

Commercial Aspects of Natural Gas Processing **by Mr. John Westover** **14-15 March 2016 | Kuala Lumpur, Malaysia**



Why do we process natural gas? Why are there so many variations & options? It's just GAS? Why is it so difficult to get right?

This 2-day course examines the aspects & issues involved with refining & purifying natural gas to suit customer requirements, with a particular look at the equipment and technology requirements, plant design, operational, & safety considerations.

About This Course

The course is designed for a broad managerial audience with a moderate technical background. It is intended to be interactive and engaging. While some of the issues discussed may be technical in nature, this is not a technical course.

The course is intended to provide the delegate with insight into how to match the required technologies with the market needs, processing needs, and commercial needs of gas processing – ideally before any contractual negotiations begin.

The course will increase the understanding of the issues confronted by gas processing, and increase the awareness of potential options available to address the issues. While breaking down the issues into manageable pieces, it does encourage a holistic approach to manage the issues, and balance the contractual, commercial and technical requirements.

As with any John Westover course, this course uses a mix of classroom lecture and participation discussion.

Who Should Attend?

- Those directly involved in supervising gas processing operations
- Managers involved in the development or re-design of new or existing facilities
- Those negotiating contracts for natural gas, LPG and NGL products
- Newly employed engineers and technicians in the gas processing industry

What will you gain?

- An understanding of the link between natural gas and the by-products from a production and market perspective.
- The purpose of different technologies, as well as the benefits and problems.
- The impact of various specifications on processing requirements and technology selection
- The impact of changing feedstock on existing technologies
- Understand how different contaminants and by-products are linked to the market, and how each can alter gas processing performance

Course Content:

Due to the highly interactive nature of the course, the agenda is approximate.

- Introduction, brief history of the use of natural gas and key developments
- The market
 - Simple Gas Processing Material Balance
 - How products and by-products are inter-related
 - Demand constrained products limiting supply constrained by-products
- Specifications
 - Types of Specifications
 - Contractual
 - Thermodynamic
 - Equipment Warranty
 - Specifications for Natural Gas
 - HHV
 - Wobbe Index
 - Ethane
 - Propane, Butane, and LPG
 - Natural Gasolines
 - Sulphur
- Separation Heuristics

NOTE: Day 1 could end as early as here

- Contaminant Management - Water
 - How much to remove
 - Inhibition
 - Dehydration and Different Methods of Dehydration
- Contaminant Management - Sulphur and Carbon Dioxide
 - Different Processes
 - Different Chemicals
 - Sulphur Recovery for sale

NOTE: Day 1 could end as late as here.

The instructor is able to perform some “on-the-spot” customisation for the delegates, depending upon what issues THEY have with THEIR gases – hence the variable finish time.

- Contaminant Management - Liquid Hydrocarbons
 - Difference between having to process and wanting to process
 - Dew Point Control
 - Different Processes
 - JT Expansion
 - IFPexol
 - Flash Gas from Condensate and Liquids
 - Turbo-Expanders
 - Cold Box
- Fractionation
 - Trayed Columns

- Packed Columns
- Deethaniser / Depropaniser / Debutaniser / Order of Separations
- Supplementary Sulphur and Carbon Dioxide Removal
- Flowlines and Pipelines
 - Flow Assurance
 - Material Selections
 - Pigging
- Case Studies
- Safety, Risk, and Hazard Consideration
 - BLEVE
 - HAZOP
- Future Technologies

Miscellaneous videos and class activities are presented depending upon specific delegate requirements.

About the Trainer



John Westover has over 33 years of experience primarily supporting the Oil & Gas Industry. His experience includes hazard evaluation, custody transfer, process simulation, design, debottlenecking, troubleshooting, start-up, project conception, training and mentoring.

John's experience includes operations involving distillation, energy transfer, pumps and compressors, electrical generation, filtration, storage, absorption, adsorption, cryogenic operations, reactors and utilities management. He worked with companies such as Fluor Alaska, BP Alaska, Amoco Production Company and more.

He has attended and facilitated numerous industry short courses. A graduate of University of Arizona in Bachelor of Science in Chemical Engineering, Masters of Engineering Science in Process Integration from Monash University and a Certificate IV in Training and Assessment (TAE40110).

Investment Fee

SG\$ 1,985.00 per person

DELEGATE DETAILS

1st Delegate Name	Mr <input type="checkbox"/> Mrs <input type="checkbox"/> Ms <input type="checkbox"/> Dr <input type="checkbox"/> Others <input type="checkbox"/>
Direct Line	Email
Job Title	Department
Head of Department	

2nd Delegate Name	Mr <input type="checkbox"/> Mrs <input type="checkbox"/> Ms <input type="checkbox"/> Dr <input type="checkbox"/> Others <input type="checkbox"/>
Direct Line	Email
Job Title	Department
Head of Department	

3rd Delegate Name	Mr <input type="checkbox"/> Mrs <input type="checkbox"/> Ms <input type="checkbox"/> Dr <input type="checkbox"/> Others <input type="checkbox"/>
Direct Line	Email
Job Title	Department
Head of Department	

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- Registrations should be made 3-4 weeks prior to event date
- Full payment for the course should be made 2 weeks prior to event date
- Cancellation 3 weeks prior to event date or no shows are liable to pay the full course with no refund, however you may substitute delegates at any time
- Participants are required to attend at least 80% of the course program prior receipt of Certificate.
- Force Majeure: Should for any reason outside the control of CTS, the trainer changes his dates or event cancels due to the act of terrorism, extreme weather conditions, industrial action or epidemic, CTS shall reserve the rights to replace the trainer or reschedule the event but the client hereby indemnifies and holds CTS harmless from and against any and all costs, damages and expenses, which are incurred by the client.

For more information, registration or any inquiries, kindly contact us at:

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