
Question: 1

In severe refinery services which type of pipe is normally used?

- A. Cast
- B. Machined
- C. Seamless
- D. Welded

Answer: C

Question: 2

Pressure applied inside a pipe creates stresses in the pipe wall. These stresses are highest on which weld orientation?

- A. Circumferential weld
- B. Longitudinal weld
- C. 30 degree mitered weld
- D. All are about the same

Answer: B

Question: 3

Which of the following is not an acceptable method for establishing the piping corrosion rate in a new service?

- A. Owner's experience
- B. Inspect the piping system within 3 months of operation
- C. Corrosion data from trade journal
- D. Corrosion data from phone discussion with a consultant corrosion engineer.

Answer: D

Question: 4

Per B31.3, how much RT is conducted on circumferential welds of a pipe in Normal Service?

- A. 0%

- B. 5%
- C. 10%
- D. 100%
- E. Depends on flange class

Answer: B

Question: 5

For welded pipe, the normal thickness undertolerance is:

- A. -0.00 inch.
- B. -0.01 inch.
- C. -0.0125 inch.
- D. -12.5% of the specified wall thickness.

Answer: B

Question: 6

When qualifying a weld procedure the essential variables must:

- A. be recorded on only the PQR.
- B. be recorded on only the WPS.
- C. be recorded on both the WPS and PQR.
- D. be recorded on both the WPS and WPQ

Answer: C

Question: 7

A pipe has a thickness designation of "40S". What does the "S" mean?

- A. Schedule
- B. Seamless
- C. Stainless steel
- D. Steel

Answer: C

Question: 8

A hydrotest is being conducted on an underground line as a substitute for the external inspection.

The test pressure is 200 psig. At the end of the test, the pressure must be at least:

- A. 100 psig.
- B. 175 psig.
- C. 190 psig.
- D. 195 psig.
- E. 200 psig.

Answer: C

Question: 9

Determine the maximum allowed pressure for a Class 300 flange that has a design temperature of 950 °F. The flange material is ASTM A217 gr.C12.

- A. 50 psig
- B. 375 psig
- C. 750 psig
- D. Not allowed - temperature is too high for this material

Answer: B

Question: 10

An 8 NPS pipe is being replaced with A106 gr. B material. The pipe retirement thickness is 0.218" and the corrosion allowance is 0.125". What is the minimum thickness of pipe that could be ordered after adjusting for mill-tolerance?

- A. 0.218"
- B. 0.249"
- C. 0.343"
- D. 0.353"
- E. 0.392"

Answer: E

Question: 11

A welder is being qualified by RT on a 0.600" plate using the SMAW process. What is the maximum allowed elongated slag inclusion for this qualifying test?

- A. 0.125"
- B. 0.200"
- C. 0.600"
- D. 1.200"

Answer: B

Question: 12

During the evaluation of a radiograph, the density at the 101 is 3.0. What is the minimum density allowed on this radiograph in the weld?

- A. 2.00
- B. 2.10
- C. 2.55
- D. 3.00

Answer: C