Unit 5 - Materials Selection

Week 4 Assessment

The due date for submitting this assignment has passed. **Due on 2017-08-23, 23:59 IST.**

Submitted assignment

1) If you take a look at a component made of plastic, you'll see the type of plastic it is made from, as well as a number inside a symbol. What does this number signify?

- Number for recycling purposes
- Serial number from the factory
- Strength of the component
- Order for assembly of the component

**No, the answer is incorrect.**

**Score: 0**

**Accepted Answers:**

*Number for recycling purposes*

2) Which of these electrical machines require their casings to be made of steel that has grain orientation in one direction?

- Relay switches
- LEDs
- Transformer
- Computer Power Supply Unit

**No, the answer is incorrect.**

**Score: 0**

**Accepted Answers:**

*Transformer*

3) Which of these terms is used to describe a material which has the properties that do not change along all its directions?

- Isotropic
- Isochoric
- Isobaric
- Equatorial

**No, the answer is incorrect.**

**Score: 0**

**Accepted Answers:**

*Isotropic*

4) You are redesigning an enclosure, changing the material from steel to aluminium to reduce weight. Which of these will have to be considered?

...
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5) During manufacture of components in mild steel, if bending or pressing is done without the material being heated (cold work), certain portions of it become weak, or more prone to breaking. This is corrected by heating the component uniformly after the cold work. This process is known as

- Annealing
- Blanking
- Drawing
- Kapooring

No, the answer is incorrect.
Score: 0
Accepted Answers:
Annealing

6) For which of these considerations, is an aluminium enclosure NOT better than a steel enclosure

- Thermal conductivity
- All of the above
- Weight
- Cost

No, the answer is incorrect.
Score: 0
Accepted Answers:
Cost

7) Which of these processes is easier and more cost effective in aluminium than in steel?

- Deep drawing
- Stamping
- Extrusion
- Welding

No, the answer is incorrect.
Score: 0
Accepted Answers:
Extrusion

8) "Mild" Steel is so called because of

- Relience (bounce back)
- Conductive properties
- Relative carbon content
- Sonorousness (sound emission)

No, the answer is incorrect.
Score: 0
Accepted Answers:
Relative carbon content

9) Which of these processes can be used to make openings in both an enclosure made of sheet metal, as well as one made from die cast aluminium?

- Welding

No, the answer is incorrect.
Score: 0
Accepted Answers:
Welding
You are using bending to make an enclosure from a mild steel plate. You use a plate slightly longer than required, to ensure that after bending, the length of both angled sides are as specified in the drawing. This extra length is known as:

- Bending dimension
- This extra length doesn't have a name
- Bending tolerance
- Bending allowance

No, the answer is incorrect.
Score: 0
Accepted Answers:
Milling

Bending allowance