

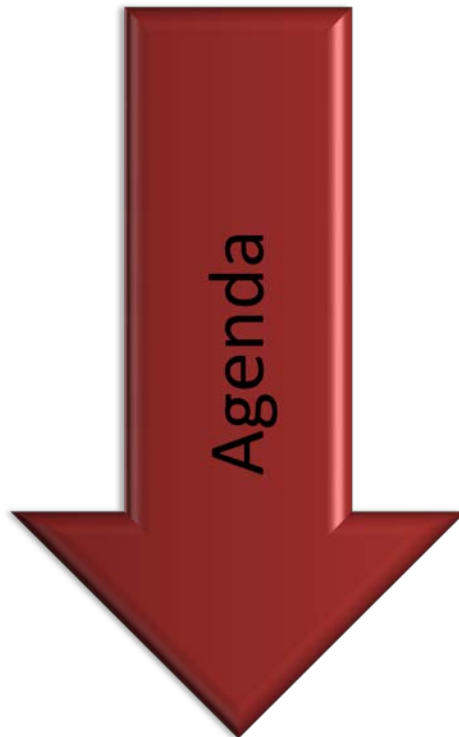
W. M. HUITT CO. ONLINE TRAINING COURSE - MODULE II

PIPE, FITTINGS, AND VALVES 90 Minute Course Schedule

Course Description: This course will provide the novice or experienced Pipe Designer and CAD Operator with the broad, but specific information they need to perform their job more efficiently and effectively. It will provide plant maintenance personnel with a better understanding of the pipe and fittings they work with daily. You will become familiar with pressure rating values and what they mean. Mechanical, Process, and Utility Engineers will get the information they need to better understand pipe and piping components and the technical information regarding their manufacture and use.

Who Should Attend: This course is useful to the beginning piping CAD operator and to the experienced piping designer who needs to gain more retrospective knowledge regarding pipe and piping components. This course also benefits plant maintenance personnel who work with pipe systems and is also of benefit to mechanical, process, and utility engineers who need to gain more detailed knowledge with the various aspects of piping component selection and piping system design.

Abstract of the 90 Minute Course Agenda: This course begins with an introduction to pipe and pipe fittings. The course will take the attendee through the various types of pipe and separate out the types that are typically used in the petroleum and chemical processing industries. The course will look at pipe manufacturing tolerances and present calculations on how to determine wall thickness including calculations for determining MAWP (Maximum Allowable Working Pressure). In discussing piping fittings the course will elaborate on rating classifications and how fittings are selected. Of particular interest are flanges, flange ratings, and their selection. The final part of the course will discuss valves and their applications.



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90 Minute Course Agenda

- I. Pipe
 - a. Types of Pipe
 - b. Types used in the chemical process and petroleum industries
 - c. Dimensions and tolerances
 - d. Calculating wall thickness
 - e. Calculating burst pressure
 - f. Calculating MAWP
- II. Flanges
 - a. Types and applications
 - b. Flange ratings
 - c. Selecting a flange type & rating
- III. Forged fittings
 - a. Types and ratings
- IV. Cast fittings
 - a. Types and ratings
- V. Selecting fittings
 - a. Forged and cast
 - b. Welded and screwed
 - c. Grooved and compression fit
- VI. Manual Valves and their application. Included are:
 - a. Gate
 - b. Globe
 - c. Check
 - d. Ball
 - e. Butterfly
 - f. Plug
 - g. Pinch
 - h. Diaphragm

END OF COURSE