

Asset Management Education & Training

Course ref	AM19
Course title	Risk-based Inspection (RBI)
Duration	2 days
Class Size	16
Overview	In recent years the development of RBI has enabled the inspection function to focus increased intensity of inspection on critical assets and less intensity on non-critical assets. RBI cost/risk/optimisation enables a better understanding and modelling of the sensitivities of the timing of inspection activities, thus ensuring more effective RBI decisions are made. As an added benefit, better decisions are possible in evaluating longer time intervals between planned shutdowns.
Objective	To improve the total cost and risk of all major planned inspections and corresponding risk of consequences of functional failure. To improve plant availability by increasing intervals between planned shutdowns simultaneously reducing unplanned downtime due to asset failures.
Content	<p>Planned failure finding task optimisation</p> <ul style="list-style-type: none">• Learning to apply the various inputs necessary to assess the optimal timing of planned failure finding tasks• Determining the costs, risk assessed optimal intervals of functional testing of protective devices. <p>Planned predictive inspection optimisation</p> <ul style="list-style-type: none">• Modelling of dominant failure modes of corrosion, erosion and cracking etc• Cost and risk assessment of possible functional failure consequences• Estimating condition deterioration rates• Evaluating the effectiveness of condition measurement and monitoring• Optimisation and timing of inspection intervals• Inputs from RBI programmes• Complementary analysis of RBI inspection decisions• API and RP 580/1 standards and the development of RBI• Understanding the effect of improved materials on inspection intervals to enable longer intervals between shutdowns
Benefit	Plant availability, both planned and unplanned, will be improved while optimising inspection intervals to reduce the total cost (including injury and environmental risk) to the organisation.
Audience	<ul style="list-style-type: none">• Inspection staff and management• Maintenance staff responsible for protective device reliability• Reliability engineers• Managers responsible for improving inspection and maintenance costs and planned availability
Pre-requisites	Although no pre-qualification is required, a degree-level HND qualification is recommended.
Cross references	See TWPL courses AM17, AM18 and AM20.

If you require more information:

Phone: + 44 (0)1635 298800

Email: enquiries@twpl.com

www.twpl.com