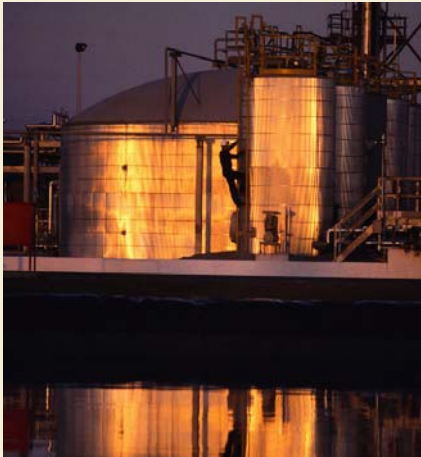# RISKWISE™

Advanced RBI software for optimising inspection and maintenance of storage tanks

- **unit-wide risk audit enables repair and maintenance resources to be risk-focused**
- **safe inspection intervals are formally obtained based on an implicit time dimension of risk**
- **risk mitigation measures are signalled and selected to meet inspection frequency targets**
- **highly user friendly decision support tool in accordance with the new API RP 580**
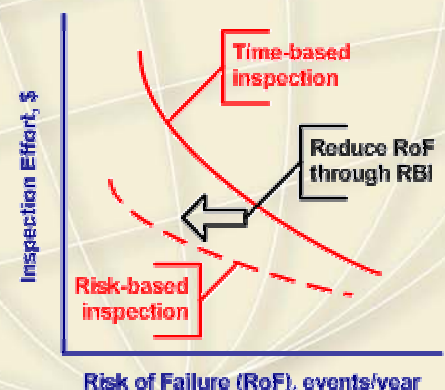- **user-selectable application display language**

Industry is recognising that benefits may be gained from adopting formal risk-based maintenance (RBM) approaches to integrity management of above-ground storage tanks through improved targeting and scheduling of inspection and maintenance effort.

RISKWISE *for Tanks*™

- stores tank information in the Item Properties and Materials screens. This information can be easily integrated with asset information in other applications, via the in-built RISKWISE™ 'Import Wizard'
- captures all relevant historical inspection and maintenance history in the Inspection Methods screen for subsequent use in the identification of tank damage mechanisms prior to the risk assessment
- captures the location of all active and potentially active damage mechanisms within each storage tank
- assesses seven likelihood (probability) of failure factors and nine consequence of failure factors, for each tank
- presents the results of the risk analysis for each of the damage mechanisms, over the three forward time intervals, as well as the resulting remaining life indicator (RLI) which defines a safe inspection interval
- presents RBI assessors with a risk action plan from which the most suitable risk mitigation options, for critical tanks, can be evaluated
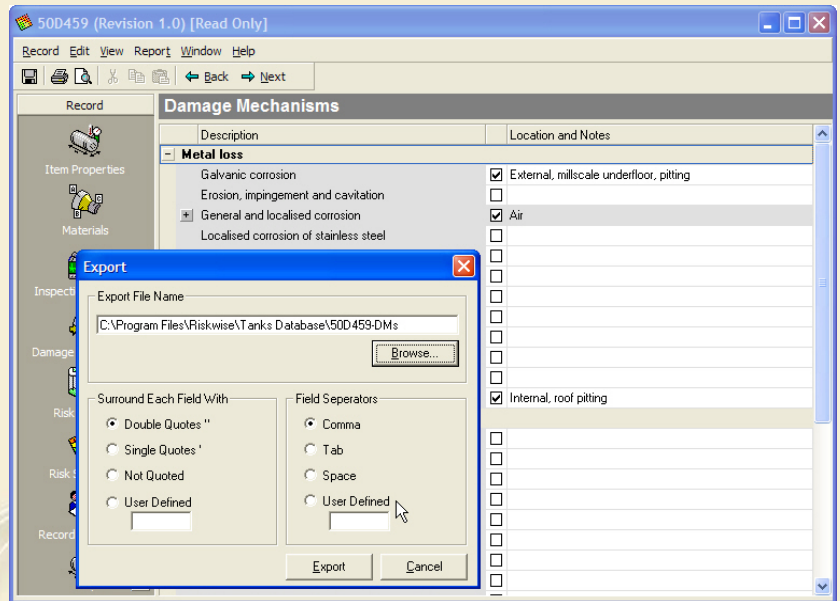
Benefits in brief

- improved safety
- optimum maintenance spend
- facilitates increased inspection intervals
- incorporates results of acoustic emission tests
- English, Chinese, Japanese and Spanish language versions available

RISKWISE™ is a TWI software product

Key features

- user friendly software, fully transparent – ensures buy-in by users
- audit team approach – accommodates plant experience
- interfaces with computerised existing inspection management systems
- time-based risk auditing module – equipment ranked by risk and remaining life
- maintenance frequency based on formal reliability rules – remaining life indicator (RLI) module
- focus/defocus module – facilitates selection of optimum mitigation measures
- fully auditable output – acceptability to insurers/regulators

Damage mechanism assessment window for Tanks

Implementation approach

RISKWISE *for Tanks*™ can be applied to all types of atmospheric storage tanks. The following approach is normally adopted:
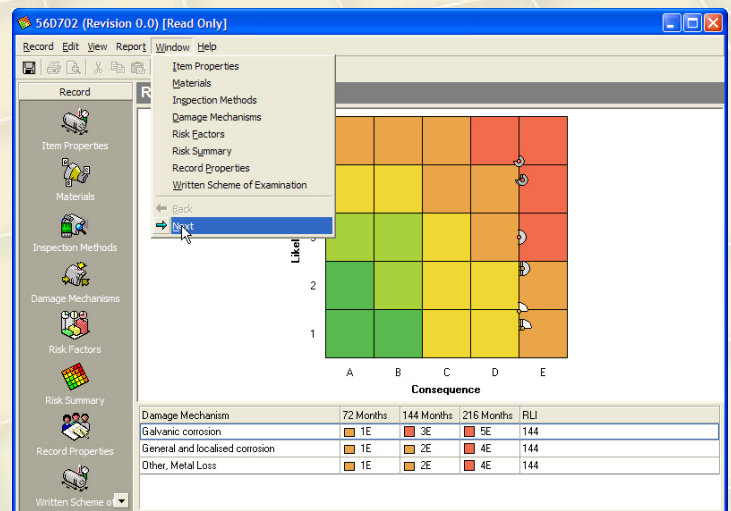
1. supply the software
2. conduct training in implementation and functionality of the software
3. assist in the implementation at a specified plant - optional
4. software maintenance and upgrade support – optional

Equipment requirement

- PC (stand-alone or networked) with MS-Windows operating system (NT 4.0, or higher)

Risk summary and remaining life indicator for a tank

Contact

Please contact riskwise@twi.co.uk or visit our website for up-to-date information on TWI's complete suite of RISKWISE™ products.

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