



GUIDELINES for MANAGEMENT of SHUTDOWNS and TURNAROUNDS

● 16 - 19 July 2007 | CEPP Rumah Semarak, UTM City Campus, Kuala Lumpur

course introduction

The success of every company depends of each employee's understanding of the key business components. Employee training and development will unlock the companies' profitability and reliability. When people, processes and technology work together as a team developing practical solutions, companies can maximize profitability and assets in a sustainable manner. Training and development is an investment in future success - give yourself and your employees the keys to success.

It is strategically important that your operations and maintenance teams understand the fundamentals of process unit shutdown, turn around management concepts. This is the difference between being in the best quartile of operational ability and being in the last quartile. There is vast difference in the operational ability of operating companies and most benchmarking studies have confirmed this gap in operational abilities.

Whether you have a team of new or seasoned employees, an introduction or review of these concepts is very beneficial in closing the gap if you are not in the best quartile, or maintaining a leadership position. Most studies show that a continuous reinforcement of best practices in operations and maintenance principles is the most effective way to obtain the desired results. Training and learning should be an on going continuous life long goal.

course objectives

This course will guide the participants to develop key concepts and techniques for management of shutdowns and turnarounds of unit operation systems. These key concepts can be utilized to make operating decisions that can improve your unit's performance.

Many aspects of operations and maintenance can be improved including, turnaround time, cost and safety. This cannot be achieved without first an understanding of basic fundamental principles of project management and planning. These principles need to be understood in advance of implementation for the operator maintenance man for problem to be effective.

course contents

DAY ONE : Introduction

- Overview of the Chemical Processing Industry
- Reviews of Process Incidents
- Safety for the Operation and Maintenance Groups
- Introduction to Turnaround Planning
 - Why is a turnaround needed
 - When a turnaround is needed
 - Turnarounds as a part of Asset Life Cycle
 - Industry Best Practices in Turnaround Planning
 - Preventive Maintenance, Periodic Maintenance, Predictive Maintenance
 - Planning Turnaround Scope
 - Critical Path
 - Work Scope - In House verses Out Source
 - Risk Management

DAY TWO : Turnaround Management as Project Management

- Introduction to Project Management Guidelines for Turnaround Management : Organisation, Planning, Contractors, Cost, Execution
- Setting the objectives and scope
- Project Communication Guidelines
- Process Risk Management
- Project Contingency Planning
- Project Time Management - flow Charting
- Balancing Technical, Mechanical, and Time Constraints
- Managing Turnaround Contracts
 - Introduction to Contracts : Lump Sum Turn Key, Reimbursable, Unit rates
 - Setting the Deliverables - defining priorities
 - Setting the Timing with rewards and penalties
 - Setting a performance based contract that aligns turnaround objectives with remuneration

DAY THREE : Turnaround Safety

- Review of Hazard Analysis Techniques
 - Hazard Identification : energy sources, electrical sources, chemical sources
 - Case Study on Hazard Identification
 - HAZOP System Methods
 - Root Cause Analysis Methods
 - Case Study on Root Cause Analysis
 - Incident Investigation
- Troubleshooting Guidelines
 - Problem Analysis
 - Troubleshooting Techniques

DAY FOUR : Safe Equipment Isolation Guidelines

- General Hazardous Work Guidelines
- Line Breaking Guidelines
- Vessel Opening Guidelines
- Confined Spaces Guidelines
- Excavation Guidelines
- Electrical Guidelines
- TLV - Threshold Limit Values
- Case Study on Isolation Systems
- Safe Equipment Isolation Industry Standards
 - Examples of Industry Standards Guidelines
 - Examples of Industry Standard Labels
- Personnel Issues
 - Over coming Project People Stress during Unit Down Time
 - Contractor Assessment
 - Personnel Skill Assessment : Identify Skill Set need for each position
- Post Turnaround Assessment
 - Plant Safely Re-Commissioned
 - Cost Assessment
 - Capture Inspection Reports
 - Plant Reliability
 - Manage future unplanned outages
- Conclusions
 - Who is the Captain of Your Ship?
 - Building Safety Awareness

what you can expect to gain

- The Turn Around Fundamentals
- Guidelines for Turnaround Planning
- Project Management Guidelines
- Hazard Analysis Techniques
- Safe Isolation Guidelines
- Industry Best Practices

who should attend ...

- People who a making day to day decisions regarding operation, maintenances, design, and economics of processing plants;
 1. Operation Supervisors,
 2. Maintenance Supervisors,
 3. Senior Plant Supervisors,
 4. Operations Engineers,
 5. Process Support Engineers.
- Ideal for veterans and those with only a few years of experience who want to review or broaden their understanding in Processing Plant Operations.
- Other professionals who desire a better understanding of subject matter.



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300 local and overseas
companies have
attended our
life-long learning
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MALAYSIA
Tel : +607- 5531559 / 31565
Fax : +607 - 5569706
Attn : Ms. Rohaizan
Email : rohaizan@cepp.utm.my

CEPP Rumah Semarak,
UTM Jalan Semarak,
54100 Kuala Lumpur, MALAYSIA
Tel : +603 - 2615 4358 / 4406
Fax : +603 - 26937921
Attn : Ms. Yatie
Email : nikyati@citycampus.utm.my

REPLY FORM

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■ YES ! I would like to register the following participants

Name 1 _____

Job Title _____

Name 2 _____

Job Title _____

Name 3 _____

Job Title _____

COMPANY INFORMATION

Company _____

Address _____

Town _____

State _____

Tel _____ Fax _____

AUTHORISED Signatory (*This registration is invalid without signature form
an authorised officer)

Name _____

Job Title _____

Tel _____ Fax _____

COURSE FEE

Local Participant	Single	2 or more
	RM3650	RM3450
International Participant	EURO 1450	

(Fee is inclusive of lunch, refreshments and course materials.
Accommodation is not included)

Method of payment

Please kindly complete and return the reply form together with
By cheque / Bank draft which are made payable to
PHYTO BIZNET SDN. BHD. (CIMB Bank Berhad)

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Cancellation & substitutions

A full refund will be promptly made for all written cancellations 2 weeks
before the meeting. 50% refund will be made for written cancellations
received 7 days before the meeting. A substitute may be made at any
time.

Note

- The organiser has the right to make any amendments that they deem to be in the
best interest of the course and to cancel the course if insufficient registrations are
received a week before course commencements date .
- CERTIFICATE OF ATTENDANCE will be awarded at the end of the course.

Credit Transfer

This module carries equivalent credit for qualified engineers or scientists
who wish to register under MSc. In Process Plant Management
Programme. Terms and conditions apply.

Contact Rohaizan at tel **07-5531559** or **rohaizan@cepp.utm.my**
for further details.



course tutors

Mr. Karl Komeltz.

He was an Assistant Manager Process Technology, Sulzer Chemtech Ltd., has over twenty-five years of progressive experience in the design, construction, commissioning, and operations management of process units from the US Gulf Coast to Alaska through Asia. He has a strong background in the manufacturing of a wide variety of chemical process technologies and product categories including; cryogenic liquids, ethylene, propylene, benzene/toluene extraction, styrene, catalytic reforming, crude atmospheric/vacuum fractionation, polyvinyl chloride, and steam /power plant operations. Mr. Komeltz has substantial experience in the design and trouble shooting of distillation columns, which is one of the key unit operations in hydrocarbon production. His experiences includes four eyes of Construction, two of which were on the Alaskan Pipeline with Fluor Daniel. Seventeen years of Refining experience, including eleven years in Catalytic Reforming, in The Charter/Phibro Refinery (now Valero Refinery) in Houston, Texas. One year of commissioning experience with Raytheon Badger EB/Styrene plants in Asia. Seven years Ethylene experience: four years in Louisiana and three years in Malaysia. Presently is the Asian Assistant Technology Manager for Sulzer Chemtech a leading distillation tower internals manufacturer. Karl has a Degree in Chemical Engineering from the University of Houston and is a member of the American Institute of Chemical Engineers.



Mr. Jeff N. Gray

Jeff N. Gray has over twenty-five years of experience in the design, construction, commissioning, and operation of process units from Australia to Asia, through North America. He has a strong background in the manufacturing of a wide variety of chemical process technologies and product categories including; cryogenic liquids, ethylene, propylene, C4 and Gasoline Hydrogenation Units, benzene / toluene extractive extraction, and steam / power plant operations.

He has a detailed understanding of the operational, technical and safety requirements of Olefins and Aromatics plants, gained through assignments in Australia, Malaysia and the USA. His areas of expertise include plant commissioning, equipment performance checks and test runs, process design, project coordination, and operations and technical training. Mr. Gray was commissioning manager on one of the most successful grass roots ethylene construction projects ever recorded. Thirty-six hours from unit feed introduction to ethylene production, with only one outage during the first twelve months of operation. His attention to detail results in project success. He has been the technical or commissioning manager for 6 grassroots plants, including Olefins, BTX extractive distillation, Gasoline Hydrotreaters, and Polypropylene plants. His experience includes twenty years Olefins and Aromatics experience with Exxon and The Titan Group. Other manufacturing experiences include; specialized ceramics for ICI Australia, drying applications for WR Grace, wax blending / emulsion specialty manufacturing, adhesives manufacturing plant for ICI Australia, and latex / epoxy resins for Dow. Jeff is currently Manager of Process Engineering for KLM Technology Group. Publications include authoring and co-authoring technical papers on a variety of subjects for product recovery, troubleshooting, training, project management, and process design with environmental concerns. Conference papers and presentations have been presented at the Malaysian Society of Chemical Engineers and the Asean Regional Olefins Conference, as well as others. Jeff has a Bachelor of Science in Chemical Engineering from The University of Melbourne.

more info, click

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