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Courses » Joining Technologies for metals

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Unit 4 - Week 3

Register for
Certification exam

Course outline

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Week 1

Week 2

Week 3

- Lec 11 - Newer variants of Gas tungsten arc welding
- Lec 12 - Gas metal arc welding
- Lec 13 - Submerged arc welding
- Lec 14 - Electro-slag and Electro-gas welding
- Lec 15 - Laser beam welding
- Quiz : Assignment 3
- Solution for Assignment No. 3

Week 4

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) The function of background current in pulse GTAW is **1 point**

- Maintain the welding arc
- To facilitate cooling and solidification
- To fuse the substrate material
- Both a and b

No, the answer is incorrect.

Score: 0

Accepted Answers:

Both a and b

2) The principle mechanism involved in activated flux GTAW process includes **1 point**

- Reversal of marangoni convection
- Constriction of arc plasma
- Plastic deformation
- Both a and b

No, the answer is incorrect.

Score: 0

Accepted Answers:

Both a and b

3) Compared to spray transfer, the short circuit transfer requires **1 point**

- Smaller arc gap
- Larger arc gap
- Arc gap does not matter
- High welding current

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- High welding current
- High welding voltage
- High welding speed
- All of above

No, the answer is incorrect.

Score: 0

Accepted Answers:

High welding current

5) Constant voltage and self-regulating arc with DCEP polarity is not suitable for

1 point

- Small electrode diameter
- Large electrode diameter
- Large electrode extension
- High electrical resistivity

No, the answer is incorrect.

Score: 0

Accepted Answers:

Large electrode diameter

6) For given value of current and voltage, increase in electrode diameter during SAW process will lead to

1 point

- Wider weld bead and deeper penetration
- Wider weld bead and shallow penetration
- Narrow weld bead and deeper penetration
- Narrow weld bead and wider penetration

No, the answer is incorrect.

Score: 0

Accepted Answers:

Wider weld bead and shallow penetration

7) Weld metal of submerged arc weld joint as compared to GTAW weld joint will have

1 point

- Coarser grain structure
- Finer grain structure
- Wider heat affected zone
- Both a and c

No, the answer is incorrect.

Score: 0

Accepted Answers:

Both a and c

8) The role of copper shoes in ESW process to

1 point

- Restrict flow of molten metal outside
- Act as sink to heat generated during welding
- Both a and b
- Generate arc

No, the answer is incorrect.

Score: 0

Accepted Answers:

Both a and b

9) For a given Laser scanning speed, highest power density is required for

1 point

- Melting
- Alloying
- Heating
- Machining



No, the answer is incorrect.

Score: 0

Accepted Answers:

Machining



10) Laser welding of Al and Cu alloys is found difficult due to

1 point

- High reflectivity
- High thermal conductivity
- Low thermal conductivity
- Both a and b



No, the answer is incorrect.

Score: 0

Accepted Answers:

Both a and b

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