

ARAMCO VENDOR INSPECTION EXAMINATION

VALVES & FITTINGS

- 1) Which American standard specifies the dimensional requirements for face to face and end to end?
Answer: ANSI B16.10
API 600 – General Valve Design (and wall thick)
- 2) Which material should be used for high temperature valves?
- 3) Which additional destructive testing is required for low temperature valves?
Answer: Impact Testing for Metallic Material
- 4) What is the required position of a gate during the backseat test?
- 5) What is the meaning of valve “trim”?
Answer: Materials for: a) Stem; b) Gate Seat Surface; c) Seat Ring Surface
- 6) What is a hot-tap?
- 7) What is a stopple fitting?
- * 8) What is the sequence for hydrotesting internally coated valves?
- 9) The allowable leak rate for a check valve is greater than for a gate valve.
TRUE/FALSE
- 10) What leak tests are required according to API 598?
Answer: Valve Inspection and Testing
- 11) What are the advantages of a flexible wedge?
- 12) What is the required position of a gate during the Shell Test?
- * 13) Which standard indicates the allowable leakage for Control Valves?
- * 14) Which standard deals with Relief Valves?
- * 15) Why the closure test is performed for both sides of Wedge?
- * 16) Name three (3) types of Wedges?
- 17) The backseat test is performed for Gate Valves, Butterfly Valves and Check Valves/
TRUE/FALSE
- 18) What you check for dimensional inspection on a Valve?
- 19) Name three (3) types of Flanges
- 20) What is marked on a butt-end fitting (*name 2 items*)

Q.1 When is Peening allowed to ANSI B31.3

A.1

Q.2 What is a Stoppel?

A.2 *Selder plug temporary plug to stop flow in a pipe.*

Q.3 What is meant by Value Trim?

A.3

Q.4 What are the essential variables of WPS?

A.4

Q.5 What is a WPS?

A.5

* Q.6 Which standard covers dimensions of valves?

A.6 *ASME B 16.25*

Q.7 What is GTAW?

A.7

* Q.8 Why do we maintain interpass temperature in Austenitic Stainless Steel?

A.8

Q.9 List (5) five things on a steel material certificate.

A.9

* Q.10 What are the advantages of a flexible wedge.

A.10

Q.11 What precaution do we need to take when welding a clad vessel?

A.11

preheating.

Q.12 Can weld repair be carried out on a vessel after heat treatment with the approval of the approved inspector?

A.12

Q.13 Is the gate open when doing a seat test?

A.13

Q.14 When a contractor supplies a part of a vessel what is required

A.14

partial MDR .

Q.1 What are the 4 types on Metal Transfer for MIG?

A.1 *Spray, Dip, Globular, Background Voltage*

Q.2 What is UG?

A.2 *Geometric Unshapness Penumbra*

Q.3 When Shooting an Ellipse, where will the penitrameter go?

A.3 *Source side*

Q.4 What 4 parameters do we get from Tensile Test?

A.4 *Elongation; Ultimate Stress; Yeald Stress; Cross Section Area*

Q.5 Which section of ASME VIII are the Scatter/Distribution diagrams for radiography interpretation?

A.5 *Section 4*

Q.6 In what Section of ASME VIII are the other defects?

A.6 *WU35*

Q.7 What properties have the 3 sub-arc fluxes?

A.7 *Inert; Chemical Change Active; alloying*

Q.8 Why do we maintain the interpass temperature when welding Stainless Steel?

A.8 *To prevent Harding in the heat affected zone through dendritic growth under bead cracking*

* Q.9 What material do we use when welding dissimilar material?

A.9 *309 Inconel for greater ware resistance*

Q.10 What is Dwell Time?

A.10 *The time for the penitrant to soak into any surface opening and the time for the developer to draw out an indication*

Q.11 What is the difference between stress relieving and normalizing?

A.11 *Normalizing temperature is above upper critical temperature, Stress Relieving is below upper critical temperature, normalizing. cool at a controlled rate or in still air.*

Q.12 What are the three types of hardness

A.12 *Rockwell; Vickers; Brumell*