Brix Foundation

Brix Product Model

The Product Model is a decomposition of asset parts and their relations. Common assets supported by DNV Software products are, but not limited to, process plants, vessels and offshore structures. The product model is typically the target for maintenance planning, inspections, condition monitoring, rule check, trend analysis and knowledge transfer. The Brix Product Model has three main aspects. Firstly, the product breakdown structure which involves all the physical aspects of an asset. Secondly, the different views of the product structure. Thirdly, support for monitor the condition of a structure.

Product breakdown structure

The relationships between items in the product breakdown structure resembles the actual structure of a product. Brix Product Model can enforce a strict part whole relationship hierarchy (e.g. an engine breakdown), or a network structure (e.g. a pipeline structure).

Product structure views

Product structure views are made up of several activity domains within the company. Due to the fact that not everyone in the company need to have the same overview of the product, required parts with their attributes can be extracted in a view. The view connects inspection requirements, observation and measurements, data aggregation and transformation rules to the product structure. The View support role based security.

Benefits

- Scalable product model technology
- Native observation and measurement capability
- Integrated with 3D visualisation technology
- Condition monitoring capability
- Condition history capability
- Support knowledge and best practice transfer across a series of products
- Interoperable XML based service API
- In-depth and role based security
- Flexible data driven configuration
- Support distributed meta data management

Brix Product Model

Observation and Measurement

An integral part of an asset management system is the capability to measure or observe the condition of a product. The Brix Product Model technology support both quantitative and qualitative measurement techniques as well as support for observation method definitions. The methods describe how measurements or observations are captured.

Asset Usage

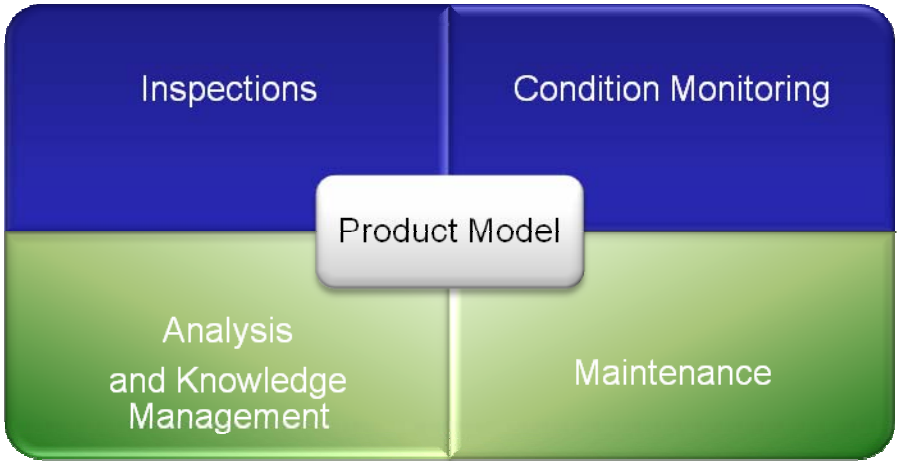
The observation and measurement module is typically used to deliver support for monitoring the condition of an asset. The observed condition of the asset is used as input to maintenance analysis, maintenance execution, compliance calculations, inspection planning, and condition reports. The observation and measurement capability store condition history enabling trends analysis.

Fleet Usage

Modelling and classification of assets and capturing their condition enables analysis and knowledge transfer across a group or fleet of assets. Operational knowledge and best practice can be searched and shared across assets with comparable structures and operational environments.

Visualisation

The Brix Product Model technology is integrated with 3D visualisation technologies in other DNV Software products enabling state-of-the-art visualisation of asset condition. The graphical and transparent overview of the asset risk resulting in faster and better operational decisions.



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DNV Software is the commercial software house of DNV serving more than 3,000 customers in the marine, offshore and process industries.

DNV Software is a market leader in software development of design, strength assessment, risk and information management.

MANAGING RISK