

CertKillers

Guaranteed Success with Accurate & Updated Questions.

API

*API-510
Pressure Vessel Inspector*

Questions & Answers PDF

For More Information - Visit:
<https://www.certkillers.net/>

Latest Version: 6.0

Question: 1

To exempt a vessel from internal inspections, what is the value of the corrosion rate that cannot be exceeded?

- A. 0.005" per year
- B. 0.001" between inspections not to exceed 5 years between inspections
- C. 0.001"per year
- D. 0.005" between inspections not to exceed 3 years between inspections

Answer: A

Question: 2

The remaining life of a vessel is 24 years. What is the maximum interval for the internal inspection?

- A. 5 years
- B. 6 years
- C. 10 years
- D. 12 years

Answer: C

Question: 3

If a vessel is subjected to temperatures above design, what may happen

- A. Precipitation at the grain boundaries may occur.
- B. The rupture disk may implode
- C. The relief device may fail
- D. Creep of the vessel's material may occur

Answer: D

Question: 4

The internal inspection interval must be reviewed whenever changes occur that could affect the degradation of the vessel. In which of the following situations does a review of the internal interval need not be conducted?

- A. operating temperature increases
- B. operating pressure decreases
- C. operating pressure increases
- D. fluid composition changes

Answer: B

Question: 5

The definition of pressure vessels is:

- A. A container designed to withstand internal or external pressure
- B. A vessel for the containment of process fluids with or without internal pressure
- C. A container designed to operate below atmospheric pressure
- D. A container no greater than 8" in cross section

Answer: A

Question: 6

Who establishes inspection interval for thickness measurements and external visual inspections.

- A. Vessel engineer;
- B. Owner-user or the inspector
- C. Corrosion Engineer
- D. NDE engineer

Answer: B

Explanation:

Because owner /user is eventually responsible for the operation and maintenance of the vessel, it is the owner /user who decides the inspection interval. API 510 Authorized Pressure Vessel Inspector designated by the owner calculates the inspection interval since API Inspector certifies the vessel "fit for service" until the next inspection schedule.

Question: 7

A SME Sec. VIII Div.1 is based on factor of safety equal to

- A. 4
- B. 3
- C. 3.5
- D. 2.5

Answer: C

Explanation:

The safety factor was previously "4" but with better manufacturing and quality over the years, the factor of safety was reduced to 3.5

Question: 8

Identify incorrect statement from following, if any.

- A. A welder performing procedure test is also qualified in that position.
- B. Supplementary essential variables become essential variables when impact test is specified.
- C. For procedure qualification, the test can be performed in any position as the position is not essential variable for procedure qualification
- D. WP S & WPQ have the same qualification requirements.

Answer:

Explanation:

changing Essential parameters of a WP S requires a brand new FOR while changing the non-essential parameters, does not invalidate the existing FOR but the WP S need to be revised anyway even when non-essential parameters are changed. PQR is a record of actual values of essential parameters used while welding the test coupon. Non-essential parameters can also be noted within a FOR if actually measured at the time of welding the test coupon but is not mandatory. PQR also include the mechanical test result (for example, tensile test and may be Charpy test, if toughness is an issue) and any NDE result, if done. FOR cannot be revised except minor clerical changes such as typo error.

Question: 9

In plate specification A 516 Gr 70, the letter A indicates:

- A. That material is A SME material. (A for AWE)
- B. That material is Ferrous material
- C. That material is Non-Ferrous material
- D. None of the above

Answer: B

Explanation:

A SME Sec. II, Part "A" deals with ferrous material specification. That is why all ferrous materials have a prefix "A".

General AWE Section II Classifications

Ferrous Metals

B. Nonferrous Metals

Cementitious, Ceramic, Concrete, and Masonry Materials

D. Miscellaneous Materials

Within the steel industry, the terms Grade, Type, and Class are generally defined as follows: Grade is used to describe chemical composition; Type is used to define the deoxidation practice; and

Class is used to indicate other characteristics such as strength level or surface finish. However, .within the ASTM standards, these terms were adopted and used to identify a particular metal within a metal standard and used without any strict definition. Although there are differences between the ASTM and traditional definitions of these terms ASTM have applied some loose rules to the use of this terminology in their designation system:

Example I -ASTM A 106-02a Grade A, Grade B, Grade C - Seamless Carbon Steel Pipe for High-Temperature Service

Question: 10

The symbol which indicates ASME code stamping for vessels manufactured to ASME Section VIII Div.1 is

- A. UI
- B. U2
- C. U
- D. U3

Answer: C

Explanation:

UI is the form filled in by the manufacturer and U2 is filled in by partial Manufacturer of parts. There is no U3 form or stamp, only "U" stamp.