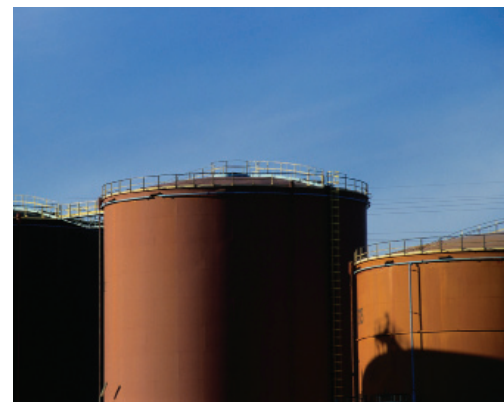


# SilverPipe

For safe and cost efficient operation of pipeline systems

DNV Software

# ONE company-wide decision platform



## SILVERPIPE FROM DNV

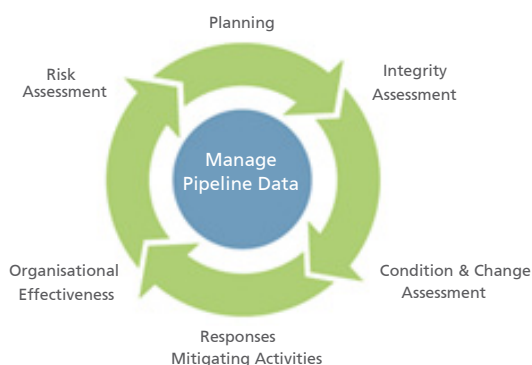
Manages integrity and risk of your complete pipeline system

SilverPipe comes with built-in support for the internationally recognised DNV ASME and API standards and is configurable to also support company standards.

By managing integrity of the entire transportation infrastructure of pipelines and facilities, SilverPipe is equally fit for long haul lines, in-field installations and distribution networks.

SilverPipe is used by customers operating complete oil infrastructures from well to down-stream terminals and gas transportation networks.

DNV combines competence and extensive experience within integrity management and software systems to secure successful implementations.



*SilverPipe closes the loop between assessment, inspection and mitigation with full traceability of integrity management events and decisions*

## PIPELINE DATA MANAGEMENT

The center of information integrating data sources into a single company-wide and real-time decision platform

Powerful GIS and inspection database integrations ensure seamless access to existing pipeline information.

Data is easily loaded as profiles and the alignment function ensures that e.g. features from separate inspection data runs can be investigated visually, trended and analysed.

Monitoring, trending and tracking of key operational parameters are provided through data revision management.

The complete integrity work processes are supported through integration with your company's ERP and document management systems.

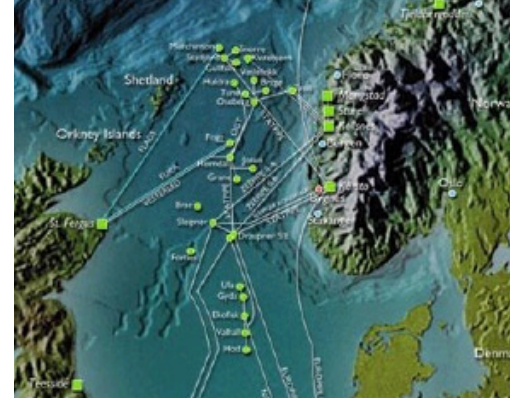
## RISK ASSESSMENT

Assess and aggregate risks for pipeline systems compliant with company best practises and regulatory requirements.

SilverPipe has built-in support for DNV-OS-F101 and ASME B31.4 and B31.8S with all threats pre-configured on group level and individually. The overall risk is aggregated, reported and used to optimise long term integrity plans. Separate assessment of pipelines, components and hotspots by qualitative and semi-quantitative approaches is the basis for risk aggregation.

The aggregated overview of total system risks as well as understanding of critical details is provided through the risk browser.

# Optimises integrity plans and inspection campaigns



## PLANNING

The work bench to maintain long term integrity plans and optimise yearly inspection campaigns.

With full overview of pipeline risk limits and regulatory and company standards, the long term inspection plans are optimised and tuned to operational needs.

Yearly inspection and survey campaigns are derived from the integrity plans and recent risk information (e.g. hotspots). Availability of personnel and survey gear is used to optimise campaign plans and establish work instructions to surveyors.

## TOOLBOX

Powerful calculation tools to pinpoint hotspots, predict corrosion and plan inspection and renewal activities.

The toolbox includes a number of integrated and well-proven tools:

- Pressure containment according to DNV and ASME
- Code checks for MAOP and ERF according to DNV RP-F101, ASME B31G, B31G Modified and BS7910
- Probability of Exceedance for Leak and Burst (RSTRENG)
- ASME code compliance according to ASME B31.B Liquid
- Remaining life calculation
- Corrosion growth assessment by regression analysis

Company proprietary tools are integrated through tailored export-import mechanisms.

## CONDITION ASSESSMENT AND MITIGATING ACTIVITIES

Assess condition from campaigns and events and derive response plans and mitigating activities.

The following powerful ASME/NACE direct assessment methods determines pipeline condition:

- dry gas internal corrosion direct assessment
- external corrosion direct assessment
- stress corrosion cracking

The unique rule-based screener detects critical areas from vast amounts of survey information and helps the integrity engineer understand the impact of threats and features – thereby focusing the essential mitigating actions and renewal of inspection plans.

## GENERAL

- Company-wide uniform integrity processes enforced through a template based project management environment.
- Tailored integrity and KPI information configured for separate user groups.
- Generates reports from build-in templates.
- Inline multi-language support improves multi-lingual communication.
- Instant deployment in global organisations through a web based architecture

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