



**STATS GROUP**  
Managing Pressure, Minimising Risk

## **Topsides UK 2022**

# **Reduced Venting & Flaring During Asset Maintenance**

# How to Safely Break Containment for Repairs & Maintenance?



At first, it may appear that the safest way to break containment on a pressurised pipeline or process system is to;

- Depressurise the entire system
- Flaring, Venting cost and environmental impact
- Remove all hydrocarbon content by flushing and purging

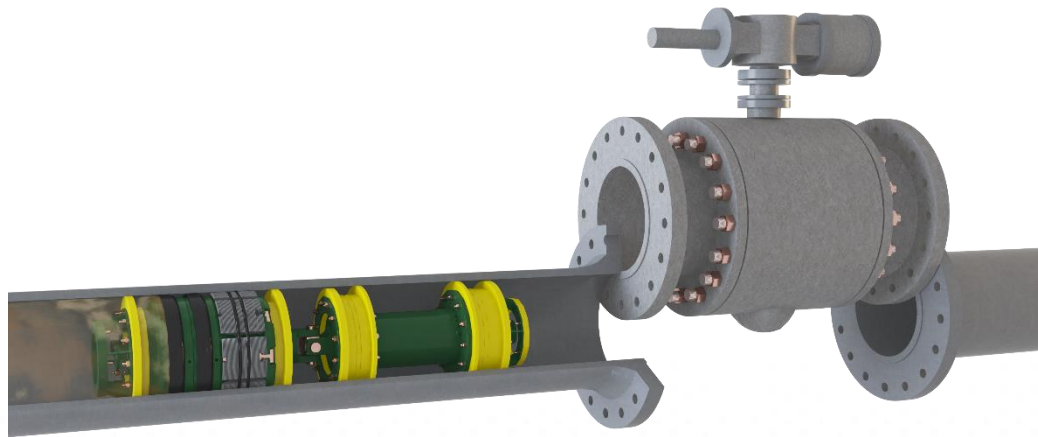
When the risks associated with depressurising, flushing, purging are properly assessed, it often becomes obvious that depressurisation may not be the safest way to do the work, as it doesn't have a residual risk level that is **As Low As Reasonably Practicable (ALARP)**.



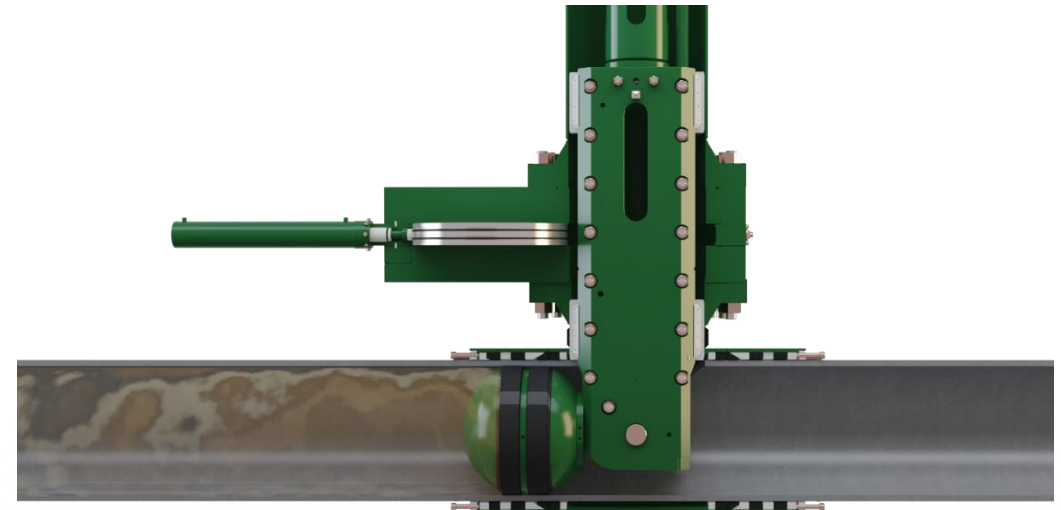


If existing system isolations are not suitable, DNV Type Approved isolation devices are available

These types of tools provide the highest level of temporary isolation integrity (Double Block & Bleed / Monitor)



**Tecno Plug®**



**BISEP®**  
**(Branch Installed Self-Energised Plug)**

# Emissions Savings Case Study Examples



## Overview of Applications & Potential Emissions if Venting Inventory

Site	Component	Pipeline Diameter	Pipeline Length	Volume (standard cubic metres)	Emissions Factor (kg CO2e per unit)	Emissions (tonnes CO2e)
Platform to Bacton receiving terminal	Natural Gas (vented) at 90 bar	24"	55 km	1,217,448.2	2.01574	2,454
Platform to St Fergus receiving terminal	Natural Gas (vented) at 90 bar	36"	452 km	23,872,634	2.01574	48,121

## Embodied Carbon Emissions Incl. Manufacture, Maintenance Transportation

Component	24" Tecno Plug		36" Tecno Plug	
	Core	Dressing Kit	Core	Dressing Kit
Raw Materials	397.51	721.56	1,637.69	1,790.01
Machining Energy Use	363.17	337.64	1,311.81	1,010.60
Delivery to STATS site	7.92	7.51	19.45	85.22
<b>TOTALS</b>	<b>768.60</b>	<b>1,066.71</b>	<b>2,968.95</b>	<b>2,885.84</b>
	<b>1,835.3 kg CO2e</b>		<b>5,854.8 kg CO2e</b>	

Emissions savings calculated and independently verified



# Emissions Savings Case Study Examples

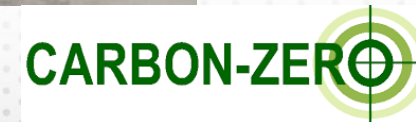


**99% Emissions Savings  
Delivered by STATS Isolation  
Tooling vs Venting**

Site	J06594	J06328
Pipeline Diameter	24"	36"
Existing Process (Venting Gas)	2,454	48,121
Tecno Plug	0.88	0.17
Savings	2,453 99%	48,121 99%



**Emissions savings calculated and independently verified**



# Providing Value Throughout the Life-Cycle Chain



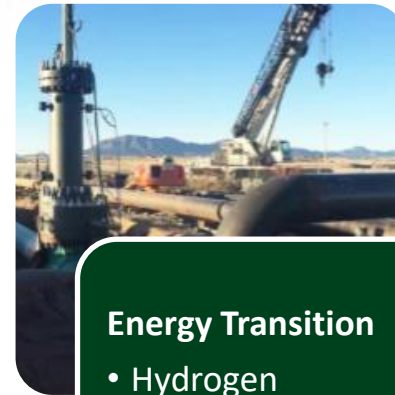
**Critical Maintenance**

- Valve Changeouts
- Tie Backs
- Sectional Repairs
- EPRS



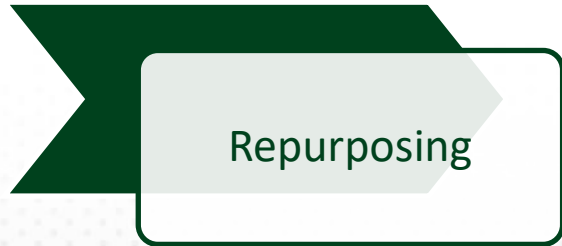
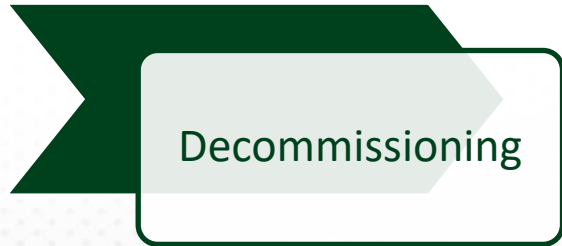
**Cease of Production**

- Bypass Projects
- Life of Field Extension
- Abandonment



**Energy Transition**

- Hydrogen
- CCUS
- Sustainability



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