Assignment 8

The due date for submitting this assignment has passed.
At present you have no submitted this assignment.

1. Preventing a blowout is vital to maintain the risk of

- excessive distortion
- porosity
- weld cracking
- lack of fusion

No, the answer is incorrect.
Accepted Answers: [1, 2, 3, 4]

2. The development of residual stresses and distortion in fusion welded structures is due to

- non-uniform heating only
- non-uniform cooling only
- both non-uniform heating and cooling
- not dependent on heating and cooling

No, the answer is incorrect.
Accepted Answers: [1, 2, 3, 4]

3. Consider the following statements in respect of the residual stresses:

- can reduce the service life of the structure
- can cause internal plasticity
- it may hamper the functional efficiency of the component
- which of these statements given above are correct?

No, the answer is incorrect.
Accepted Answers: [1, 2, 3, 4]

4. Which of the following is incorrect for tensile residual stresses?

- decrease the fatigue strength
- increase the creep resistance
- increase the yield strength
- initiate the failure due to fracture

No, the answer is incorrect.
Accepted Answers: [1, 2, 3, 4]

5. Framing may be carried out when manual metal arc welding is used in order to

- reduce the effect of contraction
- avoid the buckling tendency
- obtain the joint necessary
- spread out the welding

No, the answer is incorrect.
Accepted Answers: [1, 2, 3, 4]

6. Which of the following is not correctly matched?

- Microcracks - Developed by inhomogeneous plastic deformation from external loading
- Microcracks - Developed by the weld heat affected zone
- Microcracks - Residual stresses in the base metal from shrinkage
- Microcracks - Developed in surface cracks

No, the answer is incorrect.
Accepted Answers: [1, 2, 3, 4]

7. Which of the following residual stresses exist when two pieces that are being joined by welding are already attached to other portions of a structure?

- Mechanical Tensions
- Hydrostatic Tenses
- Reaction Tenses
- Torsion Tenses

No, the answer is incorrect.
Accepted Answers: [1, 2, 3, 4]

8. Which of the following is incorrect for residual stresses?

- result in weld cracking
- result in uniform recession
- affect the fatigue strength
- increase the creep strength

No, the answer is incorrect.
Accepted Answers: [1, 2, 3, 4]

9. Which of the following statements is incorrect for macrocracks?

- Developed by inhomogeneous plastic deformation from external loading
- Developed by non-uniform heating
- Developed by residual stress or alloying at surface zones
- Developed due to metallurgical transformations like precipitation, phase change etc.

No, the answer is incorrect.
Accepted Answers: [1, 2, 3, 4]

10. The magnitude of residual stresses in welding depends upon

- design of weldment
- geometry of components
- welding processes used
- amount of material used deposited

No, the answer is incorrect.
Accepted Answers: [1, 2, 3, 4]