Unit 4 - Week 3

Assignment 3

The due date for submitting this assignment has passed. As per our records you have not submitted this assignment. Due on 2019-03-20, 23:59 IST.

1) Autogenous TIG welding will produce weld zone by

- Plastic deformation of faying surfaces
- Melting and solidification of faying surfaces
- Melting and solidification of filler wire
- Both a and b

No, the answer is incorrect.
Score: 0
Accepted Answers: Melting and solidification of faying surfaces

2) If metallic systems A and B are having solidification temperature range (STR) of 25°C and 150°C respectively, then

- A will have higher solidification cracking tendency
- B will have higher solidification cracking tendency
- Both will have similar solidification cracking tendency
- B has better weldability than A considering solidification cracking tendency

No, the answer is incorrect.
Score: 0
Accepted Answers: B will have higher solidification cracking tendency

3) High affinity to atmospheric gases during fusion welding may result in

- Formation of oxides/nitrides
- Formation of inclusions in the fusion zone
- High amount of slag formation

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No, the answer is incorrect.
Score: 0

5) Hydrogen Induced Cracking (HIC) tendency will be lowest if a steel weld joint primarily consists of:

- Martensite
- Pearlite
- Ferrite
- Bainite

No, the answer is incorrect.
Score: 0

Accepted Answers:
Ferrite

6) In general, the weld metal of fusion welded joint after welding will experience:

- Tensile residual stress
- Compressive residual stress
- No residual stress
- Shear residual stress

No, the answer is incorrect.
Score: 0

Accepted Answers:
Tensile residual stress

7) The steel having lowest amount of oxygen content is:

- Rimmed steel
- Capped steel
- Killed steel
- Semi-killed steel

No, the answer is incorrect.
Score: 0

Accepted Answers:
Killed steel

8) With reduction in carbon content, hardness of martensitic structure will:

- Increase
- Increase first then decrease
- Decrease
- Decrease first then increase

No, the answer is incorrect.
Score: 0
9) With increase in carbon equivalent, the under bead cracking tendency will 

- Decrease
- Increase
- First decrease then increase
- Will not be affected

No, the answer is incorrect.
Score: 0

Accepted Answers:

1 point

10) Pre-heat and post heat treatments will be required during welding of mild steel plates having 

- Carbon content less than 0.2%
- 35 mm thick plates
- Restraint free welding
- 0.5% Mn content

No, the answer is incorrect.
Score: 0

Accepted Answers:

35 mm thick plates

1 point