

Piperack Design Questions and Answers

1. What is a Piperack?

Answer: A Piperack is a structural framework used to support multiple pipes, cables, and other utilities in industrial facilities. It helps organize and protect these systems, ensuring efficient and safe transport of fluids and gases.

2. What are the main components of a Piperack?

Answer: The main components include beams, columns, braces, and supports. These elements work together to provide stability and support for the pipes and other utilities.

3. Why is Piperack design important in the oil and gas industry?

Answer: Proper Piperack design ensures the safe and efficient transport of fluids and gases, minimizes the risk of leaks and failures, and allows for easy maintenance and inspection.

4. What factors influence the design of a Piperack?

Answer: Factors include the type and number of pipes, the weight and size of the pipes, environmental conditions, safety regulations, and the layout of the facility.

5. What are the primary data required for the detailed development of a Piperack design?

Answer:

1. Specification
2. Project design data
3. Plot Plan
4. Flow diagrams

6. What are the classification of the pipelines in the Piperack?

Answer:

1. Process lines
2. Utility lines
3. Relief-line headers
4. Steamline headers

7. Why a pocketed relief-line is more expensive?

Answer: Because an extra condensate pot is required with its associated instruments, valves and pumps.

8. Where should the relief-line header be kept in the Piperack generally?

Answer: To avoid pockets, generally relief-line header should be at higher elevation i.e. above the main pipe rack on a tee support attached to extended rack column.