

Operationally dependent degradation, inspection and maintenance



Background

Experience has shown that there is a major need for greater maintenance efforts within industry. Not least, maintenance work is based on the increased use of systematic status control, which applied optimally can save Danish industry billions of DKK each year.

However, the ability to optimally evaluate the results of inspections is prerequisite on having a good and thoroughgoing knowledge of the following:

- Materials used and the degradation of these
- The establishment of an optimal maintenance system incl. planning, etc
- Knowledge of inspection tools and data processing.

Contents

The course consists of two modules, of which each may be taken independently, but naturally greatest benefit is to be obtained by taking the two modules one after the other.

The course provides participants with industry specific knowledge of operationally dependent materials degradation of production facilities, primarily as a consequence of breakage, wear and tear and corrosion. Among other things, such knowledge can be applied to the making of rational choices in a given maintenance situation or in connection with maintenance work.

The course includes classroom instruction, demonstrations, assignments, practical exercises and group work.

Participants

Managers and staff engaged on maintenance and inspection work.

The course is principally aimed at:

- The onshore and offshore oil and gas industry, refineries and the petrochemical industry
- The healthcare and food industries
- The paint and varnish industry and the timber/paper industries
- Power stations.

Program

The two course modules take place in the autumn with about two weeks between each module.

The course is carried out by a number of specialists within the respective industries and comprises the following:

Module 1:

Materials technology, duration – one week

- Materials science: The properties of metallic materials and certain plastics, jointing, heat treatment and control
- Operationally dependent materials degradation: Breakage, wear and tear and corrosion; media in pressurised facilities, localisation and assessment of faults
- In addition: EN standards, surface treatment methods, corrosion protection (including cathodic protection), and materials documentation.

Module 2:

Inspection technology, duration – one week

- Production control versus status control. Review of non-destructive testing methods (status control methods). Review of many status control methods and devices focusing on options and limitations
- Data registration and processing, predictive systems for inspection planning
- Financial key figures and a review of the structure of an efficient maintenance system.

Course materials

Compendium materials will be supplied for both modules. In addition, in module 2 a handbook in Non Destructive Examination NDE will be provided in Danish or English as desired.

Practical remarks

The course is held once a year at FORCE Technology, Park Allé 345 in Brøndby. Each module lasts five days. Instruction takes place between 9 am and 4 pm, and until 3 pm on Fridays. A course certificate will be awarded upon completion of the examination.

Enrolment may be made by applying to Annlise Bagge in person on telephone +45 43 26 72 74, via email to alb@force.dk or via FORCE Technology's website: www.force.dk under Courses/maintenance/systematic maintenance/ V.04 and V.05.



Further information:

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