

## Chapter 02 Industrial Welding

### True / False Questions

1. The use of castings in fabrication is cheaper, stronger and more uniform than rolled steel.

True False

2. Welding is extensively used in the space industry.

True False

3. Robotic welding is not limited to the aerospace industry.

True False

4. America continues its vast road building and repair program over the entire country.

True False

5. When fully loaded, a giant off-highway truck can hold 290 cubic yards of earth.

True False

6. Steel has better qualities in the making of machine tools than cast iron.

True False

7. The use of welding on overland pipelines is limited by their extreme length.

True False

8. Welding allows more flexibility in the design of freight cars without increasing a car's weight.

True False

## Chapter 02 Industrial Welding

9. The manual plasma arc welding process is extensively used in the fabrication of railroad equipment.

True False

10. Many hopper cars are now made of aluminum.

True False

11. Welded passenger coaches are stronger, safer and more comfortable than riveted coaches.

True False

12. One advantage of welded submarines is their caulked seams.

True False

13. The welded seams of ships' hulls are not difficult to repair.

True False

14. Rivet causes high stress concentrations when the plate is loaded.

True False

15. In building construction, welding is limited to the structural steel frame work and to piping.

True False

16. Two serious service failures of riveted tanks were leakage and corrosion around rivets.

True False

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17. Welding is used extensively in the fabrication of tanks and pressure vessels because it develops strength equal to 90% of the tank plate.

True   False

### Fill in the Blank Questions

18. The industrial functions of welding are fabrication, maintenance, and

\_\_\_\_\_.

\_\_\_\_\_

19. The advantages of welded \_\_\_\_\_ equipment are economy, size limitation, strength, rigidity and lightweight.

\_\_\_\_\_

20. The welded joint can be substituted for heavy \_\_\_\_\_ sections in the fabrication of construction equipment.

\_\_\_\_\_

21. The welded joint is as \_\_\_\_\_ as the sections it joins.

\_\_\_\_\_

22. The production of \_\_\_\_\_ energy would not be possible without the use of the welding process.

\_\_\_\_\_

23. Welded pipe is well suited for use in nuclear plants because it can withstand the \_\_\_\_\_ and high pressure required to operate such installations.

\_\_\_\_\_

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24. Welded piping systems reduce maintenance costs because their permanently tight connections have greater strength and \_\_\_\_\_.

\_\_\_\_\_

25. \_\_\_\_\_ fittings make it possible to fabricate any combination of sizes and shapes.

\_\_\_\_\_

26. A relatively new development in freight-car construction is the super-size, all-welded, \_\_\_\_\_ gondola.

\_\_\_\_\_

27. Prefabrication, preassembly, and welding were first used in the construction of \_\_\_\_\_ ships during World War II.

\_\_\_\_\_

28. For over \_\_\_\_\_ years, bridges have been constructed wholly or in part by the welding process.

\_\_\_\_\_

29. Steel home construction saves owners thousands in \_\_\_\_\_, insurance and energy cost.

\_\_\_\_\_

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### Multiple Choice Questions

30. Which one of the following welding processes did not play an important part in household equipment?
- A. GTAW
  - B. GMAW
  - C. SAW
  - D. Brazing

**True / False Questions**

1. The use of castings in fabrication is cheaper, stronger and more uniform than rolled steel.

**FALSE**

2. Welding is extensively used in the space industry.

**TRUE**

3. Robotic welding is not limited to the aerospace industry.

**TRUE**

4. America continues its vast road building and repair program over the entire country.

**TRUE**

5. When fully loaded, a giant off-highway truck can hold 290 cubic yards of earth.

**TRUE**

6. Steel has better qualities in the making of machine tools than cast iron.

**TRUE**

7. The use of welding on overland pipelines is limited by their extreme length.

**FALSE**

8. Welding allows more flexibility in the design of freight cars without increasing a car's weight.

**TRUE**

## Chapter 02 Industrial Welding **Key**

9. The manual plasma arc welding process is extensively used in the fabrication of railroad equipment.

**FALSE**

10. Many hopper cars are now made of aluminum.

**TRUE**

11. Welded passenger coaches are stronger, safer and more comfortable than riveted coaches.

**TRUE**

12. One advantage of welded submarines is their caulked seams.

**FALSE**

13. The welded seams of ships' hulls are not difficult to repair.

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14. Rivet causes high stress concentrations when the plate is loaded.

**TRUE**

15. In building construction, welding is limited to the structural steel frame work and to piping.

**FALSE**

16. Two serious service failures of riveted tanks were leakage and corrosion around rivets.

**TRUE**

17. Welding is used extensively in the fabrication of tanks and pressure vessels because it develops strength equal to 90% of the tank plate.

**FALSE**

**Fill in the Blank Questions**

18. The industrial functions of welding are fabrication, maintenance, and

\_\_\_\_\_.  
**repair**

19. The advantages of welded \_\_\_\_\_ equipment are economy, size limitation, strength, rigidity and lightweight.

**construction**

20. The welded joint can be substituted for heavy \_\_\_\_\_ sections in the fabrication of construction equipment.

**reinforcing**

21. The welded joint is as \_\_\_\_\_ as the sections it joins.

**strong**

22. The production of \_\_\_\_\_ energy would not be possible without the use of the welding process.

**nuclear**

23. Welded pipe is well suited for use in nuclear plants because it can withstand the \_\_\_\_\_ and high pressure required to operate such installations.

**high heat**



## Chapter 02 Industrial Welding **Key**

24. Welded piping systems reduce maintenance costs because their permanently tight connections have greater strength and \_\_\_\_\_.

**rigidity**

25. \_\_\_\_\_ fittings make it possible to fabricate any combination of sizes and shapes.

**Welded**

26. A relatively new development in freight-car construction is the super-size, all-welded, \_\_\_\_\_ gondola.

**aluminum**

27. Prefabrication, preassembly, and welding were first used in the construction of \_\_\_\_\_ ships during World War II.

**Liberty**

28. For over \_\_\_\_\_ years, bridges have been constructed wholly or in part by the welding process.

**fifty**

29. Steel home construction saves owners thousands in \_\_\_\_\_, insurance and energy cost.

**upkeep**

Chapter 02 Industrial Welding **Key**

**Multiple Choice Questions**

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- A. GTAW
- B. GMAW
- C. SAW**
- D. Brazing