

API 580

Risk Based Inspection

Probability of Failure		Negligible	Marginal	Significant	Critical	Catastrophic	
	5	R	U	I	I	I	Frequent
	4	R	R	U	I	I	Probable
	3	A	R	U	U	I	Occasional
	2	A	A	R	U	U	Remote
	1	A	A	A	R	R	Impactable
Consequence of failure		1	2	3	4	5	

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Risk Based Inspection

Course Overview

This class is two-day course designed to prepare the participant to take the API RP 580 Risk-based Inspection (RBI) Supplemental Inspection Certification Examination.

The course curriculum will include instruction in:

- The Basic Concepts of RBI
- Risk Management and Risk Reduction
- Inspection Optimization
- Relative Risk vs. Absolute Risk
- Introduction to Risk-based Inspection
- Types of Assessment
- Planning
- Data and Information Collection
- Identifying Deterioration Mechanisms and Failure Modes
- Probability of Failure
- Consequence of Failure
- Risk Assessment and Management
- Mitigation
- Documentation

Attendees are required to bring the API Recommended Practice 580.

API states the Body of Knowledge for this examination is the entire API-580 document.

*Early registration is required; pre course study material is provided. Registration must be received at least four weeks prior to the start date of the course.

*API and ASME Code Books are not provided and are the responsibility of the participant.

Risk Based Inspection

API 580 Supplemental Inspection Certification program tests Inspectors' knowledge and expertise in the field of Risk-Based Inspection. The examination questions are derived from API RP 580 - Risk-Based Inspection, which is applicable to anyone in the petrochemical industry.

Body of Knowledge for this examination consists of the entire RP 580.

Completely optional, yet adding significant value to your professional credentials – it will show your employers and clients that you have obtained a high level of proficiency and understanding in this important field.

The supplemental inspection certification program will be open to anyone who is currently certified to either 510, 570 or 653.

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