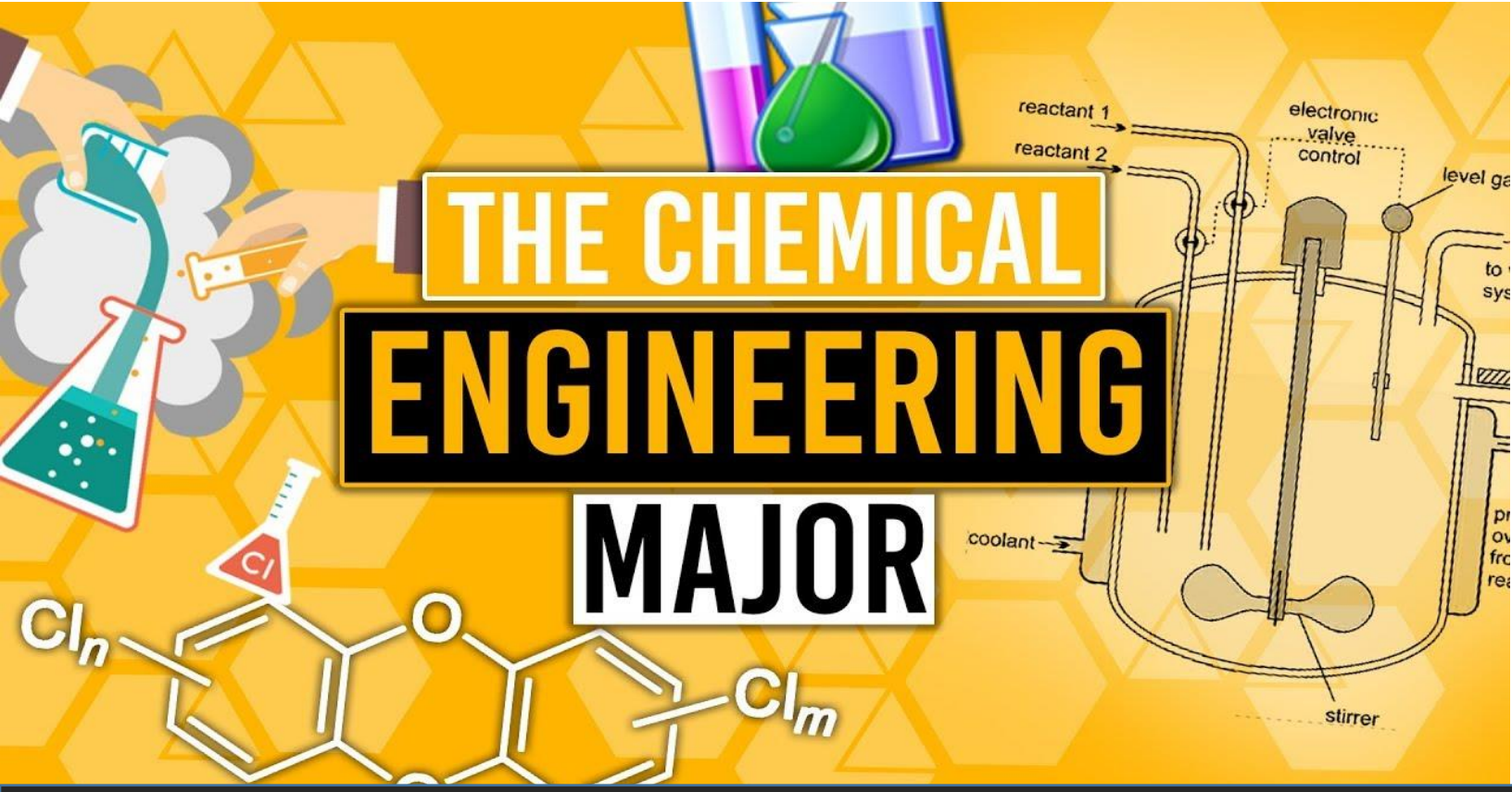

Gas Transportation Piping Code: ASME 104 – ASME B31.8

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Training & Consultancy

Gas Transportation Piping Code: ASME 104 – ASME B31.8

Course Description:

This course is designed to give the participants a thorough understanding of Gas Transport Piping Code, ASME B 31.8and its practical use as illustrated with numerous case studies. It offers detailed insight pertaining to design, manufacture and inspection of the Piping systems used in Gas Transportation. The course emphasizes understanding of 'stated' and 'implied' requirements (i.e. content and intent) of the code.

Important code requirements will be explained in a simple, straight forward manner, including the Short-cut methods in designing of Pipes, Pipe fitting and Flanges. The course is designed such that no previous background in ASME code is necessary. However, those familiar with the code will find the course immensely useful as regards understanding the code by "letter and spirit "and gaining a thorough systematic practical insight of the code. The course is divided into following areas: What is this Code emphasize upon, Introductions to fundamentals of Pipe design, Introduction to various applications of various Steels, Selection of appropriate material for intended application, How to Fabricate, what are Construction precautions and How to Test the Piping System, etc.

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Who Should Attend?

Ideally suited for Design engineers, Mechanical engineers and engineers involved in maintenance of gas transportation piping system, managers with or without experience in application ASME B 31.8 Code, Inspection people, maintenance engineers and technicians and people involved in trouble shooting of Gas Transportation Piping System.

Course Objectives:

Global competitiveness is forcing the need to construct more effective piping system, possible only if one is familiar with existing Design and Engineering practices and knows their correct adaptation in Design, Construction and Testing of piping Systems. This course fulfills this need by addressing the following:

- To familiarize participants with the main concepts, and philosophy of the code.
- To introduce participants to the concepts of standardization.
- To explain to participants the basic and technical terms of ASME Code.
- To provide participants step-by step approach in use of this Codes, including the optimization techniques.

- To introduce participants with various design conditions, design rules, environmental influences on material selection, fabrication, erection and testing of piping.

- When, where and how much to conduct NDT of piping and the acceptance Criteria.

- How to Conduct and certify pressure testing

Course Outline:

Concept and Philosophy of ASME B 31.8 Code.

Scope, Application and Limitations of ASME B 31.8 Standard Piping Components, Code content and its overview,

Design of Pipe and Piping Component

Understanding of Code Grammar, what means by SHALL,SHOULD & MAY, Code singulars and plurals, Code contents, Stated & implied stipulations in the Code, What are design conditions (pressure & temperature), What are maximum allowable operating conditions (pressure at certain temperature), Design of straight Pipe, pipe fittings such as elbows, tees and blanks, Selection and limitations of threaded, flared and compression joints, Understanding of standard piping components,

Code accepted Materials and material testing

General requirements to be checked before selection of Material, Code requirement and limitations imposed by code on materials, Use of Listed,

Unlisted materials, Limitations on use of other reclaimed miscellaneous materials, External & internal Corrosion control of selected material, reuse of material, Material to be used at Arctic Environment

Fabrication, Assembly and Erection

Code requirement on fit-ups before welding, Code requirements for welding, repair or removal of defective welds, Code requirement stated for preheating and stress relieving, Installation of Customer's meters and regulators, valves, Piping for offshore Gas Transportation

Inspection, Examination and Testing

What is Inspection and Examination, NDT of Piping Systems and acceptance Criteria, Acceptable level of discontinuities in welding, Pressure testing of piping system, Do's and Don'ts during test

Feedback examination and concluding Session.