



**Subsea UK
Pipeline Inspection Maintenance and Repairs
Springboard**

**Oceaneering® Pipeline Repair Systems
A technical overview**

**Giuseppe Rizzo
Technical Solutions Manager
Subsea products**

**grizzo@oceaneering.com
+44 (0) 7554 338914**

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SAFETY MOMENT!

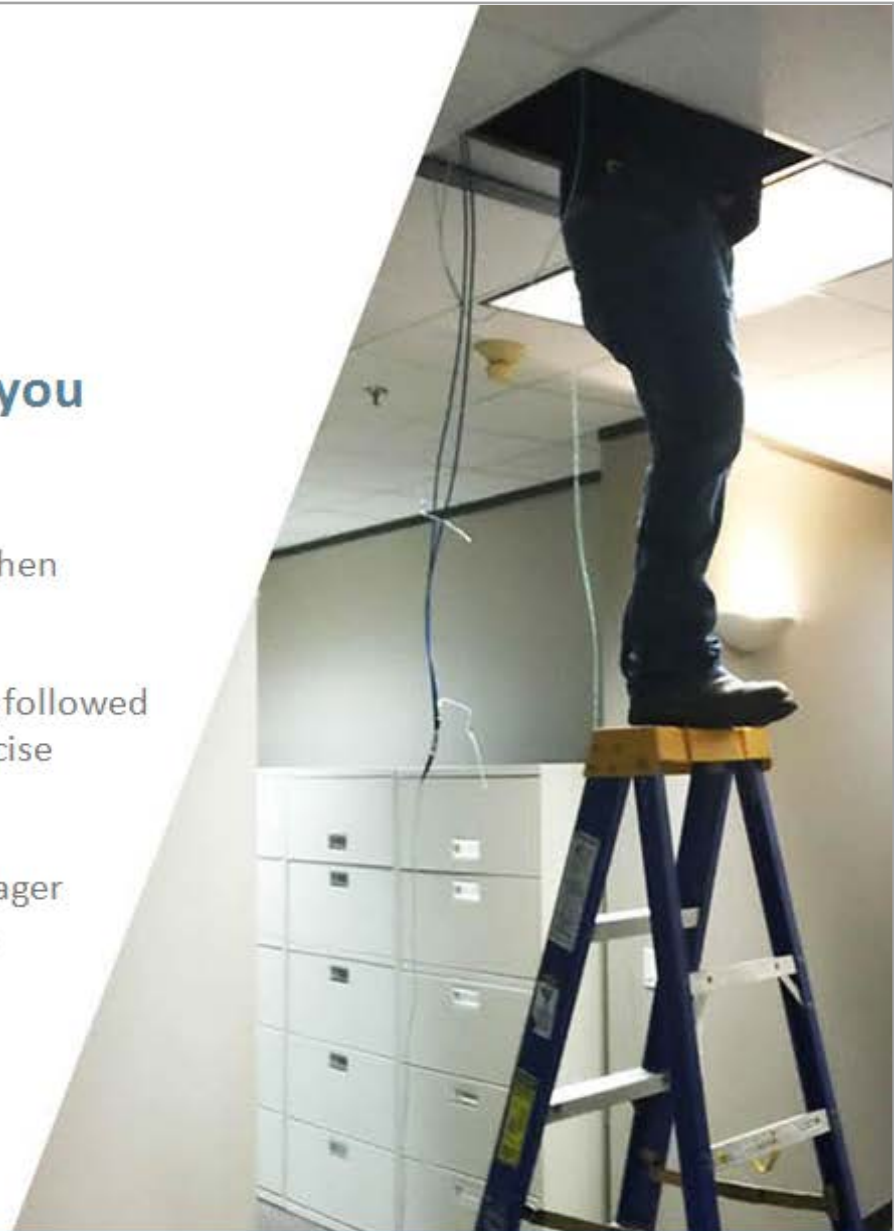
Stop the Job

Sometimes the most important work you can do is to stop working

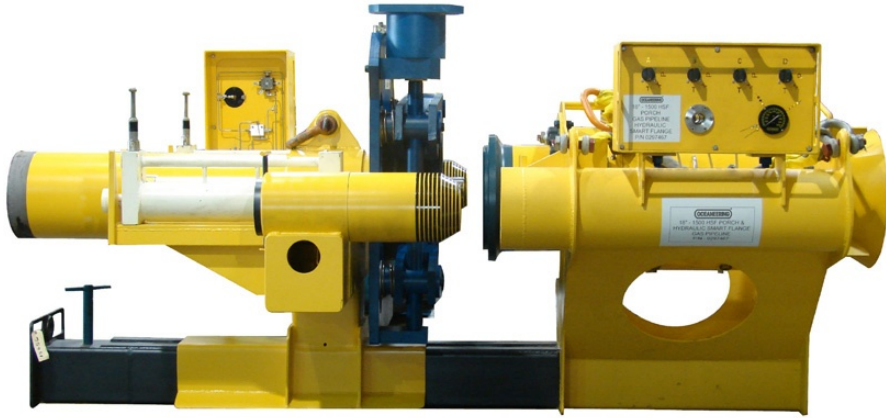
Always watch for unsafe conditions or processes, and, when necessary, stop the job until it can be done safely.

If you're working and you see a process that is not being followed correctly, or if you notice at-risk behavior going on, exercise your stop work authority by taking a quick time-out.

Then, confer with your workmates and talk to your manager to make sure everyone knows the safe way to continue.



PCRS – Deepwater Repair Systems



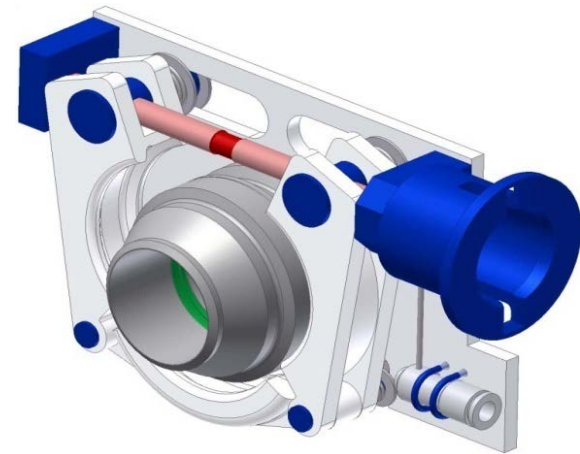
Connection Repair System



Diverless Smart Clamps



Hydraulic Smart Flange Connector



Grayloc® Subsea Remote Connectors

SUBSEA PIPELINE REPAIRS

Types of Subsea Pipeline Repairs:

Minor Repair

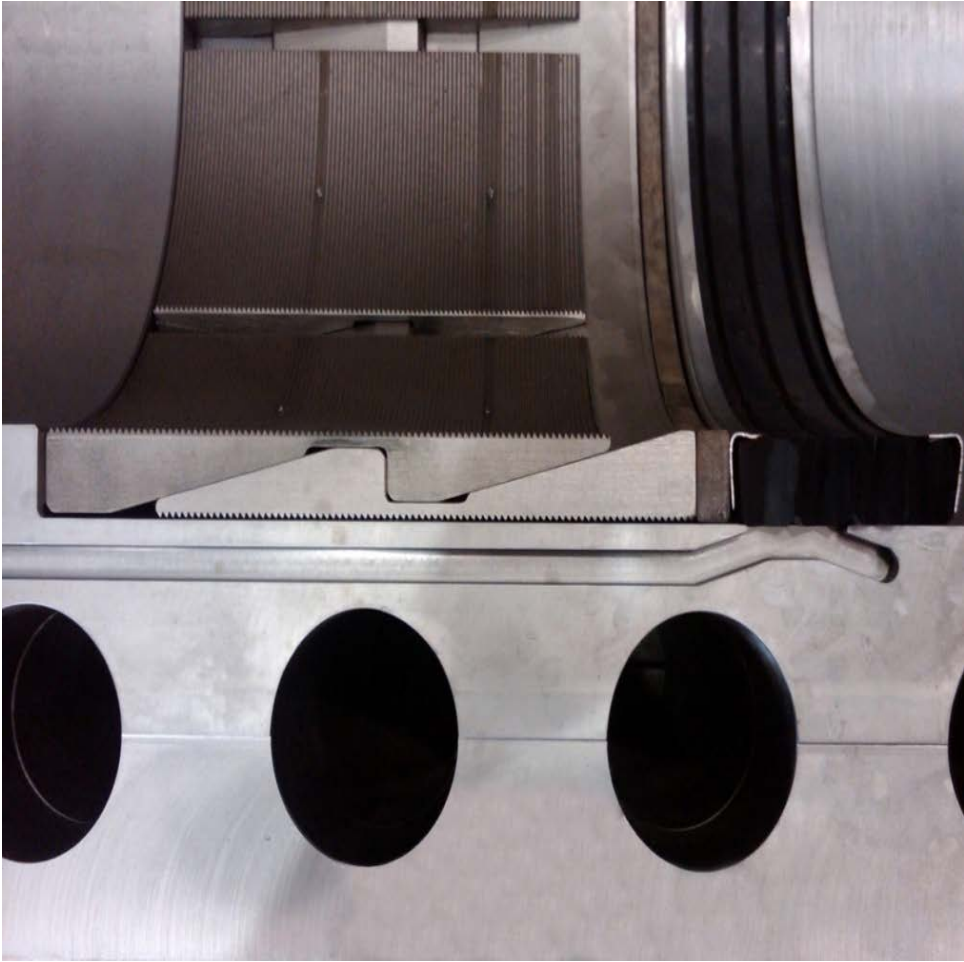
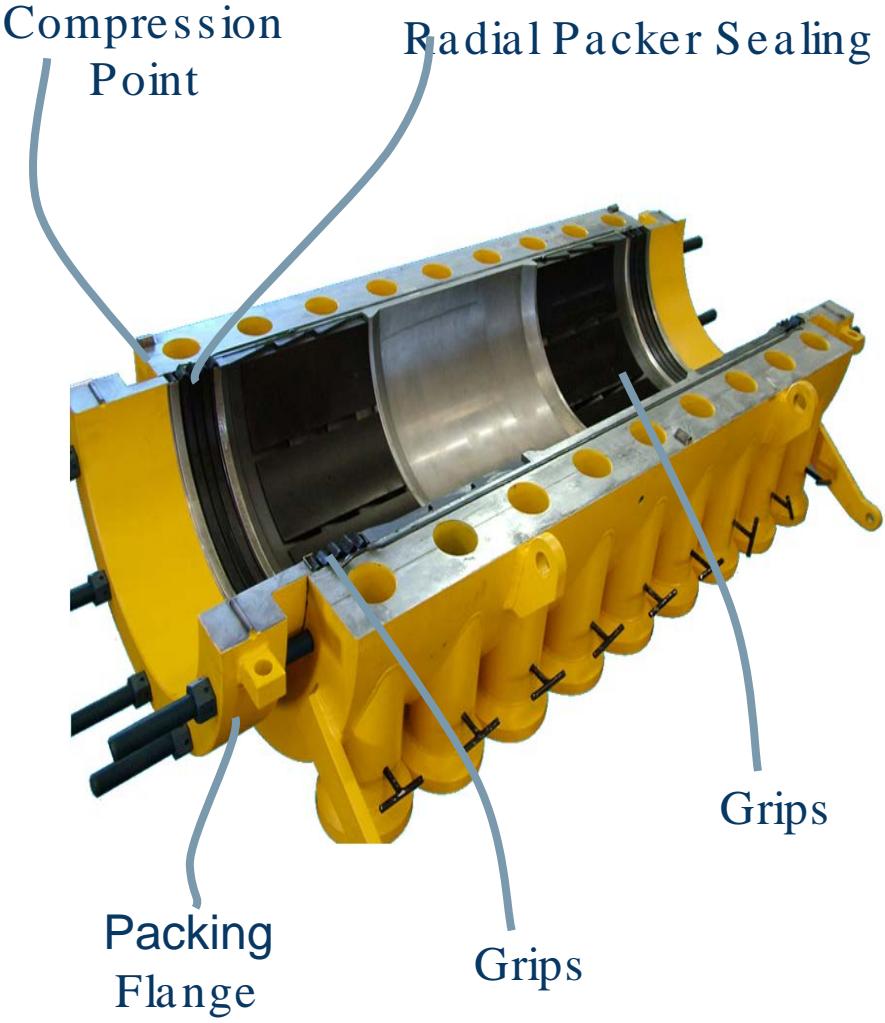


Major Repair

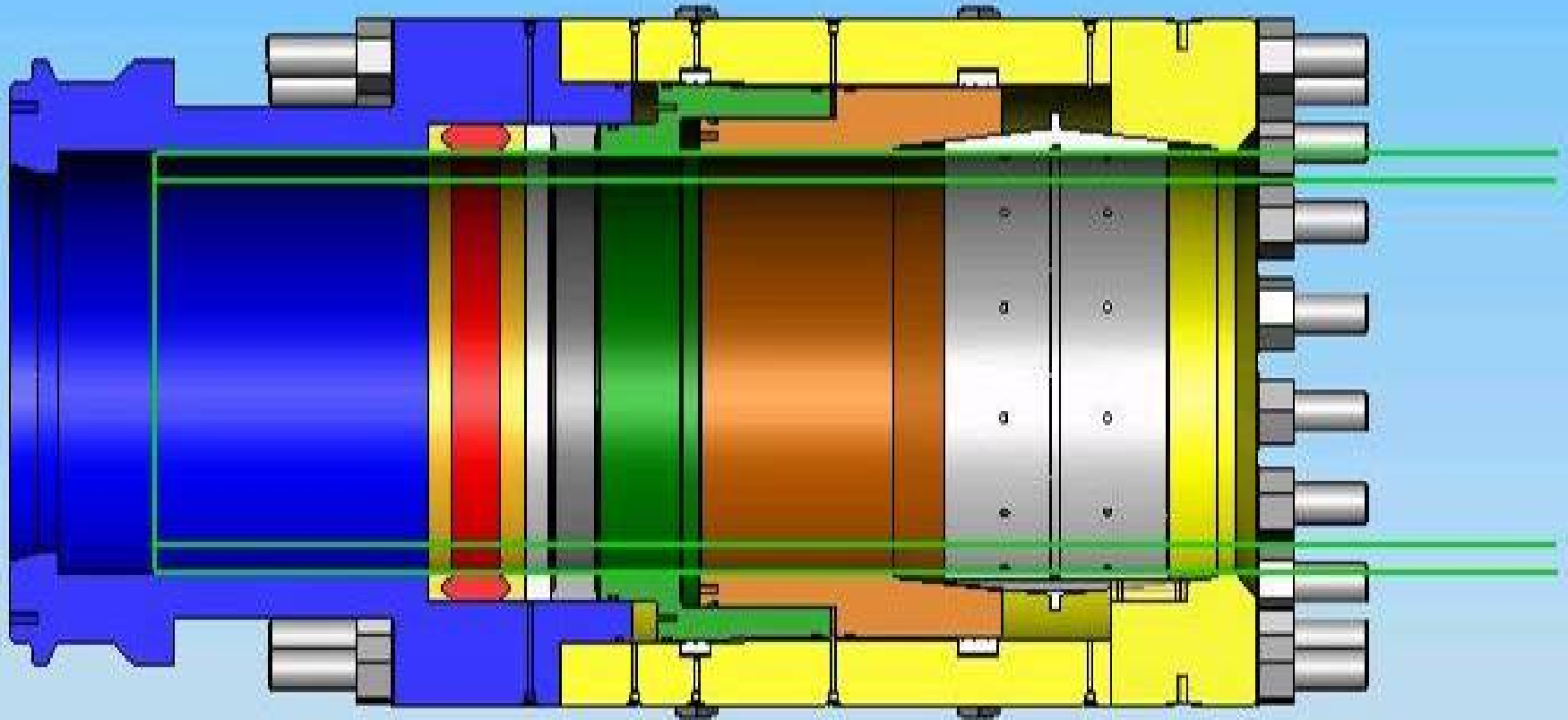


Pipeline Services

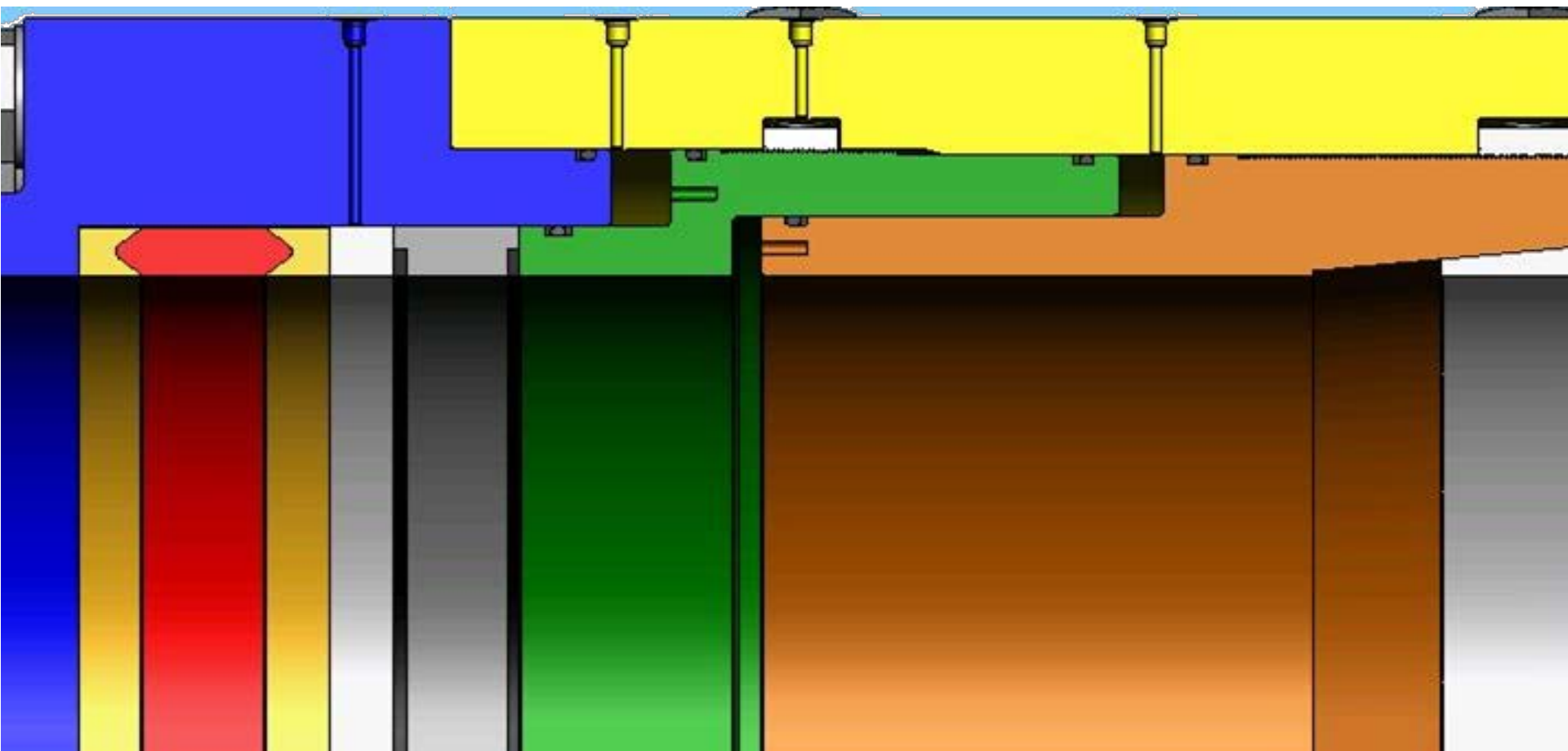
Repair Clamp



Deepwater Applications – Hydraulic Smart Flange Connector



Deepwater Applications – Hydraulic Smart Flange Connector



ROV Tooling for Deepwater Pipeline Repairs



Pipe Lift Frames



Coating & Weld Seam
Removal Tool



Pipe End
Preparation Tool



Pipe Cutting Tool
(Chop Saw)

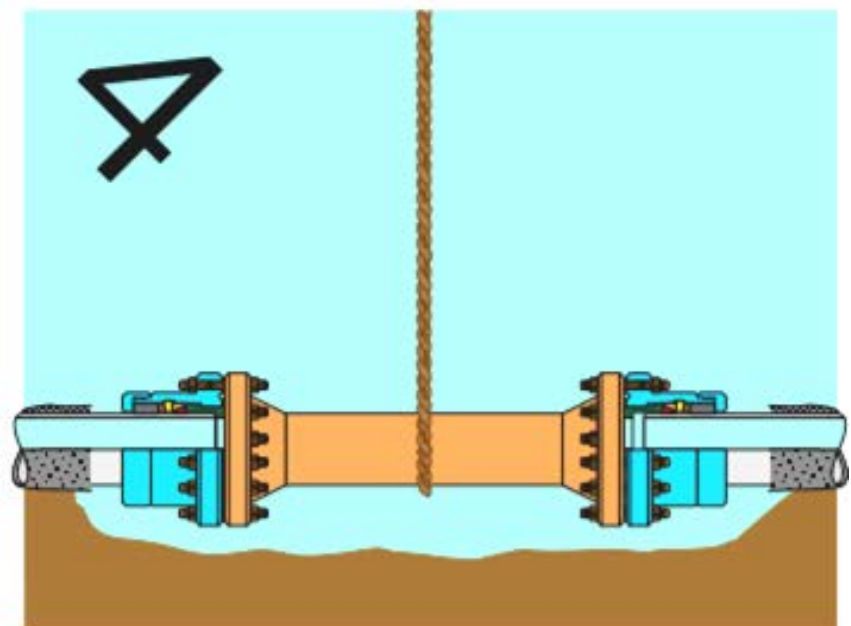
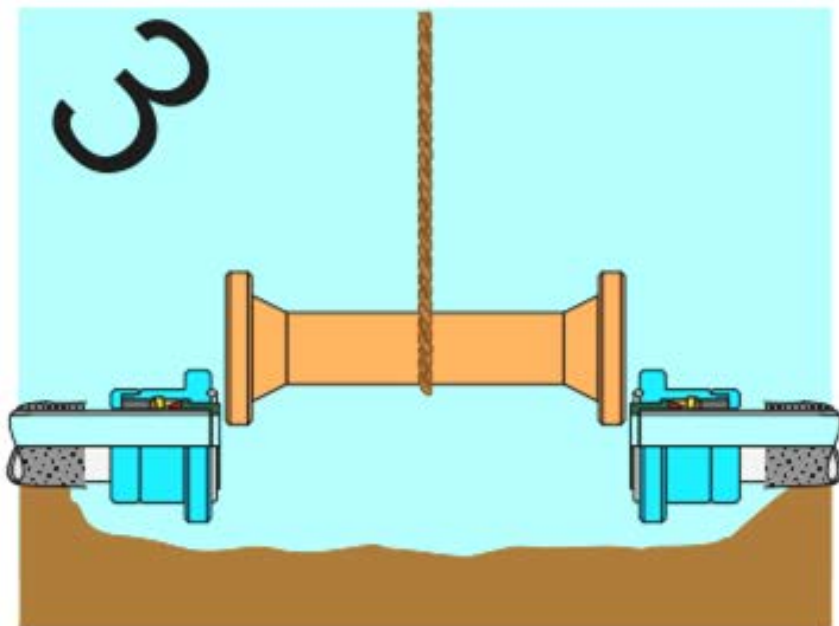
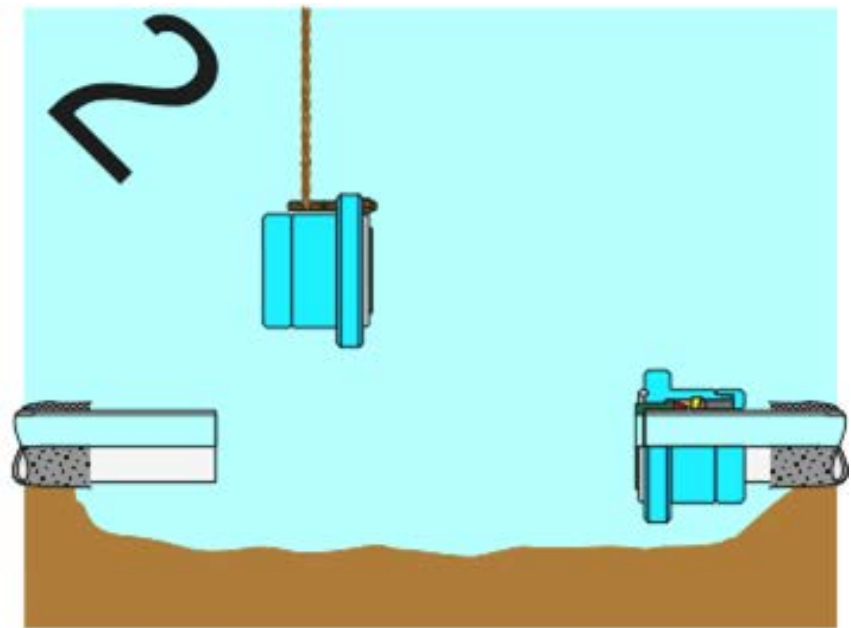
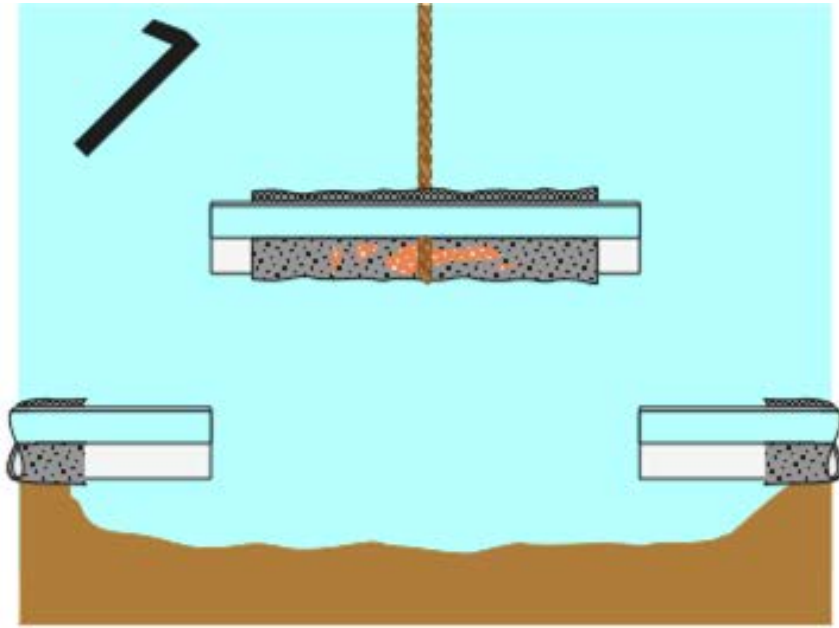


Pipe End
Check Tool

Pipeline Repair Systems- Benefits

- Components readily available from 2” up to 24” class 900
- Suitable for both Diver and ROV assisted operations
- Quick installation
- Withstand full pipeline axial, bending and torsion loads while maintaining full pressure integrity
- No weldments are required, thus eliminating the associated Weld Procedures and Qualifications and NDT activities

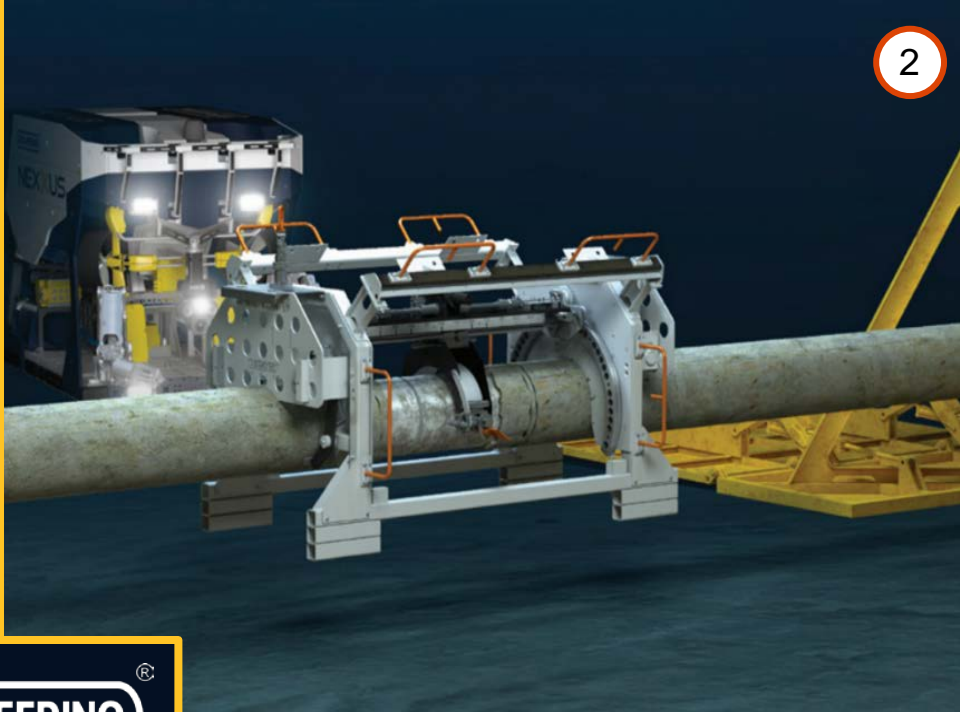
Pipeline Integrity



1



2

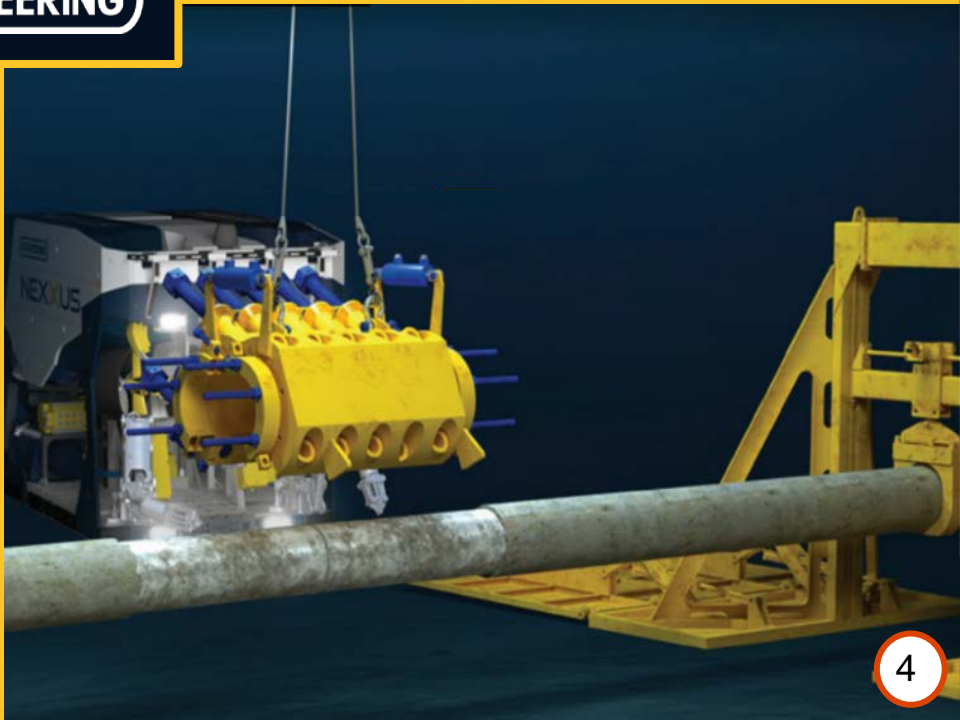


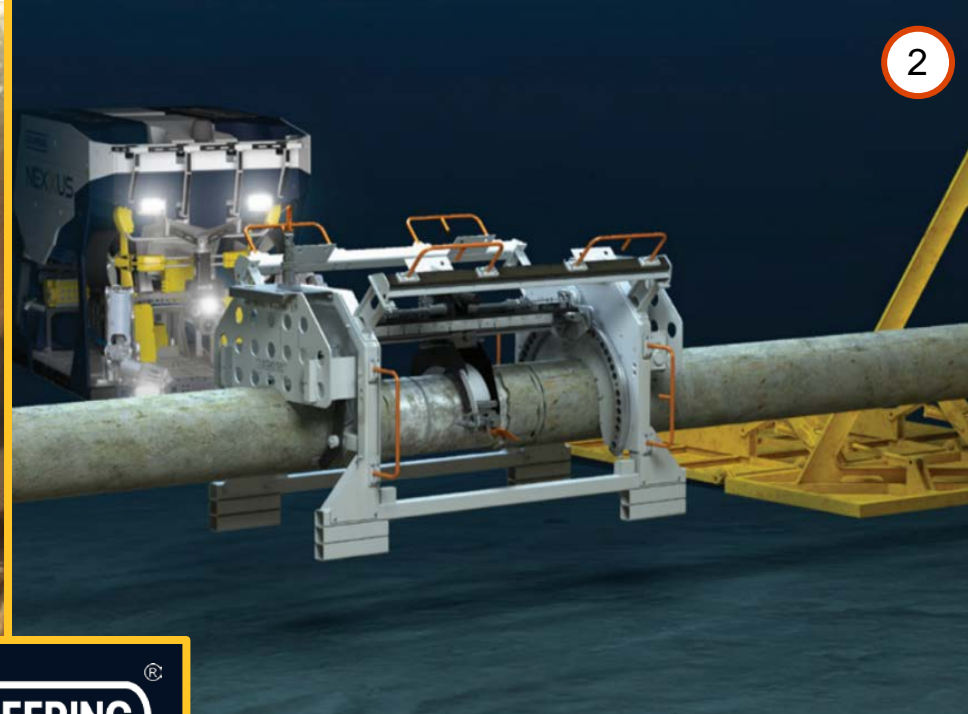
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4





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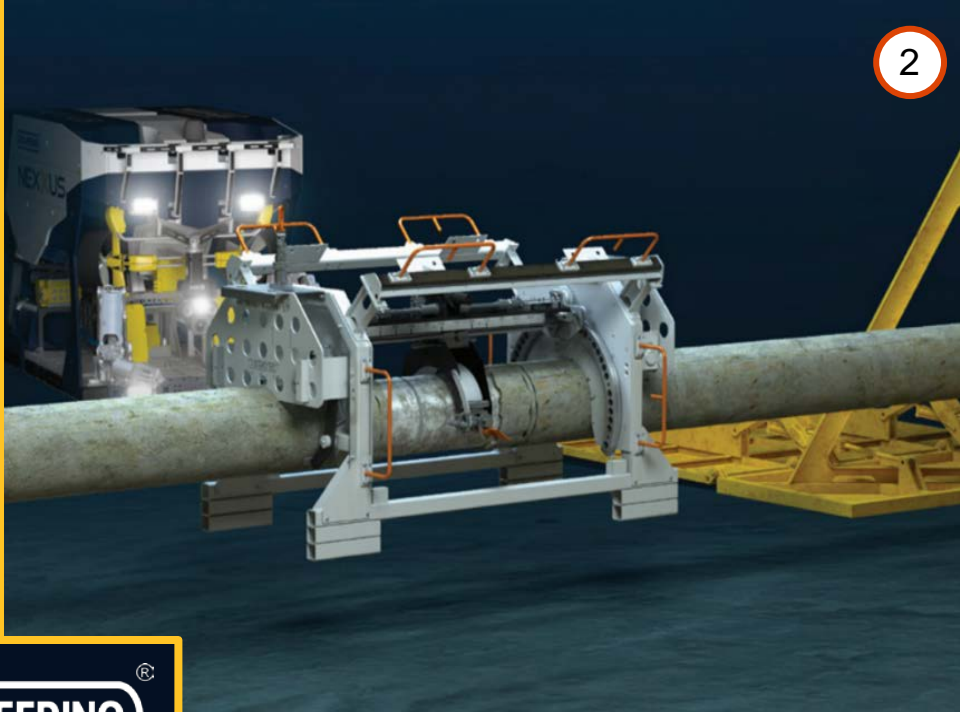
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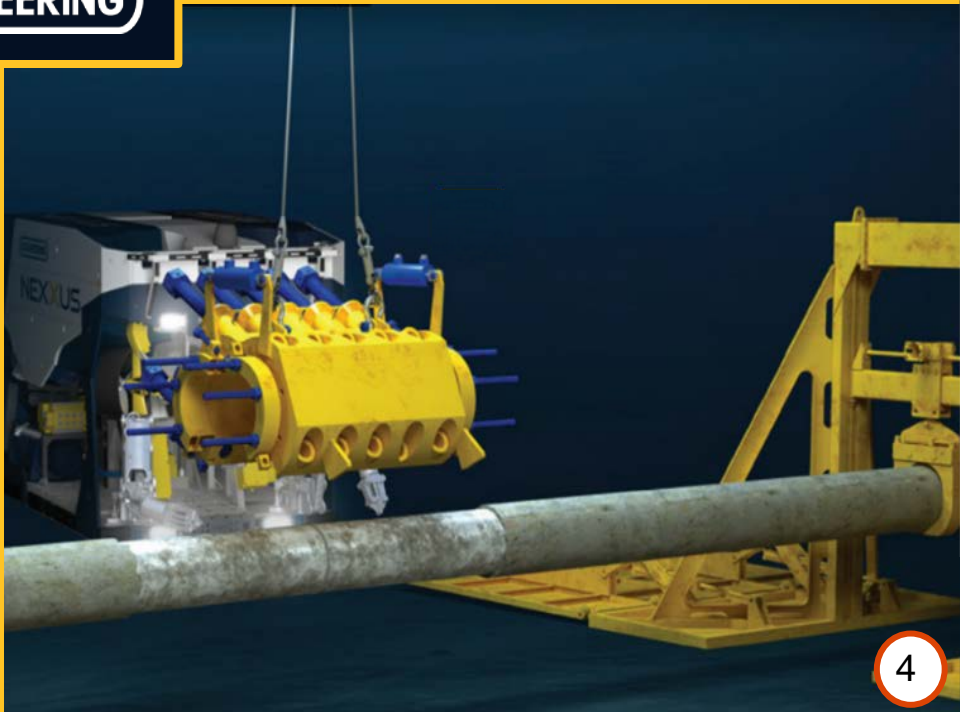
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Batch: 01/00/0000	Depth: 470.00 m	W: 400000.
Time: 00:00:00	SL: 1.00 m	E: 400000.00
CP: -000 m	Speed: 000.00	OP 0.000



3

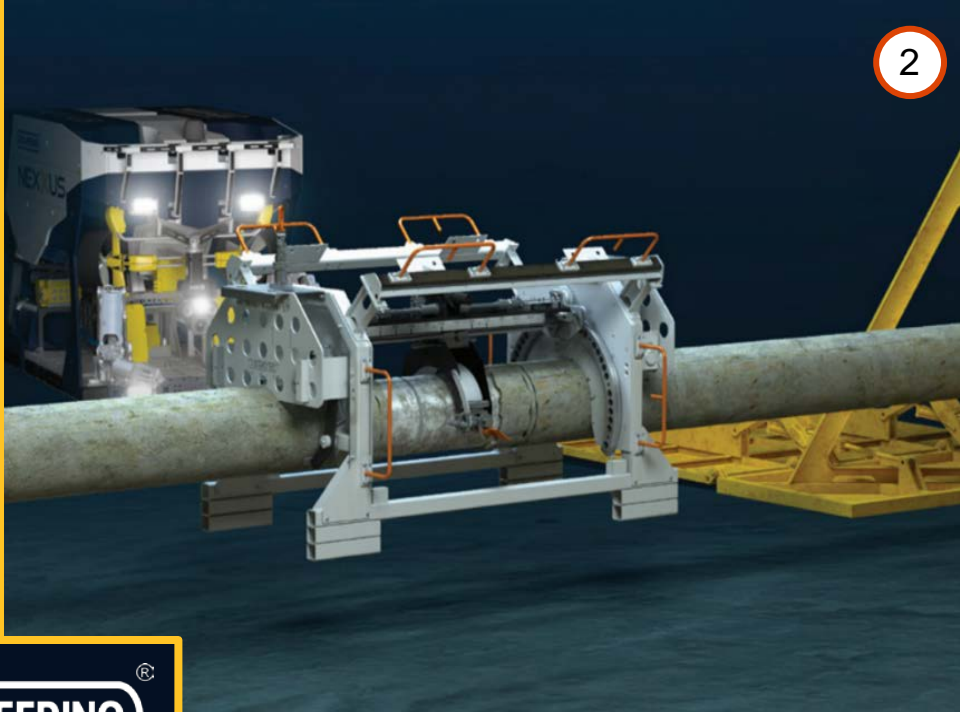
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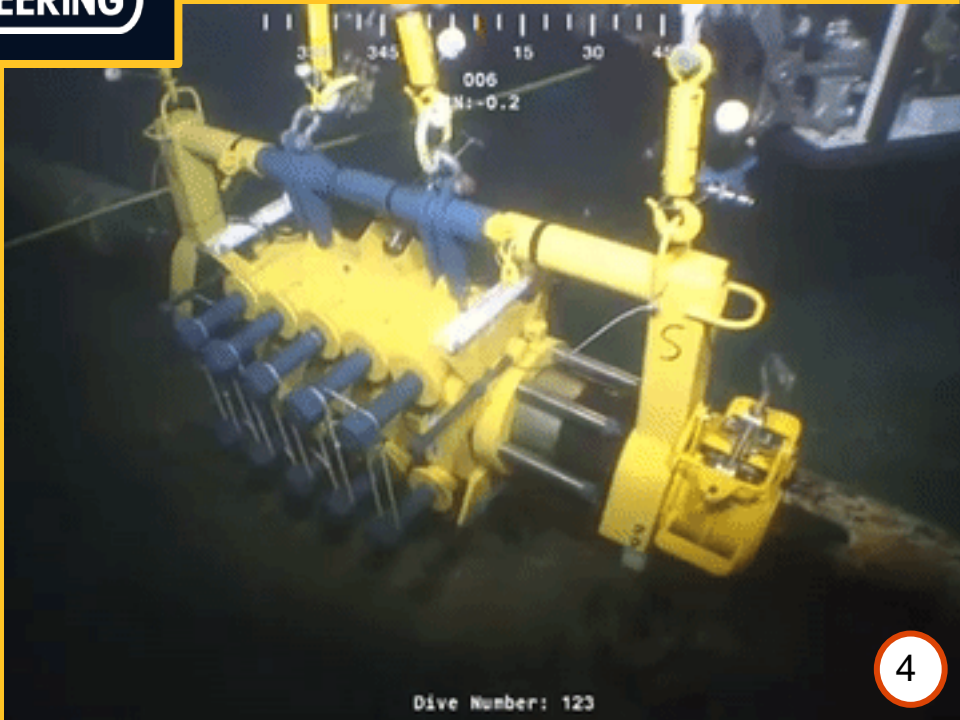


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4

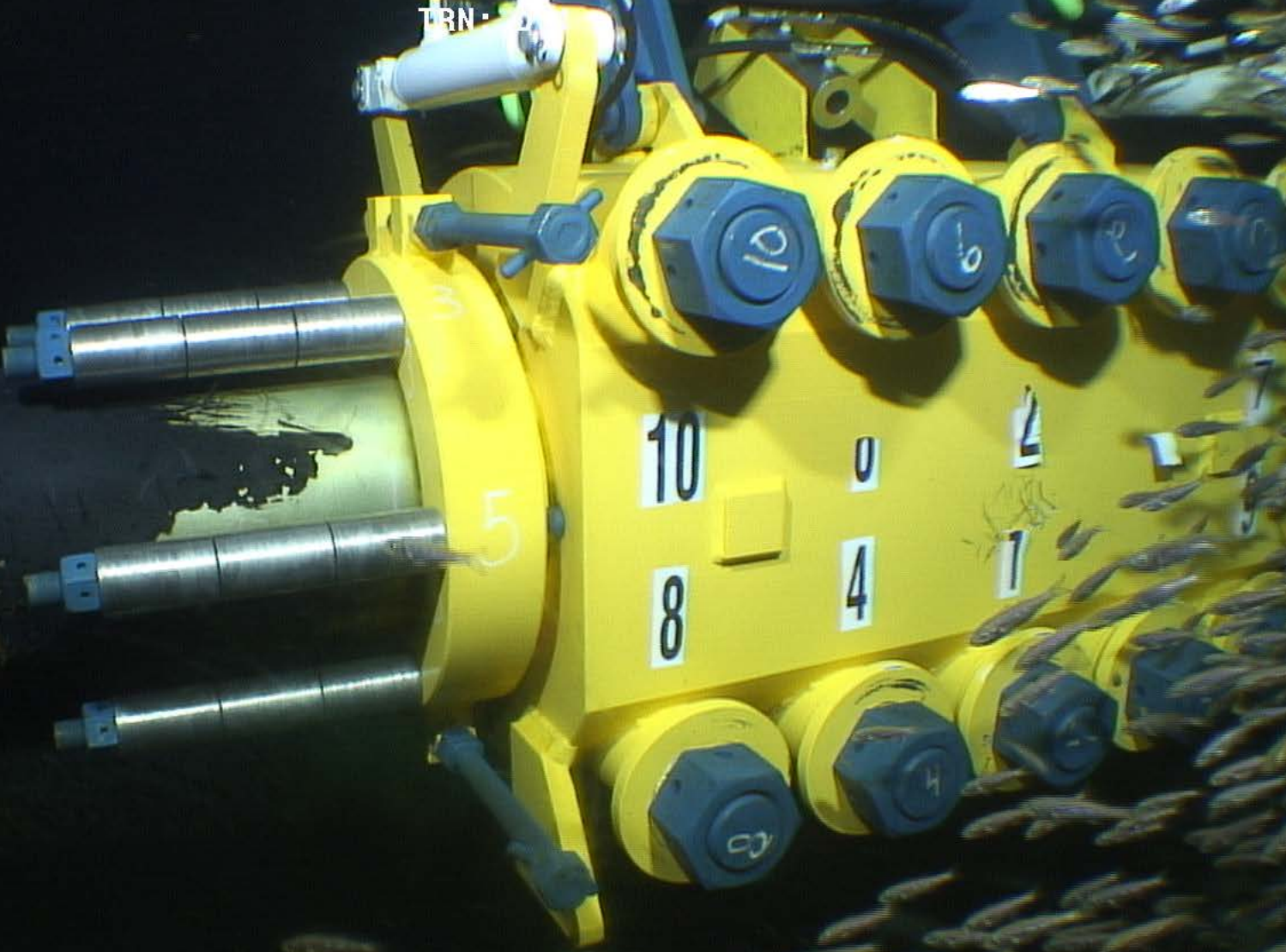


Dive Number: 123

5 30 45 60 75 90 105

ROV
DPT: 77 m
ALT: 0 m
BTY: 77 m

062
TRN:



OCEANEERING®

Dive Number: 127

02 DEC 13
01:47:45

A large offshore oil rig is shown at night, illuminated by its own lights. The rig's complex structure of steel beams and platforms is visible against the dark sky. A bright light source, possibly a flare or a spotlight, is positioned to the right, casting a beam of light across the scene. The overall atmosphere is industrial and dramatic.

**CONNECTING
WHAT'S NEEDED
WITH
WHAT'S NEXT™**