Delegates from Singapore companies can now pay as low as ***1/3 of the course fees* under the ***Productivity and Innovation Credit (PIC) Scheme***!!** Please refer to terms and conditions below.

Effective Plant Shutdown, Turnaround, and Outage (STO) Management

Save time and money during your next Shutdown, Turnaround, or Outage (STO)

18th – 20th March 2013 • Kuala Lumpur, Malaysia

Course Facilitator:

Ralph W. (Pete) Peters
Founder/President
The Maintenance Excellence Institute

- Masters in Industrial Engineering (1977), North Carolina State University
- **Over 40 years of experience** in the implementation of maintenance best practices, development of effective productivity measures, and improvement of long term operation processes within both public & private sectors
- **Frequent speaker** in maintenance seminars & workshops in over 40 countries
- **Author** of major books and handbook chapters with 200 articles and publications
- Society of Maintenance & Reliability Professionals (SMRP)

Free Workshop Takeaway Worth Over SGD 1000.00!

✓ Best Practice Benchmarking Tools
- The Scoreboard for Maintenance Excellence
- The CMMS Benchmarking System
- The Reliable Maintenance Excellence
- The ACE Team Process ©

✓ Complimentary E-Books
- Maintenance Benchmarking & Best Practices: A Profit & Customer-Centered Approach (McGraw-Hill)
- Reliable Maintenance Planning, Estimating and Scheduling (Elsevier, available in January 2014)

✓ Personalized follow-up support from The Maintenance Excellence Institute for each delegate upon completion of the workshop

Testimonials

"Very useful for shutdown and outage planning…!"
~ Training Manager, Sinopec China

"There are very few people with his total asset management knowledge and the ability to teach like he does around the world."
~ Managing Director, Nigerian Liquid Natural Gas

"[His] Reliable Maintenance Excellence Index is a terrific tool for us to finally measure the true value of maintenance."
~ Maintenance Manager, BP Texas City Refinery

Capitalise on expert knowledge to gain maximum value on these vital issues

- **MASTER** world class plant shutdown strategies and industry best practices
- **OPTIMIZE** all phases of plant STO – from long-range planning, pre-development, detailed development, final development, pre-execution, execution, to post-execution
- **IMPROVE** day-to-day planning and scheduling as a key first step
- **MAINTAIN** safety, quality, efficiency, and cost effectiveness of the turnaround procedure with improved manpower planning
- **INCREASE** profitability and productivity of both in-house and contractor staff
- **PREVENT** production loss, unexpected delays, and cost overruns
- **ENSURE** safe and quality work execution
- **ACHIEVE** plant STO excellence through checklists, procedures, strategies, e-books and other workshop takeaways

UNI training courses are thoroughly researched and carefully structured to provide practical and exclusive training applicable to your organization.
Benefits include:
- Thorough and customized programmes to address current market concerns
- Illustrations of real life case studies
- Comprehensive course documentation
- Strictly limited numbers

Productivity and Innovation Credit (PIC) Scheme

- All business in Singapore can enjoy up to 400% tax deduction for external training* provided by UNI Strategic Pte Ltd for up to $ 400,000 for year of assessment 2013. You can enjoy up to 68% of tax savings from attending our trainings which means you only need to pay 1/3 of the course fees
- Alternatively, businesses can opt for a non-taxable cash payout option of 60% of up to $100,000 for year of assessment 2013 meaning up to a maximum of $60,000
  - * *This includes both trainings in Singapore and overseas*
  - * *Both local and foreign employees are eligible*
  - * *Course fees only*

CPD CERTIFIED
The CPD Certification Service

Claim up to 18 hours CPD Points

Proudly Organised by:

UNI
UNIVERSAL NETWORK INTELLIGENCE

Agenda

Workshop Overview

Led by an experienced maintenance consultant, this 3-day course will save time and money during your next shutdown, turnaround or outage (*STO).

Effective Leadership: Attending this program will provide you a new and deeper understanding of how to effectively plan, manage, and lead large maintenance jobs such as power plant outages, refinery refits and in situations where a multi shift operation has extensive deferred maintenance to be performed in a short period.

Current Practices: The day to day planning processes that contribute more to shutdown planning will be defined, by maintaining an accurate backlog of work that can be delayed until STO and then having accurate job plans available during the pre-shutdown period.

Useful Tools: This course includes specific checklists, procedures, strategies and important outside resources that will improve your current shutdown planning and execution. The course also includes examples to demonstrate the major points.

Importance of Logistics: We will also look at logistics and the supply chain that supports a shutdown and how the onsite storeroom operation and procurement staff can improve control of parts and materials.

**While some industries use the phrases shutdown, turnaround and outages (STO) interchangeably, other industries ascribe very specific and different meanings to the terms. However, for the purpose of this course, the terms will be used interchangeably.*

Who Should Attend?

This workshop is for experienced professionals involved in the planning and execution of plant shutdowns and turnarounds, in particular Managers, Heads of Department, Supervisors, Coordinators, and Engineers from the following job areas:

- ✓ Maintenance
- ✓ Planning & Scheduling
- ✓ Plant
- ✓ Reliability
- ✓ Outage
- ✓ Asset Integrity
- ✓ Health & Safety
- ✓ Technical

Why You Should Attend

It has been shown that success is concerned primarily with the planning process before the shutdown begins. This real challenge is roughly 85-90% of the work while the remaining 10-15% is the execution process to keep the project on course. This is the reason why this course is so important. Poor prior planning often leads to cost overruns, delayed startups, production losses and profits. You can eliminate this by applying the principles from this course.

Apart from saving you time and money for the next shutdown, this course will also discuss the more subtle art of manpower management in order to lay the foundations for a more smooth sailing turnaround process, giving you an immediate return on investment when you return to the workplace.

Take advantage of the opportunity and bring shutdown schedules/ programs from your plant to discuss during the workshop. At the end of the course, you will walk away equipped with the tools and confidence to plan, lead, and execute turnarounds that are on-time, on-budget, and quality assured.

DAY 1 | 18th March 2013

INTRODUCTION

- ❖ Defining Top 5 Areas For Improvement With STO
- ❖ Setting Up Teams To Define Plan Of Action

OVERALL CRAFT EFFECTIVENESS (OCE) & PRODUCTIVITY OF STO PEOPLE RESOURCES

- ❖ Manpower Management: Key To Execution And Cost Compliance
- ❖ In-House Staff
- ❖ Contractor Staff
- ❖ Savings Via Greater STO Manpower Resource Productivity

Case Study #1: Define Value of Manpower Improvements

DIFFERENCES BETWEEN PROJECTS & TURNAROUNDS / STO THE 5 KEY PHASES OF AN STO

- ❖ Definition/Scoping: Long Range Planning (& Design)
- ❖ Preparation/Pre-Planning & Final Planning
- ❖ Execution
- ❖ Startup/Turnover
- ❖ Evaluation/Closeout

MAXIMIZING DAY TO DAY PLANNING TO SUPPORT STO AND SCOPE OF WORK

- ❖ The Scoreboard For Maintenance Excellence
  - ◆ Evaluate Current Practices To Support STO
- ❖ The CMMS Benchmarking System
  - ◆ Ensure That Current CMMS And The Work Order System Tracks All Work During STO

Case Study #2: Worklist Control

ESTABLISHING METRICS/KPI'S FOR THE SHUTDOWN TO VALIDATE YOUR RESULTS

- ❖ STO Cost Variance Compared To Total STO Cost Estimate
- ❖ Business Cost Due To STO Completion Delays (Profit Losses)
- ❖ Performance On Planned Tasks (In House Staff & Contractors)
- ❖ Number & Cost Of Change Requests

ESTABLISHING AN EFFECTIVE MANAGEMENT TEAM FOR THE STO

- ❖ STO Manager
- ❖ Project Planners/Schedulers
- ❖ Project Engineer / Task Managers
- ❖ Contractor Team Managers
- ❖ Coordinators & Supervisors
- ❖ Safety Manager
- ❖ Quality Assurance Manager
- ❖ Logistics Manager

REVIEW OF DAY 1

- ❖ Top 5 Areas For Improvement For Each Attendee

DAY 2 | 19th March 2013

PRE-SHUTDOWN PLANNING & SCHEDULING

- Scope Of Work: How To Find And Pick Jobs Based Upon Asset Criticality
- Using The Critical Asset Management Tool
- Work Validation And Preparation For Planning
- Individual Job Planning
- Cost Estimating Techniques
- Risk Management And Risk-Based Maintenance
- HSSE (Health, Safety, Security And Environmental) Issues

SUCCESSFUL MANPOWER MANAGEMENT

- Areas Of Responsibility For Establishing A Good STO Team
- Competencies Needed For A Successful STO Team
- Guidelines For Selection Of Contractors
- Guidelines For Establishing Performance Based Contracts
- Management Of Contractors: Ensuring Competency Of Their Staff

Case Study #3: Contract Strategy

SHUTDOWN MANAGEMENT SYSTEM CHECKLISTS AND OTHER STO TOOLS

- Work List Issues
- Checklist Of Contingencies
- Checklist Of Validating Work Scope
- Checklist Of Contracting Types & Issues
- Checklist Of Major & Minor Tasks Requirements
- Checklist For The Planned Work Package
- Bulkwork Specification Sheet
- Bulkwork Control Sheet
- Checklist For Logistics Requirements
- Checklist For Safety Team
- Quality Checklist For Task Packages
- Start Up Meeting Checklist

SHUTDOWN COMMUNICATIONS

- Before
- During
- After

LOGISTICS PLANNING: A KEY DRIVER FOR SCHEDULE & COST COMPLIANCE

- Materials & Equipment Lead Time Considerations
- In-House Storeroom Operations
- In-House Procurement Staff
- Overall STO Parts & Materials Control

Case Study #4: Logistics Planning

END OF DAY 2

- Questions & Review

In-House Training

Cost effective In-house courses, tailored specifically to your organisation's needs, can be arranged at your preferred location and time. If you would like to discuss further, please contact our In-house division at iht@unistrategic.com.

DAY 3 | 20th March 2013

EXECUTION OF THE STO PLAN

- Cost Management & Execution Performance Reporting Methods
- Work Control: Accounting For Manpower, Materials And Equipment
- Schedule Analysis, Monitoring & Reporting Of Progress
- Handling Scope Increase & Added Requests For Work
  - How To Say No!
- Ensure HSSE & Risk Management Requirements Followed During Execution
- Quality Assurance During Execution
  - Who Should Approve Work Accomplished?
- Startup & Turnover
  - Operational Requirements
  - In-House Maintenance Requirement

Case Study #5: Cost Control

EVALUATION & CLOSING OUT

- Maintenance & Contractor Audits
- Turnover Documents For New Equipment
- Maintenance Contracts
- Measurement & Improvement Of STO Performance

POST SHUTDOWN

Reviewing Lessons Learned

- Defining Future Improvements
- Addressing Problems
- Planning The Next Shutdown

Case Study #6: Deferred Maintenance Causes 100% Budget Overrun & 5 Day STO Delay

END OF DAY 3

- Summary
- Top 5 Recommendations For Your Organizations

PRE-COURSE QUESTIONNAIRE

To ensure that you gain maximum value from this course, a detailed questionnaire will be forwarded to you upon registration to establish your exact training needs and issues of concern. Your completed questionnaire will be analysed by the course trainer prior to the event and addressed during the event. You will receive a comprehensive set of course documentation to enable you to digest the subject matter in your own time.

Program Schedule

(Day 1 - Day 3)

08:30	Registration
09:00	Morning Session Begins
10:40 - 11:00	Refreshments & Networking Break
12:45	Luncheon
14:00	Afternoon Session begins
15:30 - 15:50	Refreshments & Networking Break
17:00	Course Ends

ABOUT YOUR COURSE FACILITATOR

Ralph W. (Pete) Peters is the Founder and President of The Maintenance Excellence Institute (USA).

With over 40 years of experience, Pete is a highly recognized trainer/author and leader around the world in the areas of implementing maintenance best practices, developing effective productivity measures and initiating long term operation improvement processes within both the public and private sectors.

His value as a consultant has been enhanced through his direct leadership and profit & loss responsibilities with two large maintenance and manufacturing plant operations prior to his consulting practice. He has helped achieve success and return on investment in plant, fleet, healthcare operations and pure facilities maintenance operations. He has performed over 200 maintenance audits/assessments using TMEI's Scoreboard for Maintenance Excellence™.

Pete is a frequent speaker, delivering speeches, seminars and workshops on maintenance-related topics worldwide in over 40 countries. He has written maintenance chapters in four books as well as a book on Maximizing the Value of Your CMMS. In 2006, he wrote and published *Maintenance Benchmarking & Best Practices: A Profit and Customer-Centered Approach* for McGraw-Hill's professional book division.

His current book in progress is *Reliable Maintenance Planning, Estimating and Scheduling* from Elsevier's Gulf Professional Publishing (slated for January 2014 release), focusing on surface facilities maintenance processes within the oil, gas, petrochemical, and heavy industry sectors.

Pete's professional affiliations include the Association of Facility Engineers, the Institute of Industrial Engineers, and the Society of Maintenance & Reliability Professionals (SMRP). He holds a Masters in Industrial Engineering (1977) from North Carolina State University.

Partial list of companies that have benefited from his expertise:

- ✓ British Petroleum
- ✓ Chevron Offshore
- ✓ EcoPetrol
- ✓ Ford
- ✓ General Foods
- ✓ Lafarge Corporation
- ✓ Lucent Technologies
- ✓ Marathon Oil Corporation
- ✓ Medco Energi
- ✓ Nigeria Liquid Natural Gas
- ✓ Petronas
- ✓ PTT Chemical
- ✓ Sinopec
- ✓ Titan Chemical
- ✓ Total
- ✓ TransGas Indo