installed Tees (Statoil Ormen Lange)

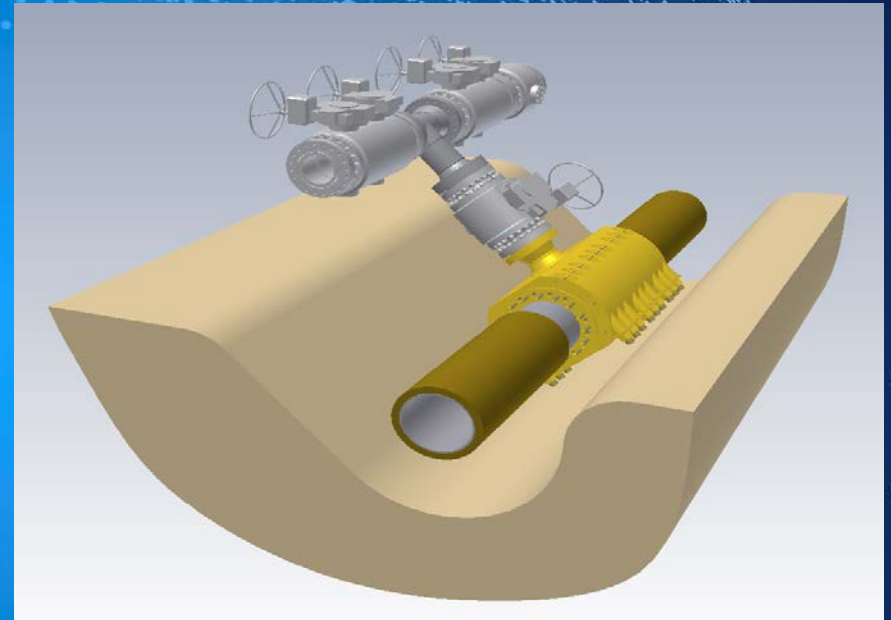


# A New Approach



## Use of Mechanical Hot Tap Tee

- Used extensively in other oil and gas regions –  
(Installed base over 1,200)
- Enables shorter tie-backs for marginal / small fields



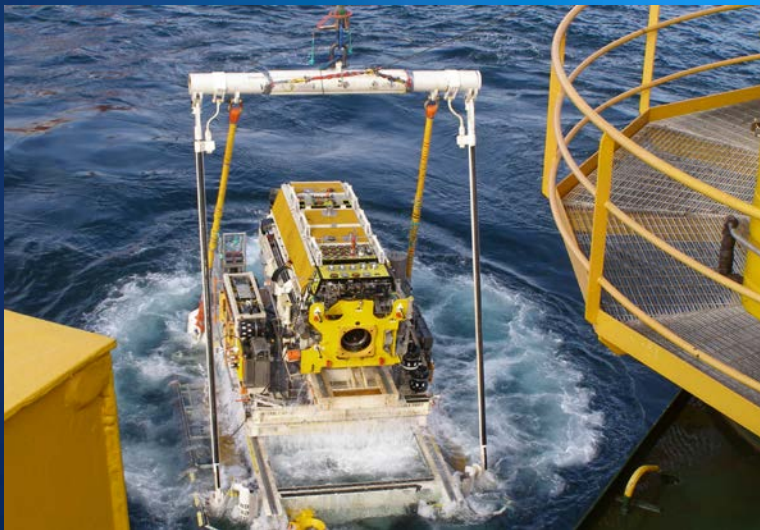
# CWS Experience



- Two remote hot tapping tools delivered to Statoil PRS

## Four Hot Tap Projects:

- *Tampen Link*
- *Ormen Lange ( 2 Hot Taps @ 850m LAT )*
- *Asgard Subsea Compression*



# *Thankyou*



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