A Four Day Course on

BUILDING OPERATIONAL EXCELLENCE IN THE PROCESS INDUSTRY

5 - 8 April 2010 or
22 - 25 November 2010

CEPP, UTM International Campus, Kuala Lumpur

Organised by UTM Universiti Teknologi Malaysia — Chemical Engineering Pilot Plant (CEPP)

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 team understands the fundamentals of operational excellence 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.

The unit on stream time is an indication of operations training. A first quartile-operating unit's on steam factor is greater than 97%. If the on stream factor is below 97% a review of operation training and development is warranted. If on stream factor or average years of operating experience is declining a review of operations training and development should be considered.

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 operational principles is the most effective way to obtain the desired results. Training and learning should be an on going continuous life long goal.

What You Can Expect To Gain;

- Guidelines on how to develop a 1st quartile safety program that has an added benefit of being a profit center
- Guidelines on how to improve plant reliability
- Find the benefits of a Quality System
- Understand your major costs and how to improve them
- People Development guidelines

For more information please contact us at :-
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Course Objective

There are many aspects of operational excellence. Partial list may include;

1. Safety
2. Reliability – Continuity of Operations
3. Quality
4. Cost
5. People Development

There are many discussions about the order of importance, but this order is defendable.

The ones most questioned are cost and people development – where should they be placed.

1. Safety

Safety is no question the number one concern. No project or operation can be classified as excellence unless it is done safely. The Center for Chemical Plant Safety (CCPS) has conducted benchmarking studies that show a strong culture of safety awareness also has economic benefits as well as the social and humane benefits.

2. Reliability - Continuity of Operations

A stable reliable plant is the largest revenue source. A reliable plant that has high cost will make generate more revenue than a low cost plant that has multiple outages. The on stream factor is a benchmark of reliability. Industry average is 97%, but the top quartile approaches 100%. This three percent increased production is a significant difference in revenue.

3. Quality

Quality has two aspects. The first is the external aspect. To develop and maintain the reputation of producing quality products will allow you to charge a premium during the economic up turns and be able to maintain your key customers in a down turn.

The second is the internal aspect. There is an added cost of non quality production.

Sometime the product can be reprocessed, with an added energy debit. If the product cannot be reprocessed it will need to be sold with a cost debit.

4. Cost

Cost control is a very important aspect of operational excellence. The two largest costs are feedstock and energy. A very small feedstock reduction can lead to a very large profit improvement. The industry averages three percent energy improvement per year. The top quartile will improve more than 3%.

5. People Development

Most people might rate this higher than fifth. It is a very important aspect of operational excellent, but talent can be acquired for a price. The best plan is to hire talented people, train them well, pay them well, and retain them, but few companies seem to be capable of accomplishing this task. People Development will insure that items one through four are optimized.

This course will guide the participates to develop key concepts and techniques to operate and troubleshoot key operational excellence fundamentals. These key concepts can be utilized to make operating decisions that can improve your unit's performance. Many aspects of operations can be improved including, product recoveries, purities and energy utilization, and safety. This cannot be achieved without first an understanding of basic fundamental principles of design and operation. These principles need to be understood in advance of operating and trouble shooting a process unit operation for the operator or problem solving to be effective.

Approved Training Provider by the Ministry of Human Resource (Reg. No 0451)

Staff from more than **500 local and overseas companies** have attended our life-long learning programmes.

Some of these companies are : PETRONAS, SHELL, BP, SAUDI ARABIA BASIC IND. CORP. (SABIC), QATAR LNG, ALMARAI (SAUDI ARABIA), IDEMITSU, EASTMAN CHEMICALS, BASF PETRONAS, KUWAIT INSTITUTE OF SCIENTIFIC RESEARCH, KHARTOUM REFINERY, LOADSTAR Ltd. (Sri Lanka) et

COURSE FEE

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

Local Participant | RM2850 (Single) | RM2700 (2 or more)

International Participant | USD 1650

TUTOR

Mr. Karl Kolmetz

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. Streangths encompass design details that originate from a strong operations background, with the ability to incorporate positive ideas from differing sources.

Experience includes four years of Construction, two(2) of which were on the Alaskan Pipeline with Fluor Daniel. Seventeen years (17) of Refining experience, including eleven years in Catalytic Reforming, in The Charter/Phibro (now Valero) Refinery in Houston, Texas. One year of commissioning experience with a total of three years (3) experience with the Westlake / Titan Group : four years in Louisiana and three years in Malaysia. Two (2) years of specialty distillation experience as Asian Technical Manager for Sulzer Chemtech, a major distillation company. Publication include authoring and co-authoring over 35 technical papers on a variety of subjects for product recovery, distillation troubleshooting, training, project management,and process design with safety and environmental concerns. Papers have appeared in Oil and Gas Journal (5), Hydrocarbon Processing (1), and Chemical Engineering Progress (1). Conference papers have been presented at the AiChE Conference, the Indian Oil & Gas Conference, the Japan petroleum Institute Refining Conference, Oil and Fats International Congress, Best Practices in Process Plant Management, and the Asean Regional Olefins Conferences, as well as others.

He has a Bachelor of Science in Chemical Engineering from the University of Houston. He is a member of the American Institute of Chemical Engineers and The American Chemical Society. Karl presently lives in Malaysia.

Syllabus

1. Introduction to Processing Industry Key Concepts
   - A. Overview of the Chemical Processing Industry
   - B. Safety for the Operations and Maintenance Groups
   - C. Process Safety Management
   - D. Hazard Analysis E. Introduction to Benchmarking
2. Plant Reliability
   - A. Introduction to Plant Reliability
   - B. Equipment Design for improved Reliability
     1. Boilers and Steam Systems
     2. Boiler Safety
     3. Furnaces
     4. Steam Turbines, Pumps and Compressors
     5. Piping and Heat Exchangers
     6. Distillation
     7. Relief Valve and Flare Systems
     8. Catalyst and Molecular Sieve Systems
     9. Electrical Systems
     10. Cooling Water Systems and Treatment
     11. Waste Water Systems
     12. Process Control
3. A. Introduction to Quality
   - B. Overview of Statistical Process Control
4. A. Introduction to Cost Control B. Feedstock C. Energy
   - D. Develop Key Performance Indicators
   - E. Managing Projects
     1. Define the Work
     2. Manage the Work Plan
     3. Build the Work Plan
     3 Manage Issues
     4. Manage Scope
     5. Manage Communication
     6. Manage Risk
     7. Manage Document
     8. Manage Quality
     9. Manage Metrics
5. A. People Development B. Team Building

REPLY FORM

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■ YES ! I would like to register the following participants

Name 1_____

Job Title_____

Name 2_____

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 _____

Signature_____

We can offer courses
in-house at your company

Method of Payments

Please kindly complete and return the reply form together with :

Local Participant

☑ By cheque / Bank draft which are made payable to
PHYTO BIZNET SDN BHD

International Participant

☑ By Direct Transfer/Bank Draft:
CEPP Bank details : CIMB Bank Berhad
Universiti Teknologi Malaysia
81310 UTM Skudai, Johor, Malaysia
Account No : **0118-0004178-05-7** Swift code : CIBBMYKL
Please instruct your bank to remit us the full amount, net of bank charges

Cancellation and 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

a) 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 .

B) CERTIFICATE OF ATTENDANCE will be awarded at the end of the course.