

API 580 Certification Preparation

“Risk Based Inspection (RBI)”



INTRODUCTION

This course is the first step for people who are interested in Risk-Based Inspection (RBI). The fundamental concepts of RBI and its reliance on understanding damage mechanisms (API 571) and fitness for service concepts (API 579) will be introduced.

The intended purpose of this course is to prepare the student for the **API 580 examination (Risk Based Inspection)**. NOTE – This is an introductory course for people with little or no experience with RBI. This will cover the basic organization and concepts of Risk Based Inspection.

API RP 580 - Part of the Supplemental Inspection Certification Program (ICP)

The objective of the ICP is to provide documented evidence of advanced knowledge and expertise (above the basic core API 510, 570 & 653 examinations) in the area of Risk Based Inspection (RBI) based on the information contained in API RP 580.

The importance of the API 580 certification is another step in safely and reliably as we strive to identify and manage our risks. Since Risk Based Inspection is a part of the API Inspection Codes (API 510, 570 & 653), proper understanding and utilization of Risk Based Inspection is essential.

An API Supplemental Inspection Certification is defined as “Documentation that indicates that minimum requirements have been met for additional qualification in the designated area of expertise”.

This would include an API issued certificate. This certificate will add 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 (RBI).

WHO SHOULD JOIN

This is an entry level RBI class that is designed for plant inspectors, mechanical engineers, process engineers, and operators who are involved in inspection, RBI, FFS, and fixed equipment reliability programs, maintenance, and operations.

Although refinery problems are the main focus of the class, personnel from related industries (such as pulp and paper, oil and natural gas, and petrochemical firms) also benefit from the course content and exercises.

TRAINERS BACKGROUND

Marc McConnell is a Chemical Engineer with 30 years as an owner-user and consultant to refining and chemical process industries. He holds multiple patents in process technology and distributed control. Most of these applications are related to the mitigation of corrosion related parameters in the refinery. He has been involved in corrosion reviews for API's Risk-Based Inspection projects, and recently focused on corrosion problems in hydro-processing process units where his specialty is in wash water design of Reactor Effluent Air Coolers (REACs).

He recently co-authored an Risk Based Inspection (RBI) presentation at NACE (National Association of Corrosion Engineers) Corrosion Technology Week /2006 (Refining State of the Art). He is slated to present a paper at the NACE International Convention 2010 on IR(infra red) use for corrosion control / identification.

Marc is a contributing author on the current re-write of API RP 571. This is being done to Update/Revise/Clarify the existing RP-571 document.

Current Certifications include

- Licensed Texas Professional Engineer
- API 510 – Pressure Vessel Inspection Code
- API 571 – Damage Mechanisms in Refining Industry
- API 577 - Welding Inspection and Metallurgy
- API 580 – Risk Based Inspection

For more information, please contact

IDC TRAINING HOUSE SDN BHD

TEL: 03-7956 5126

WWW.IDC-TRAINING.COM

HRD Approved “Class A” Training Provider (since Year 2002). Registered with Ministry of Finance.

API 580 Certification Preparation - Course Outline

OBJECTIVES

The course provides participants with the knowledge necessary to:

- Successfully pass the API RP 580 ICP exam.
- Explain why RBI analysis is used.
- Explain the benefits and limitations of various RBI technologies.
- Know the **basic concept** of risk, risk management, risk reduction, evolution of inspection intervals and inspection optimization.
- Understand the types of RBI assessments, consequence & probability for RBI, management of risks and determine the relationship between RBI and other risk-based and safety programs.
- Identify the steps of planning the RBI assessment by establishing objectives & goals of a RBI assessment, conducting initial screening, selecting the type of RBI assessment, and estimating resources and time required.
- Understand the method of assessing probability & consequences of failure and know the types of probability & consequences analysis.
- Develop an understanding on risk management with inspection activities such as establishing an inspection strategy based on risk assessment and assessing inspection results and determining corrective action.
- Realize the process of reassessment and updating RBI assessments and determine the reason why there is a need to conduct a RBI reassessment.
- Know the various roles, responsibilities, training and qualification for RBI application.
- Relate to risk mitigation activities such as equipment modification, redesign & rerating, emergency isolation, inventory reduction, blast-resistant construction, and more.
- Understand the methodology needed to conduct a step-by step RBI
- Understand concepts and principles of Risked-based Inspection for risk management
- Understand the outcome from the application of the RBI process

Course Duration: 3 Days Training

Daily Schedule:

8:30am - 5:30pm (Workshop)

6:30pm - 8:30pm (Evening session -Optional)

No of Pax: Max 25 participants / class
(to ensure optimal effectiveness of the Training)

Bring to Class: Students should bring along
The appropriate **CODES/STANDARDS** required
for API Exam, **Calculator**, Lots of Questions, and
a "CAN-DO" Attitude.

*Stationeries such as pen, highlighter are provided.

DAY 1

Welcome & Introduction

- Overview of Course Outline
- Introduction, Purpose/Scope, Definitions/ Acronyms & Basic Concepts
- Introduction to Risk-Based Inspection
- Consequence and Probability for Risk-Based Planning the RBI Assessment

DAY 2

- Data & Information Collection for RBI Assessment
- Identifying Deterioration Mechanisms & Failure Modes
- Assessing Probability of Failure
- Assessing Consequences of Failure
- Risk Determination, Assessment & Management
- Risk Management with Inspection Activities
- Other Risk Mitigation Activities
- Reassessment and Updating RBI Assessments

DAY 3

- Roles, Responsibilities, Training & Qualifications
- RBI Documentation and Record-Keeping
- Practice Exam
- Presentation of Certificates
- End of Course

Information on API Exam & Accommodations



Training and Certification

Get a Quote

Monogram Program

APIQR

ICP

What's New

Applications

ICP Programs in Detail

Status Verification

General Info/FAQ

ICP Directory

MyICP

API's Inspector Certification Programs are based on industry-developed standards that are recognized and used with confidence worldwide. These API programs emphasize professional credibility and process integrity. They enable inspectors to play an active role in improving industry health and safety; environmental performance; ensuring compliance and self-regulation; and strengthening management control and internal inspection capabilities.

Visit API website at www.api.org/icp for useful information on

- ♦ **Applications:** Exam Application Forms available for download here.
- ♦ **ICP Programs in Detail:** In-depth info on the available certification programs; General Information and Qualification Requirements, Exam Info, Sample Exam Questions, Publications Effectivity Sheet (codes/standards), Body of Knowledge, etc.
- ♦ **Status Verification:** To verify current status of certification for an individual.
- ♦ **General Info/FAQ:** Payment and Refund Policies, Certification Fees, Schedule of Upcoming Examinations, Exam Dates, Test Development and Grading, Examination Statistics, Overall ICP Statistics
- ♦ **ICP Directory:** Locate API certified personnel here.

Reminder: Students should bring along **the appropriate CODES required for API Exam (in hardcopy).**

Note: See the API website to determine which editions will be used for your exam.

Codebooks can be obtained from Techstreet (www.techstreet.com) or Global Eng Docs (www.global.ihs.com)

API EXAM SUBMISSION DEADLINES

Exam Date	Program	Deadline for ALL Applications (to IDC) *Admin Fee: RM 200	Deadline for New Applications (to U.S.)	Deadline for Reschedules / Re-tests (to U.S)
March 24, 2010	571, 577, 580, 653	-	January 15, 2010	January 29, 2010
June 2, 2010	510, 570	March 5, 2010	March 20, 2010	March 31, 2010
September 22, 2010	510, 570, 571, 577, 580, 653	June 25, 2010	July 10, 2010	July 23, 2010
December 1, 2010	510, 570	August 30, 2010	September 15, 2010	September 28, 2010

HOTEL ACCOMODATION INFORMATION

Status	Hotel	Distance from Hotel to IDC / Amcorp Mall
2 stars	Shah Village Hotel www.shahsresorts.com Tel:(603)-7956 9322	About 10 mins walking distance.
2 stars	SinggahSana Hotel www.hspi.com.my Tel:(603)-7956 2100	About 15 mins walking distance.
4 stars	Armada PJ Hotel www.armada.com.my Tel : (603)-7954 6888	Has to go by train, only 1 station away *near Aeroline station in PJ
4 stars	Crystal Crown Hotel www.crystalcrown.com.my Tel : (603)-7958 4422	About 15 mins walking distance. By taxi, about 8 mins.
5 stars	Hilton PJ Hotel www.hilton.com Tel : (603)-7955 9122	About 15 mins walking distance. By taxi, about 8 mins.

If you require IDC to assist you in API exam form submission, please fill in the followings:-

Name: _____

Which API Exam? _____ Exam Date? _____

Include Exam Fee into Invoice?

Yes () No ()

Include Admin Fee (RM 200) into Invoice?

Yes () No ()

If you need our assistance to book your accommodation, please fill in the followings:-

Name of Hotel: _____

Check -in on: _____

Check -out on: _____

No. of rooms required: _____

ABOUT IDC TRAINING HOUSE

IN-HOUSE TRAININGS AVAILABLE

IDC Training House is a leading Training Provider for corporate & government sectors; to both local & international market. Our strength lies in providing Trainers who are highly experienced & knowledgeable in their respective fields; in order to produce well-trained and qualified professionals to meet the demands of the new economy.

We specialize in human capital development in areas of **Soft Skills, Motivation, Leadership, Management, IT, ISO, Team Building, & Technical.**

If your company wishes to have a cost effective in-house training that is customized for your company,

Call us at

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Or

Email to **info@idc-training.com**

For more programs offered by IDC Training House, please visit <http://www.idc-training.com>

For public workshops, please visit <http://www.idc-training.com/course-calendar.html>

Course: API 580 Certification Preparation Training

Date: 8 - 10 Dec 2010

Venue: IDC Training Room, Amcorp Trade Centre, PJ, Selangor, Malaysia

Time: 8.30am - 5.30pm

Name of Applicant(s) Mr / Ms / Dr / Ir (Others)	Designation(s)	Contact No. (H/P)
1. _____		
2. _____		
3. _____		
4. _____		
5. _____		
Company Name :		
Correspondence Address :		
Tel : _____ Ext. : _____ Fax : _____		
H/P : _____ E-mail : _____		
Contact Person :		Designation :

	Group Package Minimum 3 delegates	Early Bird Package (With Payment)	Normal Price
Course Fee (per person)	RM 4,800	RM 4,980	RM 5,200
Closing Date	12 Nov 2010	25 Oct 2010	12 Nov 2010

Please download the location map from: http://www.idc-training.com/map/idc_map.pdf

Register NOW & save more with Early Bird Package !!



Certificate of Attendance upon completion of the course



Save more with In-House Training



Save more with group of 3 delegates

Terms and Conditions Registration Policy

Fees include course materials, lunch & tea breaks. Payment can be made by cash, credit card or using crossed cheque/bank draft made payable to **IDC Training House Sdn Bhd**, fourteen (14) working days prior to the date of the program. Otherwise registration(s) is treated as unconfirmed.

Disclaimer

Changes of course date, Trainer/Facilitator or venue

We reserve the right to make alternative arrangement to the above if the needs arise due to unforeseen circumstances. Every effort will be made to inform the participants of these changes.

Additional Expenses

We shall not be responsible for any extra expenses incurred by any participant(s) while attending the course.

REGISTER NOW! FAX TO US AT +60-3-7956 1536