

Chapter 01: Introduction to Pipe Welding

Multiple Choice

1. Piping systems can be divided into four major categories: collection, transportation, distribution, and ____.

- a. processing
- b. clay
- c. storm water
- d. natural gas

ANSWER: a

2. ____ piping systems have smaller pipes joining larger pipes as the material in the smaller pipes combines, thus requiring a larger pipe to handle the flow.

- a. Transportation
- b. Distribution
- c. Collection
- d. Processing

ANSWER: c

3. ____ piping systems have smaller individual pipes connected to larger mains.

- a. Transportation
- b. Distribution
- c. Collection
- d. Processing

ANSWER: b

4. ____ has a longitudinal weld along its full length.

- a. Seamed pipe
- b. Seamless pipe
- c. Round tubing
- d. Spiral pipe

ANSWER: a

5. ____ is formed of long coils of hot rolled steel that are wound into a long spiral much like the cardboard tube in the center of a roll of paper towels.

- a. Seamed pipe
- b. Seamless pipe
- c. Round tubing
- d. Spiral pipe

ANSWER: d

6. Which of the following may be used for water supplies, compressed air, and residential gas distribution?

- a. Low-pressure piping systems

- b. Medium-pressure piping systems
- c. Seamed pipe
- d. Spiral pipe

ANSWER: b

7. Which of the following may be used for cross-country transmission of oil, gasoline, or natural gas?

- a. Low-pressure piping systems
- b. Medium-pressure piping systems
- c. High-pressure piping systems
- d. Spiral pipe

ANSWER: c

8. The American Petroleum Institute (API) ____ code is one of the most widely used piping welding standards in the industry.

- a. 1004
- b. 1104
- c. 1204
- d. 1304

ANSWER: b

9. ____ can range in length from a mile or less to hundreds of miles.

- a. Pipelines
- b. Construction projects
- c. Seamed pipes
- d. Spiral pipes

ANSWER: a

10. A crew is made up of welders and ____.

- a. managers
- b. helpers
- c. fire watchers
- d. cleaners

ANSWER: b

Completion

11. ____ piping systems are pipes that move various products throughout the community, state, or nation.

ANSWER: Transportation

12. ____ is formed so there is no need to make a longitudinal weld.

ANSWER: Seamless pipe

13. Pipe and round tubing are different in the way they are ____.

ANSWER: specified

14. Generally, ____ has a more rigid set of specifications compared to most pipe.

ANSWER: tubing

15. ____ may be used for bicycle stands, agricultural fences and gates, and art sculptures.

ANSWER: Light-duty service pipes

Subjective Short Answer

16. When working with a crew, what are the responsibilities of the welder?

ANSWER: The welder acts as the leader and directs the other crew members.

17. Give two examples of manufacturing pipe welding jobs.

ANSWER: Examples of pipe welding jobs include welding many common products, ranging from motorcycle frames to booms for cranes.

18. What is pipe primarily used for?

ANSWER: Pipe is primarily used to move both liquids like water, gasoline, oil, and other petroleum products, and gases like air, steam, and engine exhaust.

19. What are low-pressure piping systems used for?

ANSWER: Low-pressure piping systems may be used for collection systems such as wastewater systems, agricultural irrigation systems, and building sprinkler systems.

20. What is the process used to weld a V-groove in spiral pipe?

ANSWER: The V-groove is first welded on the inside and then the outside using a process known as submerged arc welding (SAW).