





Long distance pigging using multiple inline Isolation tools

19th November 2025



Agenda

- Pipelines, integrity and maintenance pigging
- Inline Isolation tools
- Long distance pigging



Pipelines, integrity and maintenance pigging

Primary purpose: Transport from A to B
(network/systems), store products

Design and
installation

- Parent material
- Operating regime

Protection
methods

- Coatings (internal and ext.)
- Mechanical protection, wrap, backfill, cover.
- Cathodic protection and/or sacrificial anodes

Inhibitors and
additives

- Protects from adverse effects



Maintaining integrity assessment/inspections:

External inspections

- Above ground, ROV surveys.

Internal inspections

- Coupon monitoring.

Internal cleaning

- Chemical cleaning, maintenance pigging.

Integrity monitoring

- Intelligent pigging, caliper pigs, Inline inspection tools.



Pipelines, integrity and maintenance pigging

“PIGGING”

- Key part of integrity management.
- Standard, regular operational activity
- Throughout the pipeline network’s lifecycle.
- Examples: pre-commissioning, line-proving, cleaning, liquid removal, inline inspection, inline isolation, and decommissioning.

Pipeline products and transportation conditions, including pressure and temperature, will dictate the type and frequency of pigging.



Inline Isolation Tools

Inline Isolation Tools

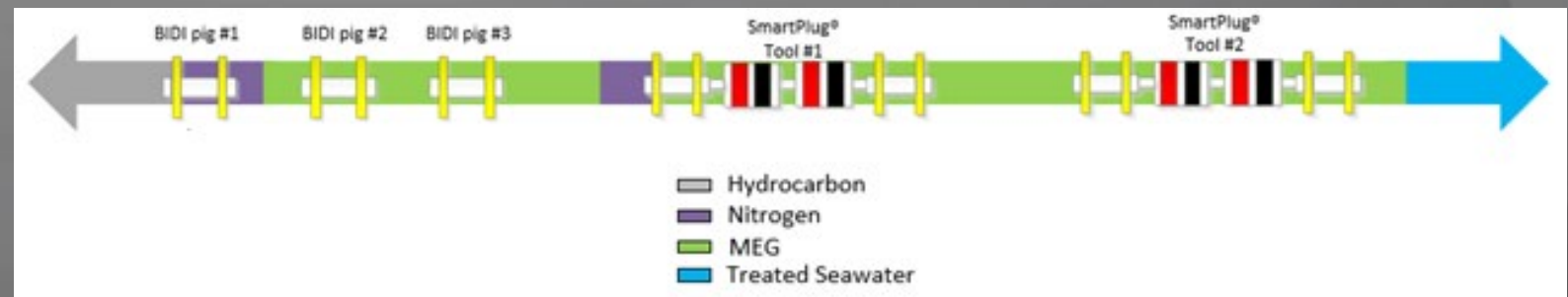
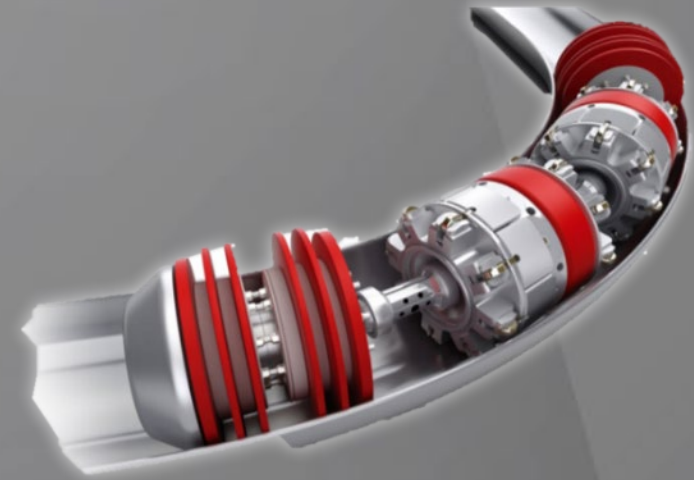
- Pigged like a pig,
- Pigged in place and set
- Set to isolate pipeline pressure – Enables intervention
- Single tool – double barrier



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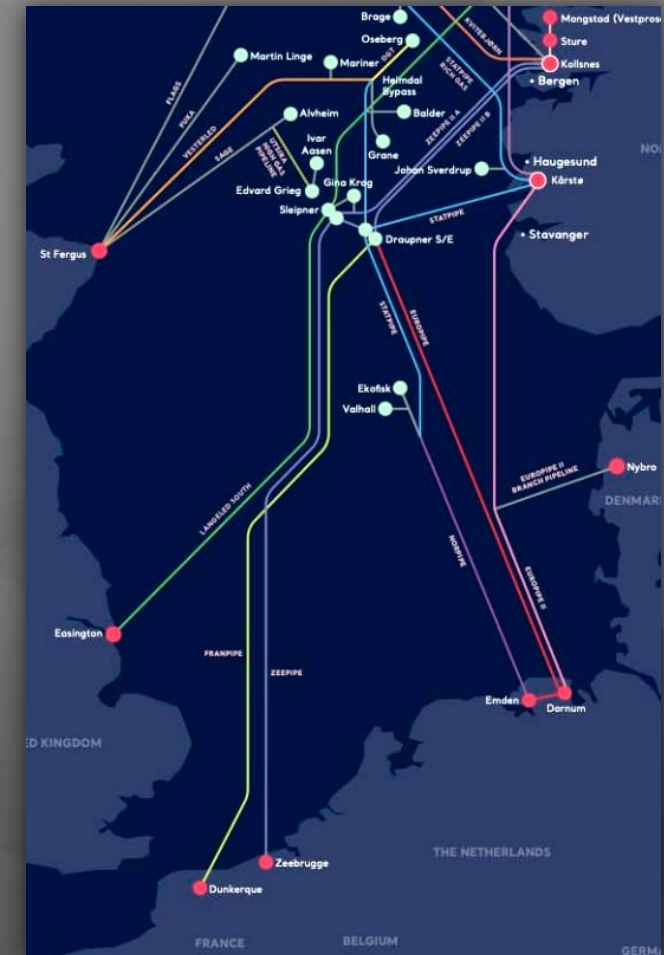
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- Sometimes “mid-line” isolation with plugs and pigs (pig train)



Long distance pigging

Multiple isolation tools and long-distance pigging project

- Typically, short pigging distances.
- But also, very long distances.
- Recent project completed: Two 42in isolation tools.
- Pigged 660km.



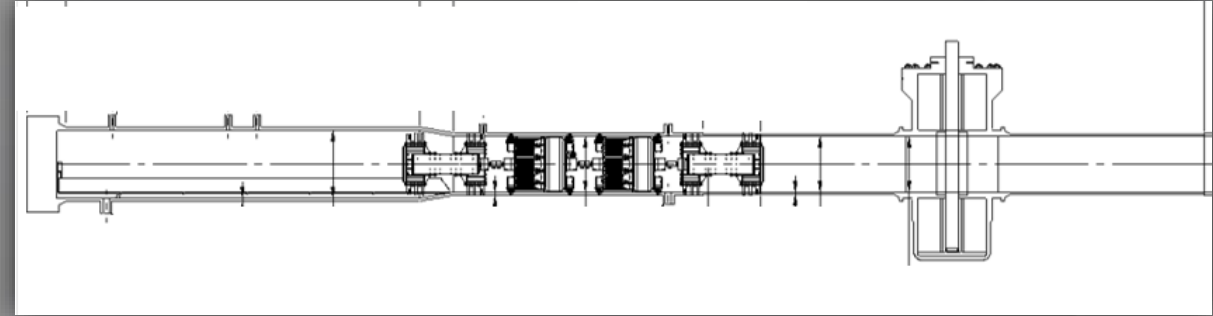
Long distance pigging – project recap

- Pigged 12km from launcher and set to isolate
- Facilitated a valve replacement at a valve-station



Long distance pigging – project recap

- No reverse pigging (-12km)
- Pigged forward another 645km
 - To the other end
- Unplanned isolation
 - One tool was set again
 - Isolated the receiving facility, before final retrieval
- Considered a full technical success!



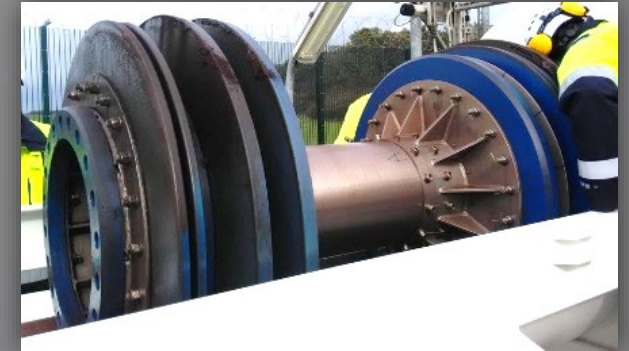
Preparing for Long distance pigging

➤ Objective - Gauge pig

- Prove the bore
- Verify pigging performance - Disc config / Dual diameter

➤ Objective - Multiple items (pigs/isolation tools)

- Distance/spacing - Set location (isolation)
- Speed and distance - during pigging
- Passing a tee / branchline
- Arriving at the receiver



Results - Long distance pigging

Results and learnings

Gauge pig

- Minimal wear and very good performance of the pig.
- Proved larger bore than earlier gauge runs.



Isolation tools

- Minimal wear
- Low dynamic friction
- Same distance after 645km
- Unplanned isolation:
 - Extra isolation at receiving facility proves reliability and repeatability of these isolation tools.



THANK YOU!

➤ Any questions

